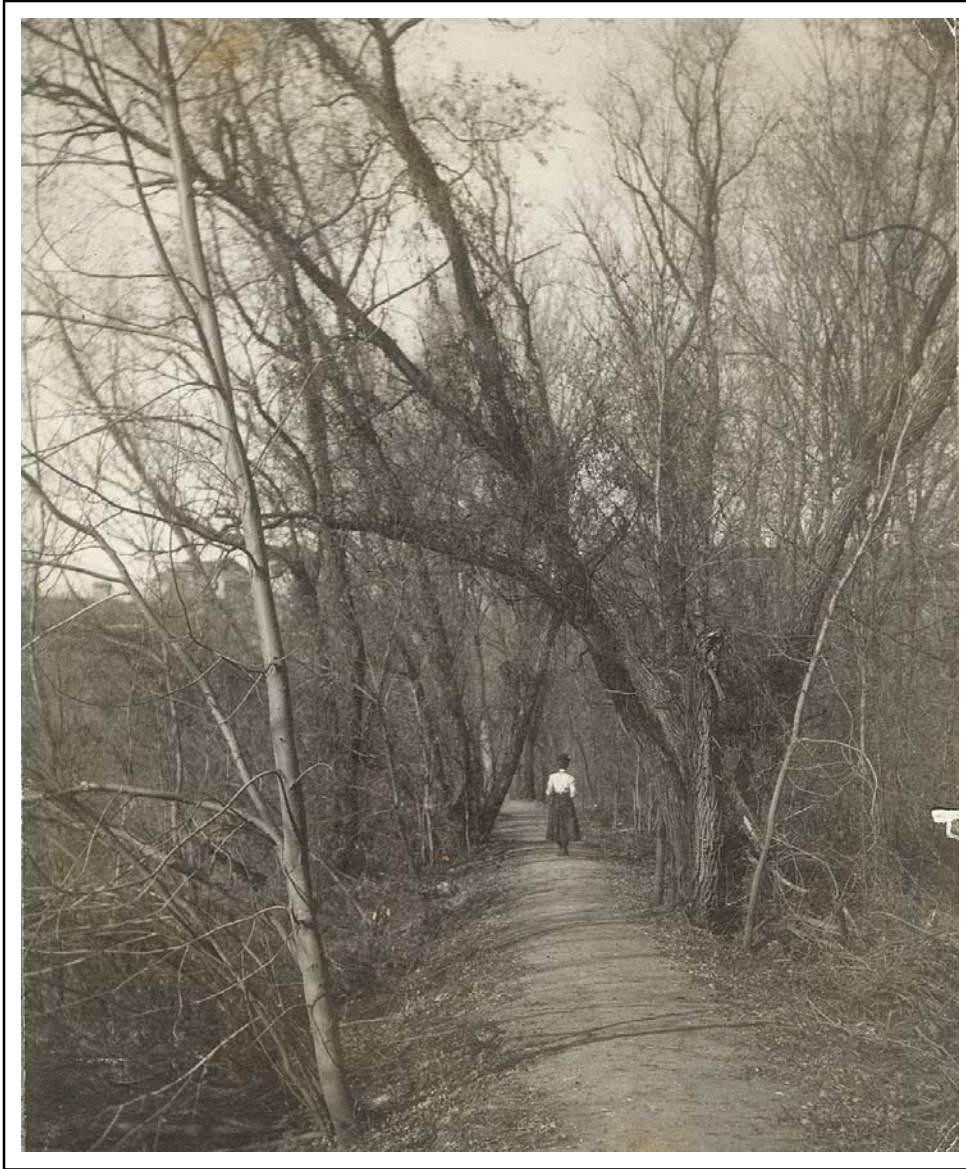


Minnesota Valley State Recreation Area Management Plan



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

November 2006

Minnesota Department of Natural Resources

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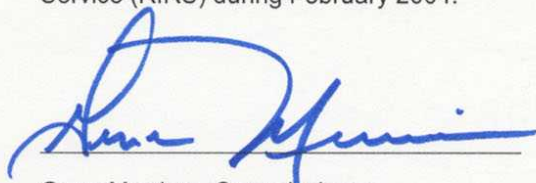
Gene Merriam, Commissioner
651-259-5555

Department of Natural Resources Approval of Management Plan for Minnesota Valley State Recreation Area

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 1994 established Minnesota Valley State Recreation Area as part of Minnesota's Outdoor Recreation System (MS 85.013, Subd. 20a).

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

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 February 2004.


Gene Merriam, Commissioner
Minnesota Department of Natural Resources

11-6-06
Date



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Minnesota Valley State Recreation Area Management Plan



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

This management plan has been prepared as required by 1993 Minnesota Laws Chapter 86A.09, Subdivision 1.

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For more information on this management plan please contact the DNR Division of Parks and Recreation at (651) 259-5600. This information is also available in an alternative format upon request by calling (651) 296-6157 (Metro Area) or (888) MINNDNR (MN Toll Free). TTY: (651) 296-5484 (Metro Area) or (800) 657-3929 (toll free TTY).

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ACKNOWLEDGEMENTS

The individual names of the many citizens who have contributed to the development of this plan are too numerous to mention here. Suffice it to say that hundreds of individuals donated their own time and energy to this planning effort by either attending meetings or by offering written and verbal comments as the plan progressed. We thank all of these individuals for their dedication and for their willingness to sacrifice their own free time to contribute to this effort.

In addition, many resource management professionals from the variety of public agencies and non-profit organizations willingly contributed their time and expertise to this planning process. We also wish to thank these individuals for their efforts.

Finally an acknowledgement should be made the GIS (Geographic Information Systems) students who produced the variety of maps and other illustrations for this planning document. A special thank you is extended to: Ryan Elizabeth Bowe, Shane Pittman, Jiong Chen, Wisdom Etse and Caleb Rick. We thank you for your patience and hard work.

Cover Photo: Cycle path from Fort Snelling to the Minnesota River, ca. 1890. Used with permission from the Minnesota Historical Society.

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EXECUTIVE SUMMARY

Summary of Major Recommendations

This plan documents the work of a three-year planning process and sets a general direction for the management of Minnesota Valley State Recreation Area (MVSRA) for the next 20 years. As such, it does not contain detailed management prescriptions for implementing the recommendations found in each chapter. It is understood that the plan needs to set a general direction and to allow regional and park management staff, in cooperation with Minnesota's citizens, the flexibility to determine specific priorities and actions that will be appropriate to carry out the recommendations.

The Division of Parks and Recreation is a governmental unit within the MN Department of Natural Resources. As such, the Division will always work within the Department's statutory mandates while carrying out the Division's statutory mandates, and continue the communication and cooperation with other DNR units to implement the plan recommendations.

Because the Minnesota Valley State Recreation Area is an extremely complex unit, the planning issues and recommendations are as well. In many ways, the SRA is more like a landscape region than a park when considering management planning. Recent work by the Minnesota County Biological Survey indicates that the Lower Minnesota River valley is one of the few remaining areas in Hennepin, Scott, and Sibley Counties with intact ecological communities. Due to the burgeoning metropolitan area, this area is becoming more important for both wildlife habitat and for recreational open space. Because of this, many of the recommendations focus on areas of land in the valley that go beyond the boundaries of the MVSRA and have interagency and interdisciplinary implications.

This plan also highlights the need for local community connections and support--- which are necessary for catalyzing new opportunities in trail design, maintenance and funding.

The following is a summary of the major recommendations from the planning process. Please see the Recommendations Section in the text or Appendix A for more complete listings of the unit-specific recommendations from the planning process.

Interpretive Services:

- ❖ **Interpretive activities:** The Minnesota Valley State Recreation Area (MVSRA) is ranked highly in the *Minnesota State Park System Interpretive Services Plan* because of its regional landscape significance and accessibility to visitors. In particular, the cultural resources of the valley are highly significant and of statewide importance. Due to its complex nature, the SRA has been largely unrecognized and underutilized. A significant increase in self-guided interpretive activities in the SRA, including maps and trail signs, is recommended.
- ❖ **Coordinated efforts:** Effective interpretation in the Minnesota River valley will require a renewed cooperative effort between all of the interpretive providers in the valley. Moreover, it is recommended that the agencies and organizations involved should continue to use a unified, recognizable style with graphic elements to tie together the interpretation along the trail (instead of a mixed, multi-agency approach). For identity purposes, the partners should consider producing one brochure for the valley possibly modeled after the Mississippi River Trail brochure produced by the Mississippi National River and Recreation Area (MNRRA).
- ❖ **Theme development:** Theme development is recognized as the best organizing framework for interpreting the natural and cultural history of the unit. The primary theme developed by the Citizens Advisory Committee is: "People and the River: A Natural System Changing through Time." Interpretation in the valley should show how human activities in the valley have always been natural resource driven, and how people have in turn affected the landscape.

- ❖ **The Dakota Communities:** Recognized Dakota Communities should play a lead role in the interpretation of Dakota history and in the management of sacred sites in the valley. The DNR Division of Parks and Recreation should continue to consult with the appropriate bands when developing new interpretive materials in the Valley.
- ❖ **Cultural Resource Protection:** Strong support was expressed for the protection and management of the cultural resources in the Lower Minnesota River valley. It is recommended that the Department of Natural Resources (DNR) should continue to work with the appropriate organizations and agencies to identify and protect cultural resources prior to development projects and other resource management activities in the SRA.

Natural Resource Management:

- ❖ **Natural Resource Protection & Management:** The Citizens Advisory Committee expressed strong support for the protection and management of the natural resources in the Lower Minnesota River valley. It is recommended that the DNR should continue to work with the appropriate organizations and agencies to identify and protect natural resources prior to facility development and other resource management activities in the SRA. Best management practices need to be continued.
- ❖ **Ecological Connectivity:** It is recommended that the DNR, as well as the other land-managing agencies and organizations in the valley, recognize that the whole valley is an important corridor for conservation. The Minnesota Valley State Recreation Area is an important component of this corridor as are the units of the Minnesota Valley National Wildlife Refuge, City of Bloomington open space areas, Eagle Creek, Assumption Creek & Seminary Fen and the Savage fen wetland complex, for example.
- ❖ **Rare Species and Native Plant Community Management:** Based on recent work by the Minnesota County Biological Survey, the Lower Minnesota River valley is home to a number of rare species and significant natural communities. These rare resources need to be monitored and protected. Continue to inventory for rare resources.
- ❖ **Mitigating threats:** It is recognized that the remaining biodiversity of the Lower Minnesota River valley is being severely impacted by its proximity to the burgeoning Minneapolis-St. Paul metropolitan area. Threats include loss of habitat, soil erosion, the proliferation of problem species and poor storm water management, to name a few. It is recommended that the DNR should continue to be involved with proactive planning efforts with the adjacent cities, counties, federal agencies as well as private landowners in order to mitigate these threats.

Recreation Development and Management:

Effective recreation development and management in the Minnesota River valley will require a renewed cooperative effort between all of the recreation providers in the valley. As with interpretation, the partners should consider producing one brochure for the valley that describes the various recreational opportunities the valley offers and how to access them. Trail funding, design, maintenance and interpretation should be done cooperatively between local authorities and the DNR; and the DNR should play a coordinating and supportive role so that the various segments of the trail can meet the differing needs of the communities.

Recommendations for trail development and maintenance include:

- ❖ **Funding:** Funding for the various sections of the trail should be sought by the local communities and interest groups assisted by DNR as opportunities arise. Examples of funding sources include

TEA-21 (federal) funds, matching grant programs through the Federal Land and Water Conservation Fund (LWCF), and state bonding funds allocated to the DNR Division of Parks and Recreation.

- ❖ **Safety:** Trail segments should be safe, well marked, connected and encourage responsible use towards other users, the adjacent landowners and the land itself.
- ❖ **Multiuse:** The trail should be a multiuse trail *system* with differing uses in different segments of the trail (not all segments of the trail need to accommodate all uses).
- ❖ **Trail facilities:** Attractive, well-signed trailheads and parking lots should be provided along the trail segments.
- ❖ **Trail design:** Trail segments should be designed and maintained in an ecologically sensitive, sustainable and fiscally responsible manner.
- ❖ **Priority sections of the Minnesota Valley Trail include:**
 - Bloomington Section (Highway 77 to Bloomington Ferry) (City of Bloomington and USFWS)
 - Fort Snelling State Park (Hennepin County) (DNR)
 - Bloomington Ferry to Shakopee (DNR)
 - Shakopee to Highway 41 (DNR)
- ❖ **Old Cedar Avenue Bridge:** All partners should work with the City of Bloomington in its efforts to replace or restore the Old Cedar Avenue Bridge (also known as the Long Meadow Lake Bridge).
- ❖ **Other trail crossings:** All partners need to work together to develop new trail crossings at Nine Mile Creek, other creek crossings and on the Highway 41 bridge (Shakopee to Chaska).
- ❖ **Trespass issues:** Partners need to secure permission in fee or easement from the remaining private landowners in the Bloomington area.
- ❖ **Enforcement:** Adequate enforcement and safety patrols need to be added along the trail; discouraging littering and off-trail riding. Local community and user groups need to self-patrol as well.
- ❖ **Coordination:** Local cities, agencies, and other organizations should continue to coordinate development of their trails with the Minnesota Valley Trail.
- ❖ **Campground facilities:** Develop a new semi-modern campground for MVSRA. The campground will replace the existing campground in the Lawrence Unit. A new site will be identified for the campground. It will offer improved facilities to better serve MVSRA visitors and eliminate the flood-related closings that occurred at the existing campground.

MVSRA Boundary & Land Issues

- ❖ **Boundary Posting:** All SRA boundaries should be posted eventually as “State Recreation Area”. The Park Manager should give prior notice to the local communities before this is initiated.
- ❖ **Acquisition Priorities:** Consider the Minnesota Valley National Wildlife Refuge and Minnesota Valley National Wildlife Trust in setting conservation and recreation priorities in the area for future acquisition. The focus should be on buying large blocks of land along the river for public access, recreation and conservation when possible. Consider developing an Interagency Open Space Preservation Committee, modeled after the one created by MNRRA (Mississippi National River and Recreation Area).

- ❖ **Land Conservation Strategies:** Continue to use the whole spectrum of land conservation programs in the Lower Minnesota River valley including programs like CREP (Conservation Reserve Enhancement Program), RIM (Reinvest in Minnesota) and other easement programs. Continue to work with appropriate agencies and organizations on proactive conservation planning in the Lower Minnesota River valley.

Operation Recommendations

- ❖ Administer the MVSRA from Fort Snelling State Park in order to use resources more efficiently.

I. INTRODUCTION

Description of the Minnesota Valley State Recreation Area:

The Minnesota Valley State Recreation Area is an unusual unit among Minnesota's state parks and state recreation areas. It consists of a series of units, connected by the river corridor, some of it currently developed as a multiuse recreational trail. The length of the authorized system is 72 miles from the base of Fort Snelling in the Minneapolis-St. Paul metropolitan area, where the trail originates, to the City of LeSueur. It encompasses 5,490 acres of state land, in a mosaic of other ownerships including the Minnesota Valley National Wildlife Refuge (12,500 acres), and other state holdings (wildlife management areas and a scientific and natural area). In addition, adjacent cities, counties and other local authorities own much of the property along the river. A significant portion of the land along the river is in private ownership.

Traditional state park amenities are currently offered at the Lawrence Unit, just outside of Jordan, Minnesota. This includes a campground with 25 drive-in sites, 8 walk-in sites, a small group camp, and a picnic shelter.



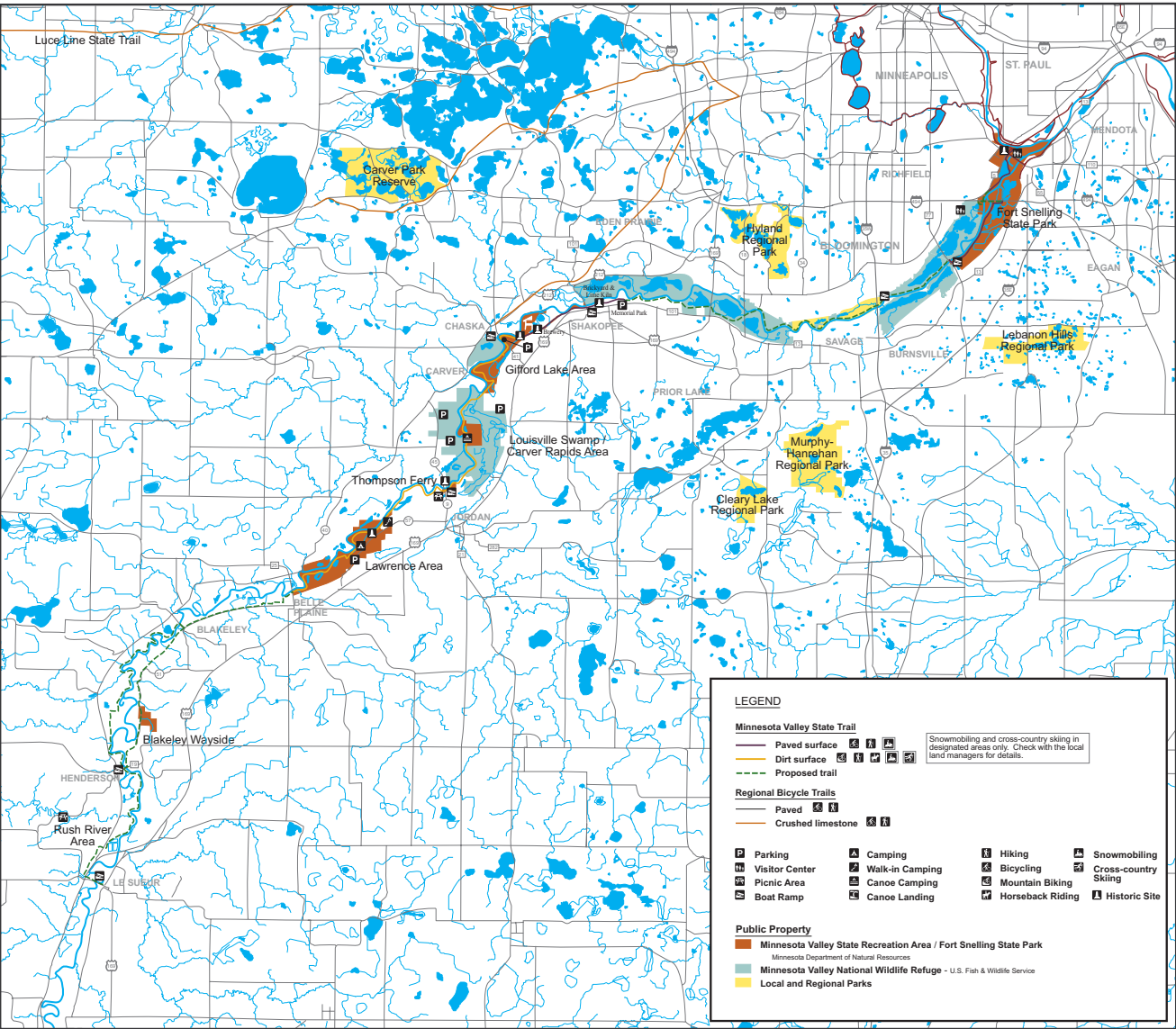
Most of the units provide access to the trail system that can be used by hikers, birdwatchers, bikers, snowmobilers, cross-country skiers and horse enthusiasts. Approximately 41 miles of trail are available for hiking - 35 miles natural surfaced and 6 miles of paved trail in the Shakopee area. Roughly 29 miles are open to mountain biking. Many additional miles of local trails are accessible to visitors via connections to the Minnesota Valley State Recreation Area.

Minnesota Valley State Recreation Area hosted over 135,200 visitors in 2004, including 2,283 overnight visitors at the Lawrence Unit campground. Day and overnight visitation can fluctuate from year to year because of flood-related closings of segments of trail, the campground, and other facilities.

The unique nature of the Minnesota Valley State Recreation Area, however, can be attributed to the fact that it remains the most significant corridor of native communities and wildlife habitat in Hennepin, Scott, Carver, and Sibley counties. Moreover, the cultural history of the valley is central to the history of both the Dakota people and the European-Americans who settled there later. To the Dakota people, the natural and cultural resources of the valley are one and inseparable. The natural resources of the valley were what drew people to the area in the first place, whether it was wild rice for sustenance or yellow clay for brick making. The stories that the valley tells us are stories of our own history in the making.

See Figure 1: Overview of Minnesota Valley State Recreation Area

Figure 1 :Overview of Minnesota Valley State Recreation Area



Legislative History

1934 - 1969¹

1934: Governor Floyd B. Olson proposes the idea of a trail system on the Minnesota River. Theodore Wirth prepares a general plan for the utilization of the valley as a parkway from Shakopee to the mouth of the river at Fort Snelling.

1935 Theodore Wirth prepares a *Tentative Study Plan for the West Section of the Metropolitan Park System for the Twin Cities, Minneapolis and St. Paul*. This proposal called for a *Parkway System* circling Hennepin County and suggested that a similar proposal be drawn up for an “*East Section Metropolitan Park System*” serving the St. Paul area. The report recommended that the Minnesota River valley form the southern boundary of the west section of the Park System. The recommendations of this report were never implemented.

1965 Minnesota Outdoor Recreation Resources Commission (MORRC) publishes a report entitled, “*The Minnesota River valley*”. In this report, the MORRC analyzed a number of proposals for the Minnesota River from Fort Snelling to Ortonville. These proposals were made by state agencies, the National Park Service, the Minnesota Academy of Sciences and others. Of particular relevance were the proposals for the Department of Conservation (now the Department of Natural Resources) to create:

1. A Minnesota River valley Forest extending from Montevideo to Shakopee. The Forest boundary was to incorporate 362,420 acres, of which 11% or 40,000 acres were to have been acquired.
2. A 14,000-acre Carver State Park between the communities of Belle Plaine and Carver.
3. A Minnesota Parkway, which follows the route of the historic Sioux (Dakota) Trail.

The MORRC Report recommended that “The state should continue to encourage forest growth to control erosion on the bluffs and siltation on the bottom lands as well as provide recreational areas for recreational use.”

The report continues, “From a statewide viewpoint, the distinctive recreational attribute of the Minnesota basin is the unique scenery and history along the valley of the main river itself. High priority should be given to the improvement of the Sioux Trail Route and the careful integration of the road into the natural landscape. This improvement should be accompanied by coordinated: a) development of picnic areas, public access, and recreational areas, and b) preservation and restoration of not simply isolated buildings, but selected historic farmsteads, villages, way-stations, trading posts, and fortifications within their natural settings.”

1966 Theodore J. Wirth and Associates, publishes a *Preliminary Proposal for Carver State Park* under contract with the Department of Conservation. The proposal is of particular significance because the legislatively authorized Belle Plaine Unit, Lawrence Unit, and Carver Rapids Unit all lie within the boundaries of the proposed Carver State Park. The consultant stated, “The establishment of Carver State Park could serve as an initial first link in the preservation of the entire Minnesota River as a natural open space and green belt.”

1967 The Minnesota State Legislature did not approve a scaled-down version of the Carver State Park proposed by the Department of Natural Resources.

¹ as excerpted from an Analysis of the Minnesota River valley Trail, State Planning Agency 1972

- 1968** The Itasca Engineering Company prepares a proposal for a trail system from Fort Snelling to LeSueur. This report, entitled *A Plan for Recreational Trails in the Minnesota River valley*, concluded "A recreational trail system in the Minnesota River valley from Fort Snelling to LeSueur is both desirable and feasible." This report provided the basis for a proposal to the 1969 Minnesota State Legislature.
- 1969** The legislature acted favorably on the proposal and passed MS 1969, Section 85.198 authorizing the establishment of the Minnesota Valley Trail.
- 1971** MS 1969, Section 85.198 was revised and renumbered 85.015 in 1971: STATE TRAILS
- Subdivision 1. The commissioner of natural resources shall establish, develop, maintain, and operate the trails designated in this section. Each trail shall have the purposes assigned to it in this section. The commissioner of natural resources may acquire lands by gift or purchase, in fee or easement, for the trail and facilities related to the trail.
- Subdivision 6. Minnesota Valley Trail, Hennepin, Dakota, Scott, Carver, Sibley and LeSueur counties.
- (a) The trail shall originate at Fort Snelling State Park and thence extend generally southwesterly along the Minnesota River valley through Hennepin, Dakota, Scott, Carver, Sibley, and LeSueur counties to the city of LeSueur, and there terminate. The trail shall include the following state waysides: (a) Rice Lake Wayside, in Scott county; (b) Carver Rapids Wayside, in Scott county; (c) Lawrence Wayside, in Scott county; (d) Belle Plaine wayside, in Carver, Scott, and Sibley counties; (e) Blakeley wayside, in Scott county; and (f) Rush River Wayside, in Sibley county.
 - (b) The trail shall be developed primarily for riding and hiking. Motorized vehicles are prohibited from that portion of the trail on the north side of the Minnesota River, lying between Fort Snelling State Park and Rice Lake Wayside.
 - (c) In establishing, developing, maintaining, and operating the trail the commissioner shall cooperate with local units of government and private individuals and groups whenever feasible.

1975-2003

- 1975** Minnesota State Legislature passes 85.021 (Acquisition of Land, Minnesota Valley Trail), enabling the Department of Natural Resources to acquire any tract for the purposes of the Minnesota Valley Trail if deemed to be in the best interests of the state.
- Minnesota State Legislature passes the Outdoor Recreation Act of 1975. This act required that the classification of state recreation land be re-evaluated and that detailed management plans be prepared before further development can take place (MS 1980, Chapter 86A).
- 1976** United States Congress enacts the Minnesota Valley National Wildlife Refuge Act of 1976 after a successful grassroots effort led by citizens who later organized into the non-profit called The Friends of the Minnesota Valley. This act declared that the policy of the Congress would be to preserve the Minnesota River valley and established the 9,500 acre Minnesota Valley National Wildlife Refuge and an 8,000 acre state-managed wildlife recreation area adjacent to it.
- The wildlife recreation area was to be established in cooperation with the State of Minnesota. The Minnesota Valley State Trail was to be provided for as an integral part of the refuge and the wildlife recreation area along the lower 36 miles of the Minnesota River.
- 1984** A comprehensive multi-agency planning effort culminated in the publication of the *Comprehensive Plan for the Minnesota Valley National Wildlife Refuge, Recreation Area and State Trail*. It set the following goals:

Overall Goal: to preserve the valuable wildlife and other natural and cultural resources of the Lower Minnesota River valley while providing natural resource recreation and educational opportunities for major segments of the population.

National Wildlife Refuge Goal: to manage the natural resources in order to perpetuate wildlife species and ecological communities' natural diversity and abundance, as well as provide opportunities for wildlife-oriented recreation and an educational center for the study of natural systems.

Minnesota Valley State Trail Goal: to develop an accessible, scenic, recreational travel route between Fort Snelling State Park and LeSueur with support facilities, which connects and compliments related public lands and commercial services.

Wildlife Recreation Area Goal: to develop complimentary recreational and educational opportunities compatible with the natural and cultural resources of the Minnesota Valley.

The Comprehensive Plan of 1984 described the objectives, coordination, development and programs to manage the parks, wildlife, refuge, trails, open spaces and natural resources in the Lower Minnesota River valley.

- 1994** Minnesota State Legislature combines the Minnesota Valley Trail and its associated units into the Minnesota Valley State Recreation Area to be managed by the DNR Division of Parks and Recreation. In addition to other activities authorized in State Parks, the following activities may be permitted in certain areas of the Minnesota Valley SRA as prescribed by the Commissioner: 1) public hunting, trapping and fishing; 2) existing trail uses. The acquisition of land for the Minnesota Valley State Recreation Area was to be continued as previously described.
- 1999** Congress passes the Wildlife Refuge Act, which further delineates appropriate recreational activities in federal wildlife refuges. One immediate consequence of the passage of this act was the determination that the Minnesota Valley National Wildlife Refuge should start the process of revising its overall management plan. In 1999, the USFWS started the public process of revising its Comprehensive Conservation Plan for the Refuge. Shortly afterwards, DNR Division of Parks and Recreation initiated the revision of its state park management plan for the Minnesota Valley State Recreation Area as well.
- 2001** The Minnesota State Legislature approves the extension of the "Minnesota Valley State Trail" from Belle Plaine/LeSueur upriver to Big Stone Lake State Park, the river's source (Minnesota Statutes Chapter 85.015 Subd. 22). Planning for this section of the trail was initiated by the DNR Division of Trails and Waterways working with local support groups.
- 2003** The Minnesota State Legislature authorizes the transfer of the Rush River Unit to Sibley County (Minnesota Statutes Chapter 85.013 Subd 17a and 2003 Minnesota Session Laws Chapter 24 Section1).

Role of Minnesota Valley State Recreation Area in the State Park System

A central part of the planning process for the Minnesota Valley State Recreation Area was the development of mission and vision statements for the unit. Both the Citizen Advisory Committee and the Interagency Technical Committee spent time articulating these statements.

The following mission and vision statements provide direction to the agency as whole, then to the Minnesota State Park system as a whole, and then finally, to the Minnesota Valley State Recreation Area.

Mission and Vision Statements

The Mission Statement of the Minnesota Department of Natural Resources:

"Our mission 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."

The Mission Statement of Minnesota State Parks:

"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."

The Vision Statement of Minnesota State Parks:

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

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

Mission Statement for Minnesota Valley State Recreation Area:

To protect, manage, restore, and interpret the remaining natural features, cultural landscapes and sacred places² in the Lower Minnesota River valley; to focus on telling the stories of the people who have chosen to live in these landscapes; and to provide a recreational travel route through the valley that connects these features.

Vision Statement for the Minnesota Valley State Recreation Area:

"In 20 years, this is what we want the Minnesota Valley State Recreation Area to be..."

- ❖ a place where the natural areas, wildlife and other natural features that remain are protected and restored
- ❖ a place within and near the Minneapolis-St. Paul metro area where the natural, wild character of the river valley is maintained
- ❖ a place where cultural sites and landscapes are protected and restored
- ❖ a place where people can come to understand the history and traditions of the Dakota people and to learn to respect sacred sites
- ❖ a place where people can access these features through a variety of recreational pursuits
- ❖ a place where recreational use is facilitated and encouraged without compromising the integrity of the natural and cultural resources
- ❖ a place where the on-the-ground management and interpretive programming are coordinated between the variety of city, county and federal agencies, as well as the other myriad organizations who work in the valley
- ❖ a place where the corridor is connected to other natural areas and green space in the valley
- ❖ a place that has been expanded and where future acquisitions for the recreation area will be broader and more ecologically connected
- ❖ a place where the variety of users act responsibly towards each other, towards neighboring land owners, and towards the environment
- ❖ a place where people can develop a deeper appreciation and sense of ownership towards the Lower Minnesota River valley, its history and its future

² Places considered sacred to the American Indian

The Planning Process

This plan documents the work of a three-year planning process and sets a general direction for the management of Minnesota Valley State Recreation Area for the next 15-20 years. As such, it does not contain detailed management prescriptions for implementing the recommendations found in each chapter. It is understood that the plan needs to set a general direction and allow management staff, in cooperation with Minnesota's citizens, the flexibility to determine specific actions that will be appropriate to carry out the recommendations.

Initial Open Houses and Citizens Advisory Committee

The Minnesota Valley State Recreation Area planning process was an open public process that began in December of 2000 with two open houses, one in St. Paul, and one in Henderson, sponsored by the DNR Division of Parks and Recreation. Subsequently, in 2001, the Citizens Advisory Committee was formed. This committee met through the early part of 2003.

All citizen advisory committees were announced publicly through press releases to the local newspapers. In addition, individual mailings were sent out to approximately 400 citizens and organizations for each scheduled meeting. Meetings were held in Shakopee, Henderson and at the Shakopee Mdewakanton Dakota Community (Scott County), Minnesota.

The Citizens Advisory Committee included all citizens who chose to participate in this public process, in addition to representatives from a variety of nonprofit and local government organizations. Many of the citizens who participated are residents of the valley. Collectively, committee members represented a variety of perspectives and geographic areas ranging from the suburbs of metropolitan area to the rural areas of several counties along the Minnesota River. These citizens donated numerous hours of their own time to discuss difficult and complex issues.

Residents of the following areas attended the meetings (listed by county):

- ❖ Hennepin County
 - Bloomington
 - Minneapolis
 - Eden Prairie
- ❖ Ramsey County
 - St. Paul
- ❖ Scott County
 - Jordan
 - Prior Lake
 - Belle Plaine
 - St. Lawrence Township
 - Shakopee
 - New Prague
 - Shakopee Mdewakanton Dakota Community
 - Blakeley Township
 - Belle Plaine Township
- ❖ Dakota County
 - Burnsville
 - Lakeville
 - Rosemount
 - Farmington

- ❖ Sibley County
 - Henderson
 - Green Isle
 - Arlington
 - Winthrop
 - Gaylord
- ❖ Carver County
 - Chaska
 - Norwood
 - Waconia
- ❖ LeSueur County
 - LeSueur
 - Montgomery
 - LeCenter
 - Kasota
- ❖ Nicollet County
 - St. Peter
 - North Mankato
 - Nicollet
- ❖ Blue Earth County
 - Mankato
- ❖ Brown County
 - New Ulm
- ❖ McLeod County
 - Glencoe
 - Hutchinson
 - Plato
- ❖ Rice County
 - Webster
- ❖ Washington County
 - Stillwater
- ❖ Mille Lacs County
 - Milaca

Examples of organizations who attended one or more committee meetings included:

- ❖ Izaak Walton League of America, Bloomington
- ❖ Metropolitan Airports Commission
- ❖ Ney Environmental Center
- ❖ Friends of the Minnesota Valley
- ❖ Minnesota Off-Road Cyclists
- ❖ Belle Plaine Snowmobile Club
- ❖ Penn Cycle Bicycle Club
- ❖ Minnesota Ornithologists Union
- ❖ Penn Cycle Women's Mountain Bike Club
- ❖ City of Shakopee

- ❖ International Mountain Bike Club
- ❖ New Prague Park Board
- ❖ Shakopee Mdewakanton Dakota Community
- ❖ Erik's Bike Shop
- ❖ The 106 Group
- ❖ City of Bloomington
- ❖ J. R. Brown Minnesota River Center
- ❖ Scott County Historical Society
- ❖ Henderson Chamber of Commerce
- ❖ Minnesota River valley Scenic Byway
- ❖ Carver County Parks
- ❖ City of Henderson
- ❖ Shakopee Snowmobile Club
- ❖ Minnesota Native Plant Society
- ❖ City of Eden Prairie
- ❖ Gideon Pond Heritage Society
- ❖ Pond-Dakota Society
- ❖ Bloomington Historical Society
- ❖ Minnesota Land Trust
- ❖ City of Belle Plaine
- ❖ Sibley County
- ❖ Three Rivers Park District (Murphy's Landing)
- ❖ Blakeley Township
- ❖ Henderson Fire Department
- ❖ Belle Plaine Township
- ❖ Minnesota Foundation Quarter horse Club
- ❖ Black Sheep Club
- ❖ WSCA Fox Hollow Saddle Club
- ❖ Friends of Rush River

Interagency Technical Team

In addition, an Interagency Technical Team was established during the latter part of 2000 to discuss and provide recommendations. Members of this group met periodically and concurrently with the Citizens Advisory Committee throughout the process. Technical Team representatives included:

- ❖ Shakopee Mdewakanton Dakota Community
- ❖ Minnesota Department of Transportation (State Bicycle Coordinator)
- ❖ Lower Minnesota River Watershed District
- ❖ Scott County Historical Society
- ❖ Minnesota Valley National Wildlife Refuge
- ❖ Carver County Parks
- ❖ City of Bloomington, Parks and Recreation
- ❖ Minnesota Native Plant Society
- ❖ Great River Greening
- ❖ Friends of the Minnesota Valley
- ❖ Minnesota Department of Natural Resources
 - Area Forester
 - Area Trails and Waterways Supervisors
 - Area Conservation Officer
 - Area Fisheries Supervisor
 - Area Wildlife Manager
 - Area Nongame Specialist
 - Regional Plant Ecologist
 - Regional Park Naturalist
 - Area Parks Resource Specialist
 - Regional Park Manager

- Minnesota Valley State Recreation Area Manager
- Regional GIS Coordinator (& former Minnesota Valley Trail Specialist)
- Area Hydrologist

Special Note: Rush River (Open House and Citizen Advisory Committee Meetings)

Due to its unique nature, the Rush River Unit was the focus of a series of meetings starting in the spring of 2002 and concluding in early 2003. These included both Citizen Advisory Committee meetings and an Open House hosted at the Hilltop Elementary School in Henderson. One tangible result of these meetings was the formation of the Friends of Rush River, a local support group for the unit, and the subsequent transfer of the unit to Sibley County.

Household Survey

In cooperation with the US Fish and Wildlife Service-Minnesota Valley National Wildlife Refuge and the Friends of the Minnesota Valley, the DNR designed a survey in 2001 to gain an understanding of the public's use and perceptions of the Minnesota River valley area—the area between the river bluffs from LeSueur downstream to the confluence with the Mississippi River. The survey offered citizens another opportunity to provide input into the planning process (without attending meetings). The survey asked citizens about a number of topics: familiarity with the Minnesota River valley area; how they get information (become familiar) with the area; how they currently use the area; barriers to further use of the area; perceptions of current natural resource quality and recreation opportunity conditions in the area; plus perceptions of recent trends in these same conditions; ideas for future management of the area; organizations they trust to make sound recommendations concerning the future of the area; and who they are (demographics). The survey was mailed to 1500 random households within 25 miles of the Lower Minnesota River valley.

The survey results are incorporated into the appropriate recommendation sections of the planning document.

User Survey

In addition to the Household Survey, a Minnesota Valley Trail User Survey was developed and implemented in 2001 and 2002. Preliminary results include the responses of 47 individuals. Visitors were intercepted in the following locations: Fort Snelling State Park (in front of the Visitor Center), the Bloomington Ferry Crossing in Hennepin County, Memorial Park in Shakopee, the Louisville Swamp parking lot and the Lawrence Unit. Visitors were asked to comment on the quality of their experiences on the trail, the importance of a variety of trail-related factors to them, their satisfaction with the trail and the general trail environment, items that detracted from their enjoyment of the trail experience, their comments on possible management actions for the Minnesota Valley Trail, as well as general demographic information.

Like the Household Survey, the results of the User Survey are incorporated into the appropriate recommendations of this planning document.

Draft Plan Review and Approval

Once the list of management recommendations was generated, the draft plan was written and submitted for review. A 30-day public review was initiated with an open house hosted by the DNR Division of Parks and Recreation. Concurrent with the public review, a departmental review was initiated through the Regional Interdisciplinary Review Service (RIRS). Upon approval by the public and RIRS, the Commissioner of the Department of Natural Resources gave the plan its final approval.

Copies of the final plan were distributed to the Minnesota Valley State Recreation Area Park Office in Jordan, the DNR Regional Office at 1200 Warner Road in St. Paul, and the DNR Central Office at 500 Lafayette Road in St. Paul. All meeting minutes and related records are available from the DNR Division of Parks and Recreation Planning Unit in St. Paul.

II. REGIONAL ANALYSIS

Ecological Subsection

"With the first March thaw the thoughts of the Indian women of my childhood days turned promptly to the annual sugar-making."

Charles Eastman,
Indian Boyhood

The Minnesota Valley State Recreation Area is located within the Big Woods Subsection of the Minnesota and NE Iowa Morainal Section (Eastern broadleaf forest province). This subsection was adjacent to tall grass prairie to the west, savanna and tall grass prairie to the east, and the Mississippi River and an extensive outwash plain to the north. This subsection derives its name from the dominant vegetation type, commonly referred to as *The Big Woods*, which consisted primarily of red oak (*Quercus rubra*), sugar maple (*Acer saccharum*), basswood (*Tilia americana*), and American elm (*Ulmus americanus*). The primary landform is a loamy-mantled end moraine associated with the Des Moines lobe of Late Wisconsin glaciation. This is demonstrated by circular, level topped hills bounded by smooth side slopes and above a broad lower level. The lower level is interspersed with closed depressions containing lakes and wetlands (Division of Ecological Services, MN DNR 2003).

It is important to note that although the overall vegetation was Big Woods in the landscape, the Minnesota River cut through the middle of this, and the steep slopes and outwash-derived sands created conditions for the prairie, savanna, and woodland vegetation that occurred in the river valley.

See Figure 2: Big Woods Subsection

Regional Population Analysis

Minnesota Valley State Recreation Area stretches from Fort Snelling State Park, in the center of the Minneapolis-St. Paul Metropolitan area, through rural parts of Scott, Carver and Sibley Counties to the City of LeSueur. The 2001 Household Survey indicates that most people who use the recreation area use the portion nearest their home, so the characteristics of the people who use the trail, their surrounding communities, and what they're interested in doing recreationally are somewhat dependent on which portion of the trail being looking at. However, there are some relevant demographic trends:

Population Growth

From 1990 to 2000, the population in most of the counties along the Lower Minnesota River valley increased significantly. There is a continuing trend of people moving to more suburban and exurban locations. As an example, Scott County was recently listed as the nation's eighth-fastest-growing county, and the fastest in either the Midwest or the Northeast, according to the U.S. Census Bureau (as cited in Peterson 2003).

See Figure 3: 2000 Census Information

Table 1: County Population Increases 1990-2000

County	% Population Increase
Hennepin	8.1
Dakota	29.3
Carver	46.5
Scott	54.7
Sibley	6.9
LeSueur	9.4

Source: Census 2000, Minnesota Planning

Figure 2: Big Woods Subsection

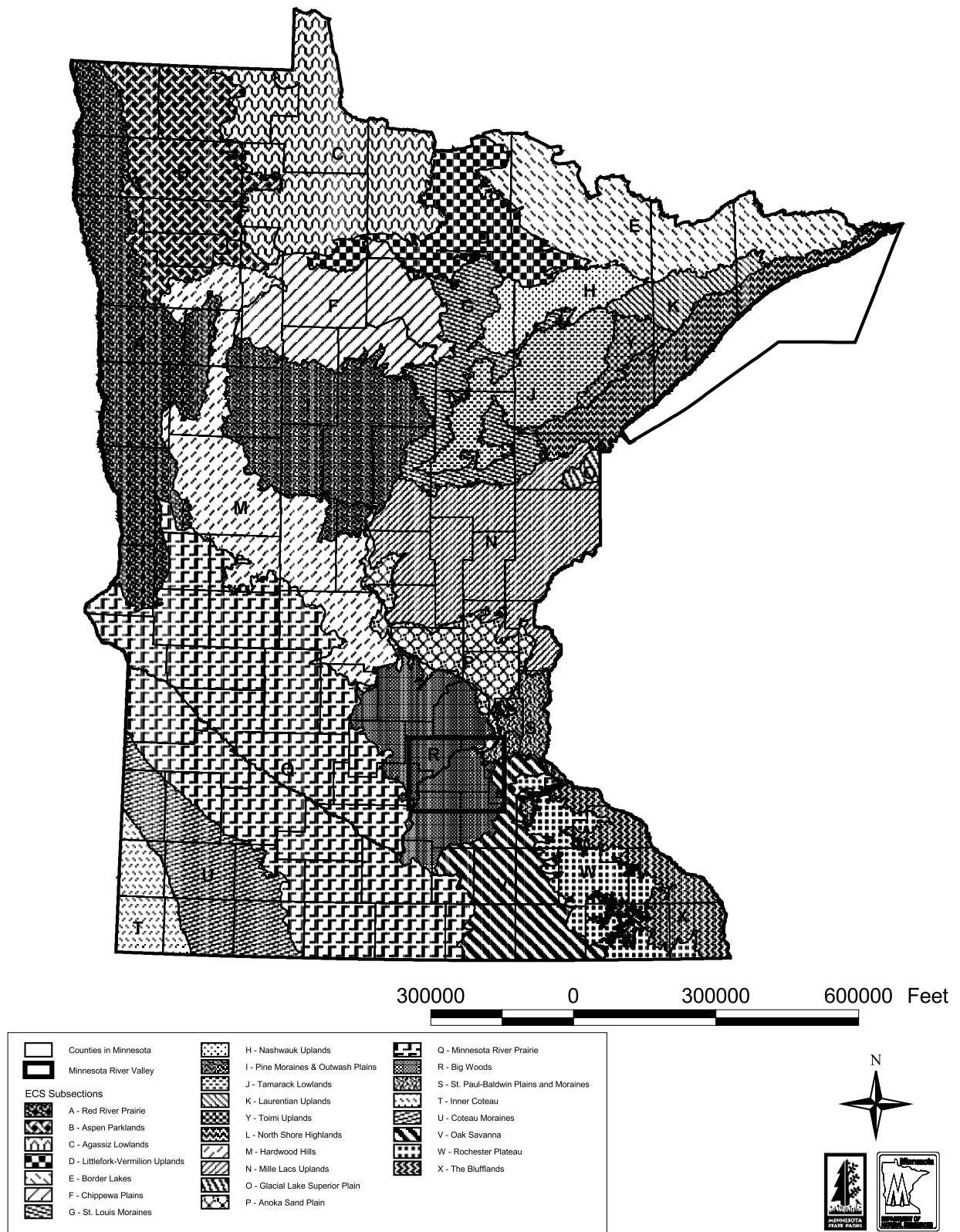
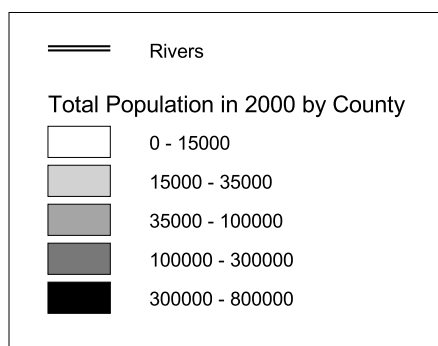
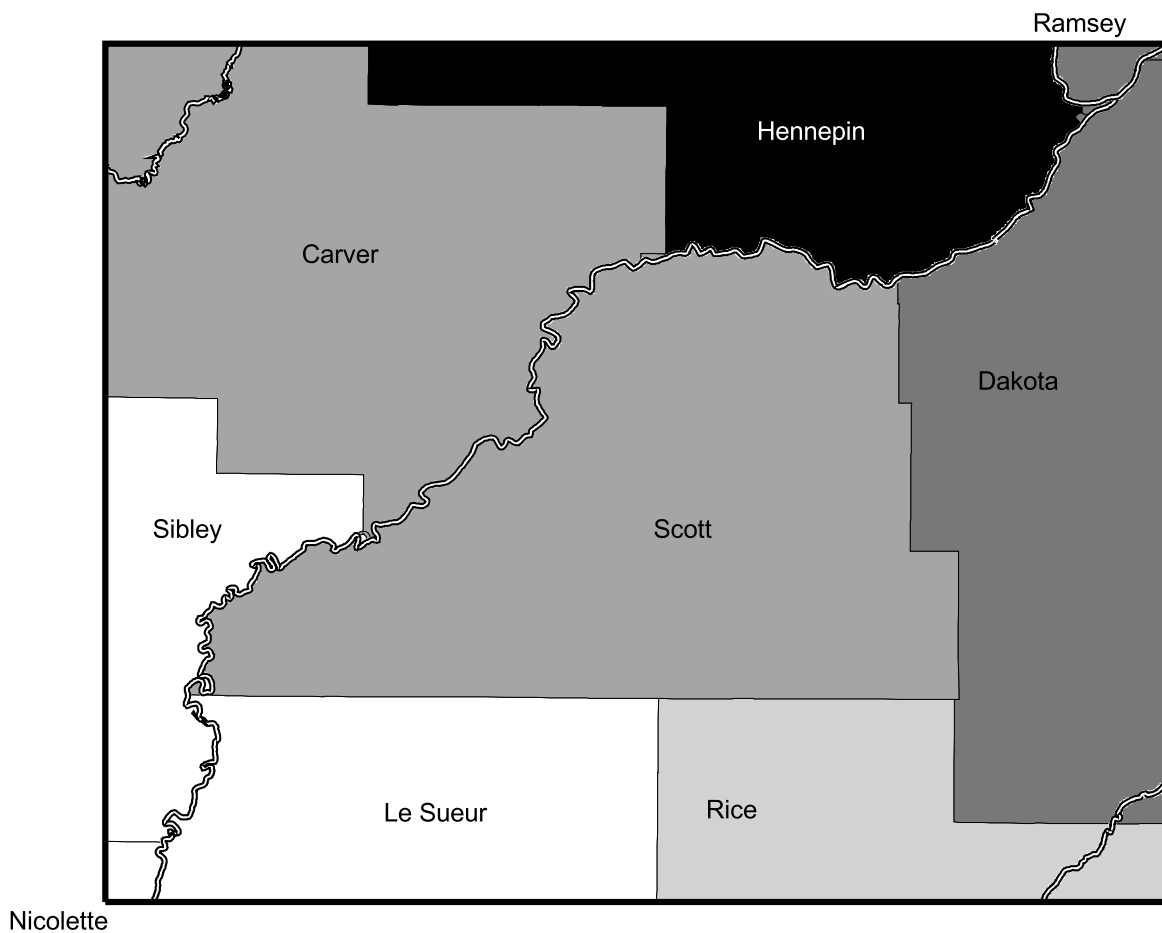
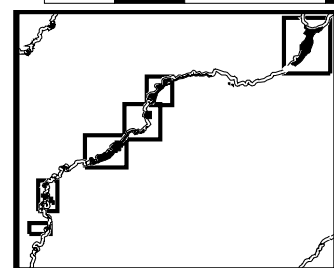


Figure 3: 2000 Census Information: Population



30000 0 30000 60000 Feet



Moreover, many individual cities along the Minnesota River corridor had significant gains. For example, in the same time period, the city of Savage (Scott County) increased its population from 9,906 to 18,500, an increase of 113%. Population forecasts by the Metropolitan Council indicate more of the same in terms of growth.

Racial/Cultural Trends:

During the 1990's, growth in the minority population in Minnesota accounted for 56.7% of the overall population growth. The number of non-English speakers in public schools tripled from 1994 to 2002, with Russian, Somali, Spanish and Hmong languages increasing significantly (MN DCFL 2003). Overall, Minnesota's minority population increased from 6.3% in 1990 to 11.8% in 2000. The state is becoming more racially and culturally diverse, although it is still much less diverse than the nation as a whole. The percentage of minorities in the nation as a whole was 30.9% in the year 2000. (Minnesota Planning 2003).

Because of its proximity to the metropolitan area, visitors to the Minnesota Valley State Recreation Area are more culturally and linguistically diverse than those who visit most other State Parks. This presents differing opportunities and challenges in terms of meeting visitor expectations and on-the-ground resource management objectives. The recommendations for park interpretation, for the provision of recreational opportunities and for natural and cultural resource management are a reflection of this park's unique clientele, opportunities and challenges and are discussed in the appropriate sections of this plan.

See Figure 4: 2000 Census: Minority Populations

Age:

Between 1990 and 2000, the 45-54 year-old age bracket in Minnesota grew 55.4% and the 55-59 year-old age bracket increased 31.1%. In other words, there are significantly more people in these older age classes. This trend is projected to continue in the next 10 years with the greatest growth in the 45-64 year-old category. Moreover, people are expected to live longer than they ever have before (U.S. Census 2000).

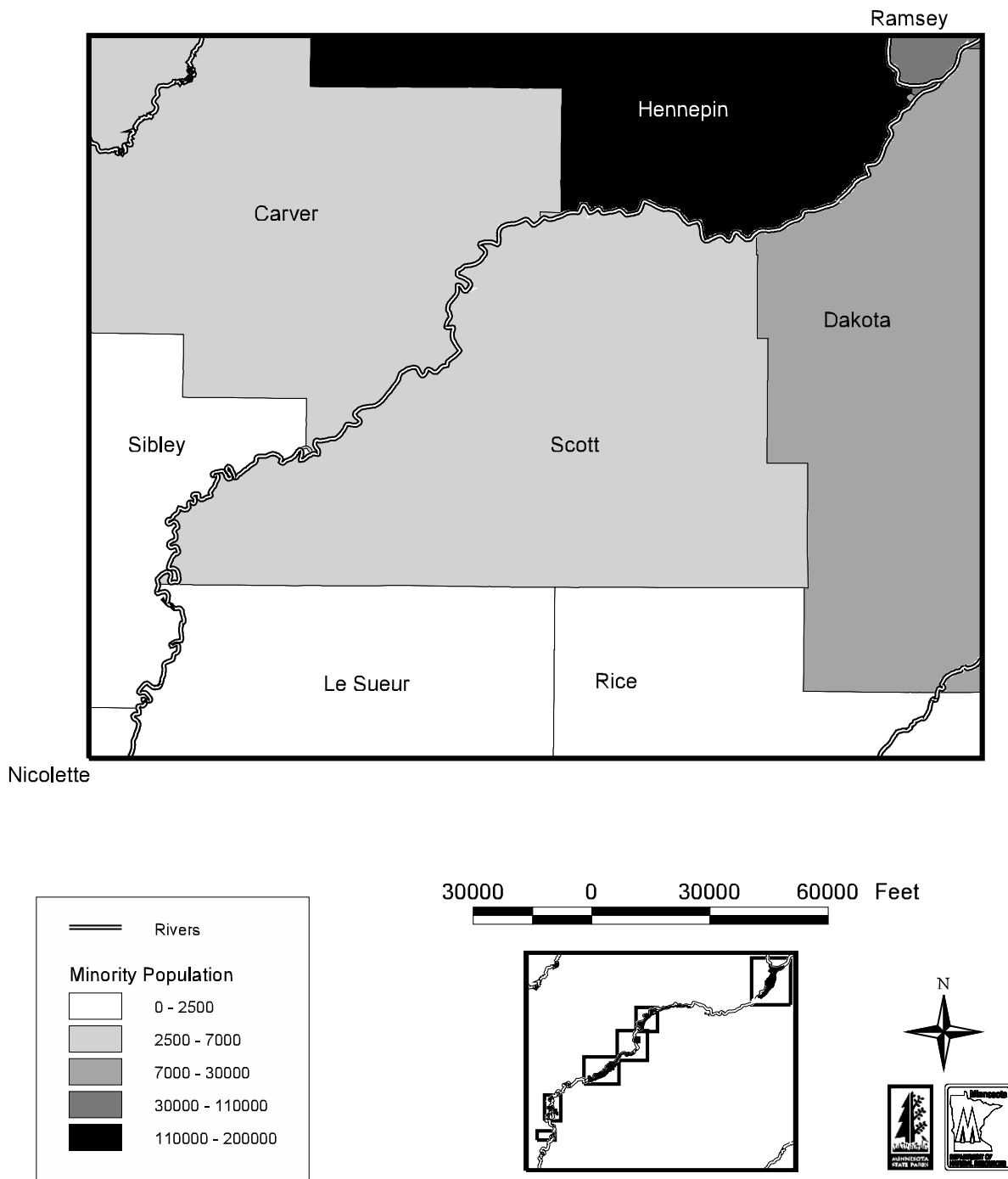
Regional Recreation and Tourism Opportunities

Given that most people who visit the Minnesota Valley State Recreation Area are either within 25 miles of their home or using it as a springboard to visit other Metro area attractions, the SRA needs to be viewed as part of the larger spectrum of recreational opportunities in the area. For example, private campgrounds with full amenities are much more common in the area than public campgrounds that provide a rustic experience. It is likely that the visitors who frequent the campground at the Lawrence Unit are there because they prefer a rustic type of campground, close to the river itself.

Most of the visitors to the Minnesota Valley State Recreation Area are day-use visitors, however. The User Survey indicates that most day users in this unit are interested in recreating in a natural setting, away from crowds, in order to gain certain benefits such as physical fitness, mental rest and spiritual renewal. Given its setting, the Minnesota Valley SRA (and the adjacent publicly owned lands) may be the primary provider of this type of opportunity in the area. People are seeking these areas because they want to escape life's usual demands and for many of them, the SRA is nearly in their backyards.

In a recreational sense, connectivity is also important. The Minnesota Valley Trail was originally envisioned as the core trail that connects the various city, county and regional trails in the area. As time has passed, these local communities have designed and built their trails with the expectation that the Minnesota Valley Trail will be completed. As the trail is further defined and developed, this will become more of a reality. In the Fort Snelling area, for example, the trail currently connects to the Minnehaha Trail System (Minneapolis), the Big Rivers Trail (Lilydale-Mendota Heights), and the Bloomington Trail System. Other proposed connections include the trail system of the Three Rivers Park District and the Edina/Richfield Corridor, for example.

Figure 4: 2000 Census Information - Minority Populations



III. NATURAL RESOURCES

Climate

The annual precipitation ranges from 29 inches in the west to 31 inches in the east, with growing season precipitation ranging from 12 to 13 inches. Growing season length is approximately 145-150 days (MNDNR 2003). Average snowfall for Hennepin County is 55.9 inches (USDA 2003).

Topography

Topography is characteristically gently to moderately rolling across the Big Woods Subsection.

See Figure 5: Contours

Geology

The Glacial River Warren, flowing from Glacial Lake Agassiz, formed the Minnesota River valley 10,000 years ago. When the glacial river retreated, it left a broad valley with a much smaller stream. In places, the valley is five miles wide and 300 feet deep.

Depth to bedrock varies from 0 to 400 feet. Underlying bedrock includes Ordovician Cambrian sandstone, shale, and dolomite to the south; and Cretaceous shale, sandstone and clay to the north.

See Figure 6: Geology

Soils

Soils on the uplands of the Big Woods Subsection are dominantly loamy, with textures ranging from loam to clay loam. Parent material is calcareous glacial till of the Des Moines lobe (late Wisconsin glaciation) origin. They are classified primarily as Alfisols (soils developed under forests). There are also some Mollisols (soils developed under grassland) found on the west side of the subsection. These soils are usually well drained.

Soils in the flood plains or bottomland soils are nearly level, poorly to moderately drained formed in loamy, silty or sandy alluvium and are associated with the flood plain of the Minnesota River.

Pre-European Settlement Vegetation

"In the early 1880's Minneapolis was a place of enchantment---a veritable fairyland. Along the riverbanks grew in profusion trillium, bloodroot, wild phlox, anemones, Dutchman's breeches, and hepatica; the meadows were glorious with Indian paint brush, both red and yellow, with gentians, purple fringed orchids, and royal clumps of blue violets. In the tamarack swamps of the suburbs might be seen long vistas of our state flower, the showy lady's slipper, together with the wild calla, and pitcher plants without number. And who could describe the outlying prairies, rioting in color far exceeding the brilliancy of tropical flora."

Eloise Butler,
The Wild Gardener

Figure 5: Contours

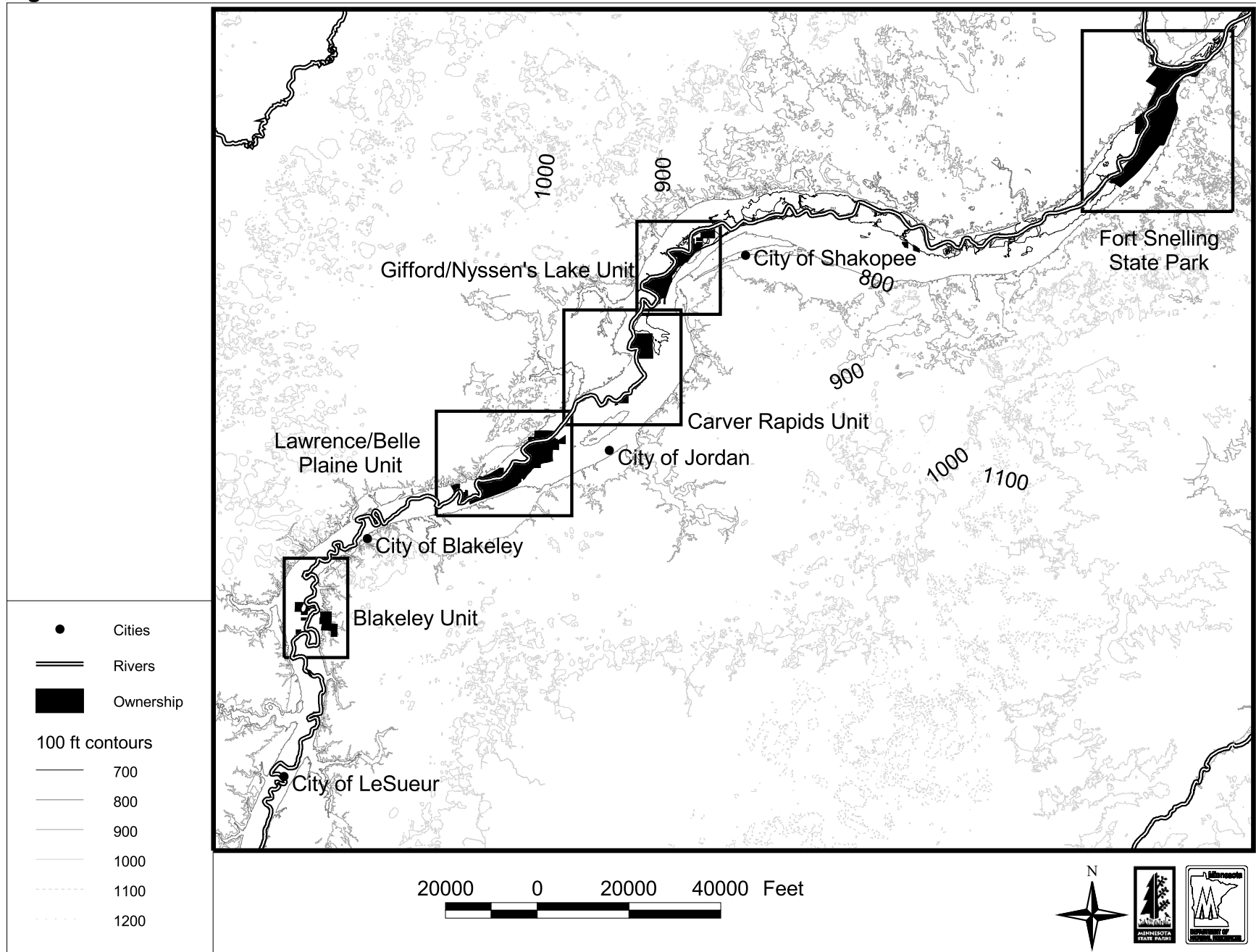
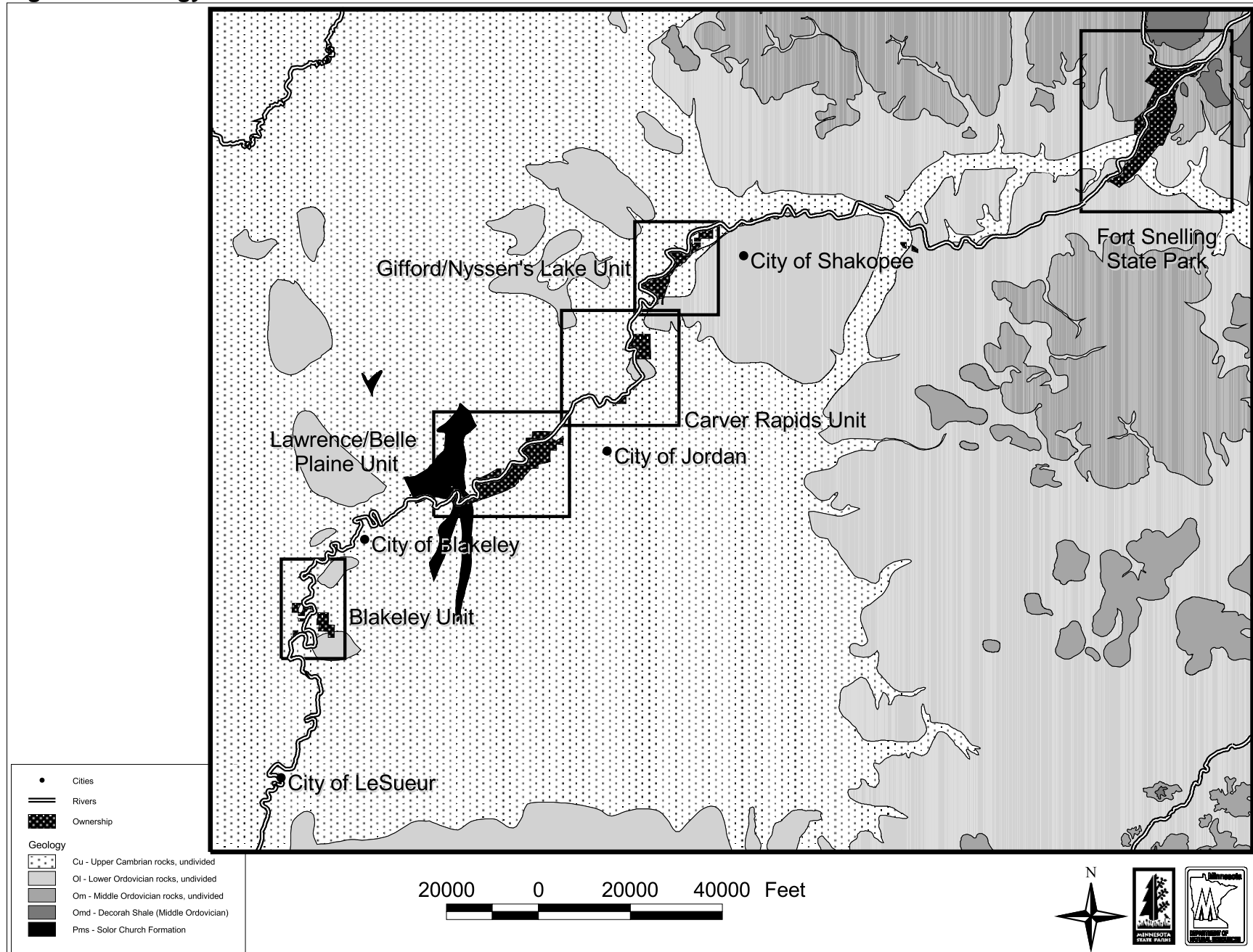


Figure 6: Geology



There are many resources that we can use to develop an historic picture of the Lower Minnesota River valley and surrounding areas. Dakota stories and traditions perhaps give us the best illustrations of what the area was like before European settlers arrived. In fact, it is clear that Dakota lives were intimately tied to the natural resources in the valley.

Their lives centered on the changing seasons and the resources that were available for use in food, shelter and clothing. From March through May, women and children moved to their sugar camps, located in forest dominated by large maples, while the men were away hunting and trapping, presumably near the many shallow lakes and marshes in the valley. By late spring, all of the community---men, women and children returned to their summer planting villages where the women, in particular, planted corn and harvested wild berries, nuts and other edible plants. In late summer, the corn was harvested and the families moved to the wild ricing camps, near the many shallow lakes available to them. After the rice was dried and stored, the families moved again to the fall deer hunting camps. During the coldest months, the families moved once more to their winter camps, near where their food had been stored after the summer harvest. Hence, we know that Dakota lives were dependent on a variety of natural resources in, and adjacent to the valley, including maple forests, marshes and shallow lakes, and the various wildlife species that lived there.

At the time of European contact, we also have the benefit of the many illustrations that were done by people such as Seth Eastman. Vivid descriptions of the landscape were also written by a variety of people who either passed through the area, or stayed at Fort Snelling.

The best technical information we have about vegetation in the area circa 1850 resides in the notes of the surveyors who worked for the United States General Land Office Survey. It is important to note, however, that the area was surveyed several decades after the area was first visited by European explorers. Fort Snelling itself was established in 1820, three decades before the survey. It is likely the activities of people in the area prior to the survey influenced the results of the survey in the confluence area.

Marschner completed an interpretation of the natural history of the area in 1974. Marschner, as portrayed in his map of *The Original Vegetation of Minnesota*, did an analysis using the General Land Office Survey notes as well as plat maps, soil and landform information. A quick look at the map tells us that he concluded that the area was a combination of upland prairie (bluestems, Indian grass, needle grass and grama grasses; composites and other forbs), oak woodland and brush land (bur oak, pin oak, aspen and hazel thickets, and prairie openings), and maple-basswood forest (elm, basswood, sugar maple, red oak and white oak), as well as a variety of prairie-related wetlands.

A current interpretation of the historic vegetation of the valley would conclude that the flood plains in the Minnesota River valley south of the present-day Mendota Bridge were occupied by a narrow strip of flood plain forest on alluvial soils immediately next to the river, and a complex of lakes, calcareous seepage fens, and emergent marshes on organic soils between the flood plain forest and the bluffs to the east. Moving away from the river valley, the vegetation graded to deciduous forest. On the steep moist slopes, maple-basswood and mesic oak forest occurred. The flat to rolling uplands were primarily oak savanna and oak woodlands, as well as open expanses of prairie.

See Figure 7: Pre-European Settlement Vegetation

Current Vegetation

“When our people lived in Minnesota, a good part of their natural subsistence was furnished by the wild rice, which grew abundantly in all of that region. Around the shores and all over some of the innumerable lakes of the “Land of Sky-Blue Water” was this wild cereal found. Indeed, some of the watery fields in those days might be compared in extent and fruitfulness with the fields of wheat in Minnesota’s magnificent farms today.”

Charles Eastman,
Indian Boyhood

The vegetation in the area today has been drastically altered by rapid settlement of the area by European cultures following the end of the U.S.-Dakota conflict. The natural communities have been fragmented and many of those that still persist are altered by the spread of invasive exotic species. For example:

- ❖ Much of the flood plain adjacent to the river has been greatly disturbed by farming and other land uses, so that the former extent of flood plain forest, marshes and wet meadows has been reduced and the river hydrology has been changed significantly.
- ❖ The few remaining prairies along the river valley have been invaded by brush and exotic species after being grazed and in the absence of fire.
- ❖ Oak woodlands and oak forests will likely convert to maple-basswood forests on many slopes without fire or other disturbance.

However, recent work by ecologists indicates that the river valley and its immediate environs supports the majority of the remaining native plant communities and rare species in Carver, Hennepin, and Scott counties. Please refer to the Recommendations Section for technical descriptions of the natural resources in the MVSRA.

Water Resources

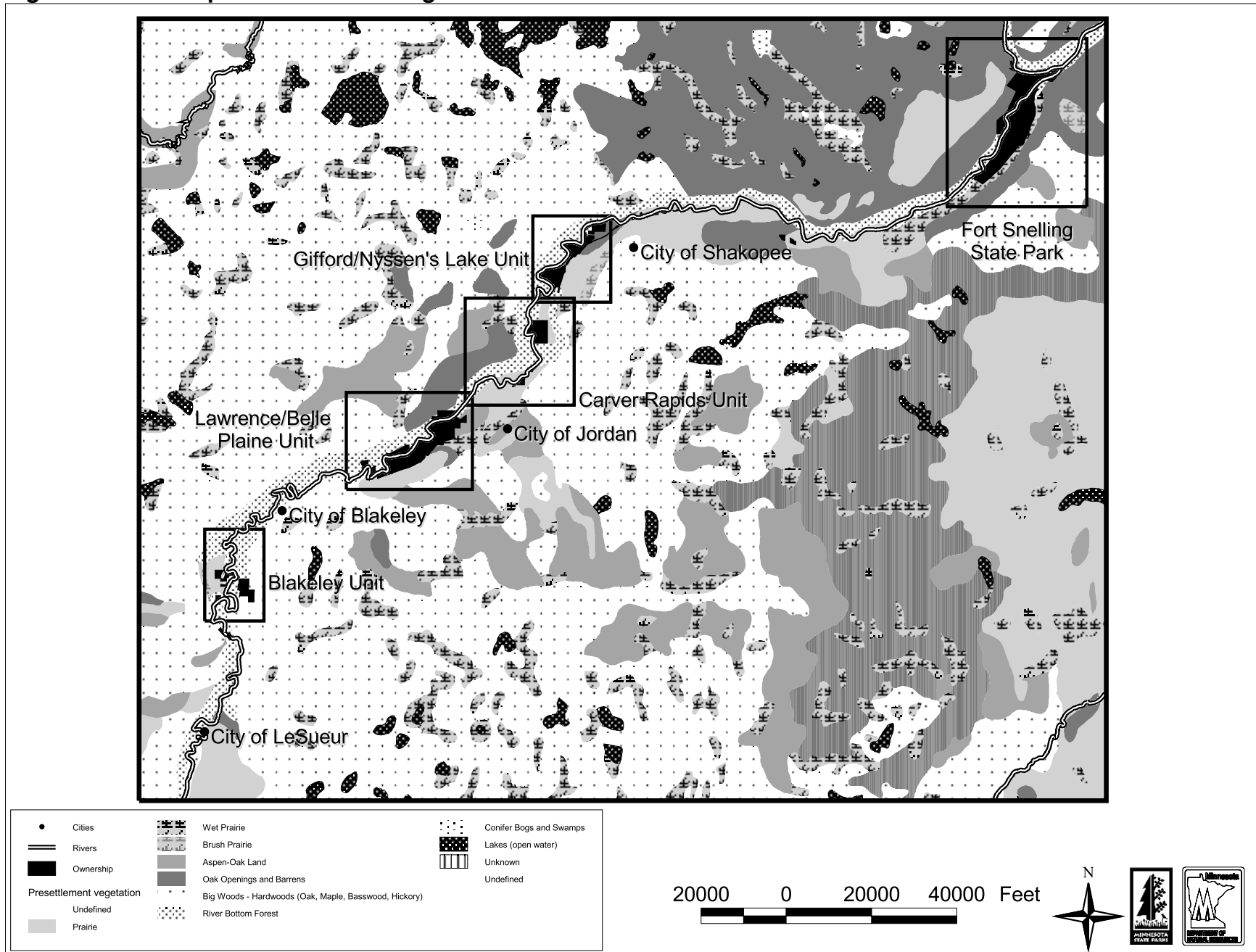
Water Quality

As early as 1934, the Minnesota Health Department found that the river suffered from the effects of pollution coming from industrial, domestic and farm runoff. Nearly all of the studies that have been conducted on the Minnesota River describe the same general problems—frequent violations of in stream water quality standards for bacteria and turbidity; occasional violations of standards for ammonia; and moderate-to-high levels of suspended solids, oxygen-demanding substances, nitrates and phosphorus (Minnesota River Citizens’ Advisory Committee’s Final Report to the Minnesota Pollution Control Agency, 1994). Since 1994, many organizations and agencies have been making a coordinated effort to improve the water quality of the Minnesota River.

Wetland Resources & Wildlife

The Minnesota River valley is a mosaic of wetland types ranging from cattail marshes, to oxbow lakes, to wet meadows, to flood plain forests, to trout streams, to calcareous fens. As such, the valley is home to many species of wildlife including migratory birds, waterfowl, fur-bearers, and other species of hunted game. Notably, in recent years, the valley has become home to several pairs of bald eagles as well as to sandhill cranes. In addition, coyotes and wild turkeys have been seen in Bloomington. Whitetail deer management strategies have been implemented to control their numbers in the metropolitan areas of the valley since the late 1970’s.

Figure 7: Pre-European Settlement Vegetation



Flooding

The frequency and duration of significant flooding events has been increasing in the last decade. It is likely that increased human activities on the landscape have reduced the land's natural capacity to hold rainwater. Remedies include the removal of tiling and ditching as well as the restoration of wetlands to the landscape.

Fisheries

Fish commonly sought by anglers in the Minnesota River include channel catfish, flathead catfish, walleyes, northern pike, and panfish. Fish populations are dominated, however, by fish such as sheepshead, buffalo, quillback, suckers, redhorse and carp (Waters 1977).

Natural Resource Management Goals

The DNR Division of Parks and Recreation 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've lost by recreating examples of original Minnesota landscape 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 Natural Resource Recommendations:

- ❖ Recognize that we need to look at the whole valley as an important corridor for conservation. Areas such as Eagle Creek, Assumption Creek/Seminary Fen, and the Savage fen wetland complex are all connected to the river valley yet are not a part of the MVSRA. This will require a renewed cooperative effort between all partners in the Valley.
- ❖ Protect rare resources: Based on the recent work by the Minnesota County Biological Survey, the Lower Minnesota River valley is home to a number of rare species and significant natural communities.
- ❖ Continue to use the best resource management prescriptions and techniques.
- ❖ Continue cooperative management with city, county, state, and federal agencies as well as with private landowners. The local bands, as well as other organizations interested in cultural and historic resource management, must be included as part of the management of the natural and cultural resources in the Minnesota Valley.

Inventory work in the valley should continue. Monitoring and management plans need to be written for species and native communities.

Identified Threats (as described by the Interagency Technical Committee)

There are many threats to maintaining the remaining biodiversity of the valley as a whole including:

- poorly planned residential & commercial development and associated infrastructure
 - loss of habitat
 - soil erosion
 - overuse of fertilizers and pesticides
 - homogenization of habitat due to current landscaping practices
 - noise and air pollution
- the proliferation of problem plant and animal species including European buckthorn, leafy spurge, reed canary grass, garlic mustard and white-tailed deer
- altered hydrological regimes
 - frequent flooding events
 - poor storm water management
- lack of funds, education and staff to identify natural resources
- proliferation of unauthorized trails
- noise pollution due to aircraft and vehicular traffic
- poor agricultural & industrial practices
- loss of habitat due to inappropriate logging on private lands

Unit Descriptions

The units of the Minnesota Valley State Recreation area are the primary state-managed landholdings in the Lower Minnesota River valley. Together with the land administered by the USFWS as part of the Minnesota Valley National Wildlife Refuge, and the DNR's Division of Fish and Wildlife (Wildlife Management Areas), they provide the core of the remaining natural areas in the Lower Minnesota River valley today. One look at the maps of the natural communities and rare species of Carver, Hennepin and Scott Counties tells the story: What remains of naturalness in these counties is primarily located in the river valley and its tributaries.

Biological surveys of Scott, Carver and Sibley counties were conducted by Minnesota County Biological Survey (MCBS) during the field seasons of 1995 through 1998. Through a cooperative agreement between MCBS and the DNR Division of Parks and Recreation, surveys of native plant communities and rare species were intensified on lands of the Minnesota Valley State Recreation Area. This work resulted in the report entitled "Survey of Biological Features in the Minnesota Valley State Recreation Area" published in 2002 by the DNR Division of Ecological Services (MN DNR 2002).

Areas specifically described by the MCBS in Scott, Carver and Sibley counties include the Gifford Lake Unit/Nyssen's Lake Unit, the Carver Rapids Unit, Sioux Vista Dunes/Thompson Ferry, the Lawrence and Belle Plaine Units, the Blakeley Unit/Jessenland 25, and the Rush River Unit.

Specific recommendations and unit descriptions for the management of the natural resources for the Minnesota Valley State Recreation Area are included in the Recommendation Section.

IV. CULTURAL RESOURCES

Archaeological and Historical Setting

"Perhaps the finest tribute that any cultural group has paid to the Minnesota River was given by the prehistoric Indians who chose to bury their dead along its bluffs. In so doing, they said that the river was a place for spending one's eternity."

Suzanne Winckler 1990

The history of humans in the Minnesota River valley is one of changing environments and changing cultures. Roberts et.al. (1993) lists the following themes as being unique to the Minnesota River valley:

- The Minnesota River valley served as the major east-west corridor for transportation and communication between the eastern edge of the tallgrass prairie and both the Mississippi River valley and the western edge of the deciduous forest. It has been, therefore, a focal point for contact, interaction, and cultural change for thousands of years.
- At different times in the past, the Minnesota River valley (along certain portions of its extent) may also have served as a barrier to north-south communication and transportation, as well as a "contested zone" between different groups of people.
- The evolution of the Minnesota River flood plain has been distinctive and the flood plain is characterized by numerous backwater sloughs, ponds, marshes, and protected areas. The flood plain is significantly larger than any of its tributary streams and may have served as an "oasis" for people seeking a variety of resources concentrated in a relatively small area.
- Major changes have taken place in the physical characteristics of the valley during the last 10,000 years and the continuing processes of erosion and deposition have destroyed or buried many archaeological sites, particularly those from early periods. Changes have also taken place in the vegetation and climate of the valley and have been along an east-west gradient. Thus, the environmental setting for most of Native American history in this region has not been the same as that encountered during the 19th and 20th centuries.

The differing cultural traditions known to have existed in the Minnesota River valley include:

- The Paleo-Indian Tradition (circa 11,000-8,500 years before present)

This period of time witnessed significant changes in landscape, climate and vegetation in the Minnesota River valley. Prior to the beginning of this period, portions of Minnesota were still covered by glacial ice and the river valley as we now know it, had not yet been formed. Then, over a period of several thousand years, Glacial Lake Agassiz began to drain to the south, releasing melt waters that eventually created the current Minnesota River valley. As the post-glacial climate warmed, the vegetation during this period changed from tundra and spruce forest to mixed deciduous and coniferous forest, with prairie to the west. The Paleo-Indian tradition is thought to have included small, nomadic groups of people who hunted large mammals present in the region.

- The Archaic Tradition (circa 8,500-3,000 years before present)

The Archaic tradition in the Minnesota River valley is characterized as having shifting climate and environmental changes. For the first half of the period, the climate gradually became warmer and drier, and the vegetation became more prairie-like. And then for the remainder of the period, the climate became cool and moist, and the deciduous forest became more prominent, invading from the east. The cultures living at the time are thought to have been the more western prairie

inhabitants who hunted bison, in addition to the more eastern woodland inhabitants who were general hunters and gatherers.

➤ The Woodland Tradition (circa 3,000-1,000 years before present)

During the Woodland tradition, changes in the landscape, climate and vegetation of the Minnesota River valley were slowing down and the resulting cultures are thought to have been more stable or at least more sedentary. Ceramics, earthen mounds and horticulture started to appear during this time.

➤ The Oneota and Plains Village (circa 1,000-300 before present)

The Oneota and Plains Village traditions are characterized as being the first where farming became a substantial part of life for the people who lived in the Minnesota River valley. At about this time, there was a true shift towards cultivation of crops such as corn, beans and squash; villages tended to be more permanent and there were rapid increases in population. There is evidence of long-distance trading between complex regional cultures.

➤ The Dakota Villages (circa 300 B.P to present)

The Dakota have lived in the Lower Minnesota River valley since at least 1700 A.D. Accounts of the Dakota culture can be found alive today in the stories told by current members of the tribes (Mdewakanton, Wahpeton, Sisseton and Wahpekute) and by historical records from European explorers, missionaries, traders and settlers. In essence, their lives centered on the changing seasons and the resources that were seasonally available in the Minnesota River valley for use in food, shelter and clothing. We know today that there were several historic Dakota settlements in the valley including:

White Bustard's Village (1823; Hennepin County)

Black Dog's Village (1750's-1852; mouth of Black Dog Creek, Dakota County)

Cloudman's Village (1840; Hennepin County)

Nine Mile Creek Village (also known as Penichon's Village, 1823-1840; Bloomington)

Village near Eagle Creek (1834; Scott County)

Shakopee's Village (1834-1853; Shakopee area)

Sand Creek, White Sand or Sand Hills Village (1823-1836; Scott or Carver County)

Little Rapids (1802-1853; Scott & Carver counties)

Broken Arm or Lively Spirit Village (1830-1840; Belle Plaine)

Village of Red Eagle (1823-1838; Henderson)

Prairie La Fleche (1840; LeSueur Creek)

With the arrival of French and English explorers in the early 1700's, and later, fur traders, the Dakota way of life was to change forever. Trading posts were established and treaties were signed. Early Europeans who visited the Minnesota River valley included Pierre Charles Le Sueur (1700), Jonathan Carver (1766), and Peter Pond (1774). After the Louisiana Purchase in 1803, Zebulon Pike was sent to explore the area and establish a United States government presence in the area now known as Pike Island (Fort Snelling State Park). Subsequent explorers included Colonel Henry Leavenworth (1819), Lewis Cass (1820),

Stephen H. Long (1823), Henry Schoolcraft (1832), George Featherstonhaugh (1835), George Catlin (1836) and Joseph Nicollet (1836). Most of these expeditions had a general goal of surveying the area for trading posts, Indian settlements, native wildlife, vegetation, and geologic formations as well as eventually expanding the ever-increasing European American settlements into the area.

Early treaties that were inexorably demanded of the Dakota included:

- The Treaty of 1805 by which the Dakota led by Little Crow (grandfather of Little Crow of 1862) ceded 9 square miles of land between St. Anthony Falls, the confluence of the Minnesota and Mississippi rivers, and the mouth of the St. Croix and Mississippi rivers to the U.S. Government for the establishment of military posts. In return, the Dakota were to be permitted “to pass, repass, hunt or make other uses of the said districts, as they have formerly done”. This agreement later included a \$2,000 payment in cash or goods.
- The Treaty of 1837 by which the Dakota ceded the lands in the delta region between the St. Croix and the Mississippi rivers in return for goods and perpetual annuities. This treaty did not reserve the right for the Dakota to continue to hunt, fish and gather wild rice on the ceded lands.
- The Treaty of Traverse des Sioux (July 1851) by which the Dakota (Sisseton and Wahpeton bands) ceded all of their lands in Iowa and Minnesota east of the Red River-Lake Traverse-Big Sioux River in return for a tract of land ten miles wide on both sides of the Minnesota River from Traverse Lake to the Yellow Medicine River. Later in August of the same year, a similar treaty was negotiated with the lower bands of the Dakota (Wahpekute and Mdewakanton) to set aside a reservation ten miles wide on both sides of the river from the Yellow Medicine River 60 miles downstream to Little Rock stream. The result of these treaties was that essentially all Dakota land west of the Mississippi, except for the specified reservations, was ceded to the U.S. government.

Following these treaties, most of the Dakota eventually moved to the established reservation areas. At the same time, European American settlement was expanding quickly into the Minnesota River valley with trading posts, military posts, and towns being established along the entire length of the river. As cited in Roberts et al. (1993), the non-Indian population of Minnesota in June of 1849 was fewer than 5,000, but by 1860 had reached 172,022. Clearly, settlement was booming in the 1850s with many pre-railroad paper towns being established as well.

Tensions between the Dakota and the new settlers were increasing, however, at this time due the U.S. government's negligence in providing the reservations with the agreed upon goods (food) and annuities. This eventually erupted into the U.S.- Dakota Conflict of 1862³.

After the mid-1860s the Minnesota River valley became the new home of a variety of European and American cultures who settled down to develop towns and farms. Examples of existing towns that developed at that time include Shakopee, Chaska, Carver, Belle Plaine, Henderson and LeSueur. Initially, these towns were either accessed by steamboat or by overland trails that initially had been used by the Dakota. These trails were later renamed “oxcart “ trails by the settlers who widened them for the passing of their wagons. Throughout the 1800s, ferries were often the only way to cross the river. By 1865, the first railroad (the Minnesota Valley Railroad) had laid track between Mendota and Shakopee and the area was opened up even further to settlement and to more rapid transport of goods.

Early industry in the Lower Minnesota River valley included limestone and sandstone quarrying for the production of both lime and stone for buildings. Later, brick making became more common in the Shakopee and Chaska areas, especially. These resources were readily available in the river valley and easily accessed. The handful of structures from this time period that remain in these communities bear witness to these early industries. Other early industries in the area included agriculture, lumbering, flour milling and brewing.

³ For an account of the U.S.- Dakota Conflict see *Through Dakota Eyes: Narrative Accounts of the Minnesota Indian War of 1862*, Gary Anderson & Alan Woolworth, Eds. Minnesota Historical Society Press, 1988 or *The Sioux Uprising of 1862* by Kenneth Carley, Minnesota Historical Society Press, 1976.

The Dakota People Return to Minnesota

By the 1870s, a few families were establishing small “colonies” back in Minnesota and at Flandreau, South Dakota. Some had managed to stay in Minnesota, after the removal of most of the Dakota, in areas like Red Wing, Wabasha and Hastings. Eventually some family groups re-established residence in the old reservation areas. By 1887, the Government allocated some relief to the Minnesota Dakota by adding to several small tracts of land already purchased at Birch Coulee (Morton, MN), Prior Lake, and Prairie Island. These land holdings grew to become the reservation communities of today. The Dakota struggled through decades of changing U.S. Indian policies that went from allotment of Indian lands and termination of tribal governments to the Indian Reorganization Act of 1926 and the re-establishment of tribal sovereignty. In Minnesota, those “pioneer” Dakota families that returned or managed to stay in Minnesota in poverty and isolation grew to become the self-sufficient communities that exist today.⁴

Existing Historic Features

Existing historic features that are high priorities for preservation and interpretation remaining either along the trail or in one of the units of the Minnesota Valley State Recreation Area include:

- Shakopee limekilns, brickyard and associated structures
- Shakopee brewery and associated structures
- Strait House (Lawrence Unit)
- Corbel House (Lawrence Unit)
- Thompson Ferry site (Scott County)
- Bloomington Ferry site (Hennepin County)

For a complete list of the Cultural Resource in and near the Minnesota River valley identified for protection see Appendix B.

Threats to cultural resources include:

- artifact collection on public lands
- graffiti & vandalism to historic structures
- lack of routine maintenance to historic buildings and structures
- lack of funds, education and staff to identify cultural resources
- abuse of identified cultural sites
- destruction of viewscales and cultural landscapes

Cultural Resource Management Recommendations are included in the appropriate sections below.

⁴ See History of the Santee Sioux: United States Indian Policy on Trial by Roy W. Meyer, University of Nebraska Press, 1967.

V. INTERPRETIVE SERVICES

Introduction

Division mission and goals for interpretive services

The Minnesota State Parks Interpretive Mission 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."

DNR Division of Parks and Recreation, as part of its core mission, seeks to increase public understanding, appreciation and enjoyment of natural and cultural resources in Minnesota. It does this by providing interpretive services that focus on each park's unique story and resources. State park interpretation also focuses on visitor and resource management in order to help protect park resources. By working with other DNR divisions, educational institutions and local communities, interpreters increase their effectiveness in providing outdoor education and recreation. The result of interpretation in a local state park area can increase public awareness of critical environmental issues on a much greater scale. State Park Interpretive Services can thus provide significant recreational and natural resource based educational experiences that influence peoples' understanding and behavior in such a way that they themselves become stewards of Minnesota's cultural and ecological treasures.

Regional Analysis of Interpretive Services

The Minnesota Valley State Recreation Area is different from most state parks. It is comprised of a linear trail connecting larger units for 72 miles along the Minnesota River between Le Sueur and St. Paul. It crosses through many towns and cities, ecological communities and an unusual number of cultural sites. The state recreation area is more like a landscape region than a park when considering management planning. The differences in the state trail between a small river town like Henderson and Fort Snelling State Park, in the midst of the Metro area, are significant, both in the types of recreational use and in the resources to manage and interpret. In the case of Interpretive Services, it becomes particularly important to consider interpretation and education already being offered along the trail recreation area.

Refer to Table 2: Interpretive Opportunities in the Minnesota Valley

This is only a partial listing of environmental education opportunities. More needs to be done to make contact with local efforts along the study area. As this happens, a coordinated effort to fill in the missing pieces, and provide complementary interpretation that does not duplicate efforts but builds on a comprehensive interpretive plan should be the goal.

Interpretive Services Planning for Minnesota Valley State Recreation Area

The Minnesota State Park System Interpretive Services Plan identifies the MVSRA as a level 4 park (in a rating of 1- 5) based upon landscape region significance and visitor use. This means the MVSRA ranks high in representation of landscape features to interpret. The natural and cultural features are of large size and/or of high quality, and are readily accessible for interpretation. It also ranks high in the analysis of park use based upon the number of visitors and the population base within 25 miles. Minnesota Valley's highest scores are in significance of cultural resources and in the number of potential users because of its location in the Metro area.

Usually, this level of park would contain a visitor center, one full-time naturalist with seasonal help and facilities such as information stations, self-guiding trails and unit exhibits. However, because of its long acquisition history, visitor use patterns and the great length of the unit, the focus has been primarily on self-guided interpretation and occasional programming from Fort Snelling State Park staff.

Table 2: Interpretive Opportunities in the Minnesota River valley

Provider	Personal Programs/Tours	Brochures & Videos	Self-Guided Trails	Visitor Center/Exhibits	School & EE Programs	Historic Site Exhibits	Geographic Area	OTHER NOTES
Minnesota Valley National Wildlife Refuge	x	x	x	x	x	x	Bloomington to Jordan	Interpretive Center is in Bloomington
Mississippi National River and Recreation Area	x	x	x	x	x	x	4 Miles from mouth of Minnesota River	Interpretive Center is in St. Paul; School program is Big River Journey
MnDNR Parks	x	x	x	x	x	x	River Confluence to Le Sueur	Interpretive Center is in Fort Snelling State Park
Shakopee Mdewakanton Dakota Community		x		x	x		Minnesota River valley	Main Center is in Prior Lake
City of Shakopee		x	x	x		x	City of Shakopee	Memorial Park
Ney Environmental Center		x	x	x	x		Henderson	
Three Rivers Park District	x	x		x	x	x	Murphy's Landing	Shakopee
Joseph R. Brown River Center				x		x		Henderson
Scott County Historical Center	x	x		x	x	x	Scott Co. Museum	Shakopee
Minnesota Historical Society	x	x		x	x	x		Sibley House; Fort Snelling
City of Bloomington						x		Gideon Pond House
Friends of the Minnesota Valley	x	x					Minnesota River valley	Special Programs
Minnesota River valley Audubon Club	x		x				Minnesota River valley	Special programs & Birding Trails

Minnesota Valley State Recreation Area Interpretive Mission

A broad geographic range of significant resources makes it challenging to focus interpretation for the State Recreation Area into a manageable effort. Yet, as a whole, the trail and recreation area has the potential to tell a cohesive story of the early history of Minnesota. The history of the Lower Minnesota River valley takes on a proportion of statewide significance and mirrors perfectly the statewide interpretive theme: "the changing relationship of people to the landscape through time."

The success of interpretive and educational efforts depends upon several things. First, as stated above, cooperation with complementary interpretive and educational efforts along the length of the trail is essential. Second, clearly identified as a goal in the planning effort, is the need to step back; to look at the big picture in order to provide the continuity and context needed to interpret numerous cultural sites, natural communities, and time periods.

It became evident during public discussions that in order to provide this context it would be necessary to blend natural and cultural interpretation rather than separate them. From the Dakota perspective, as noted by several participants in the planning process, they are indistinguishable. Interpretation should show how human activities in the valley are natural resource driven, and how people have in turn affected the landscape. Revealing this relationship of natural and cultural history is the special niche of state park interpretation.

The planning process for the interpretive section of the management plan included a series of citizen meetings with an interpretive subgroup, which focused on developing goals, objectives and themes for interpretation. The technical team also made recommendations for the interpretive section from a public and private agency perspective. This process included many of the players in the existing interpretive effort along the Lower Minnesota River valley.

Goals for Interpretation in the Minnesota Valley State Recreation Area

Interpretive media and programs will be developed with the following goals in mind:

Trail users will learn about the distinctive ecological and cultural history of the Minnesota River valley over the past 10,000 years in a variety of ways.

Visitors will learn about Dakota history in the valley from a Dakota perspective through collaboration with the four Dakota Communities.

Trail and unit visitors will have information and interpretation that is functional and coordinated with facilities such as benches, rest rooms, picnic shelters and trail heads.

The signing system for the MVSRA will be user-friendly, clearly identify entry and exit points and will inform visitors of attractions at off-trail locations.

Visitors to the MVSRA will be provided with the "big picture" context to which they can relate individual sites and specific stories.

Visitors will understand the connection between the natural resources and cultural history in the river valley.

Visitors will be provided with information about linkages between MVSRA and trail systems from adjacent communities.

Visitors will enjoy coordinated programs through collaboration between agencies and communities providing information and interpretation in the area of the MVSRA.

Visitors will feel a sense of stewardship for the natural, cultural and recreational features of the MVSRA.

Interpretive Themes

A wealth of interpretive themes for the Lower Minnesota River were outlined in the *Cultural Resource Study and Interpretive Plan for the Minnesota State Trail and Recreation Area* completed by Norene Roberts et al. in 1993. Archaeological records record thousands of years of transportation, habitation and cultural interchange on the Lower Minnesota. This area plays a key role in the birth of the state. It is at the center of U.S.– Dakota relations – from the exploration of Zebulon Pike in 1805 to the U.S.- Dakota Conflict and removal of the Dakota from the State in 1862-3. The river's relationship with people includes industry, agriculture and recreation.

This planning effort hoped to clarify an over-all or connecting theme, which would support the many themes and changes over time. This came to be expressed as “People and the River” with the understanding that people and the river are linked past, present and future. To further focus the theme, the group was asked: “What message do you hope people come away with after visiting the State Recreation Area?” The answer to that was the need for people to feel a sense of stewardship for the natural and cultural features of the State Recreation Area, the river and the watershed. By understanding the history and significance of the area, people will naturally want to preserve it for the future.

Primary Theme

The interpretive planning process identified a primary or connecting theme for interpretation of the MVSRA:

“People and the River: a natural system changing through time”

Secondary Themes

Secondary themes include:

1. The Minnesota River valley is a rich mosaic of natural communities at the meeting place of Minnesota's biomes.
2. The Minnesota River valley has sustained people, plants and wildlife throughout history.

The Minnesota River was and is an important corridor of communication, transportation and settlement (including agriculture).

The Dakota people have a long history with the Minnesota River that continues today (see “Dakota Presence” theme notation below).

Historic Dakota lifestyle focused on seasonal sustainable resource- based activities such as wild ricing, maple sugaring, agriculture, hunting, fishing and trade.

With modern development and shrinking natural habitat, the river valley is an important remaining natural corridor for plant and animal communities.

3. People have shaped the river valley and its landscapes throughout history.

Early peoples helped maintain a rich diversity of life in the Minnesota Valley through a sustainable economy and the use of fire.

The Dakota presence in the Minnesota Valley (this theme will be further developed through consultation with Shakopee Mdewakanton Dakota Community & other Dakota communities).

“Minnesota” is a Dakota word meaning...cloudy, sky-reflected waters.

Early European/U.S. river settlement economies were based upon land speculation, and industries along the river such as breweries, brick making, quarrying, button making, farming, ferries, and transportation.

Changing transportation was a major factor in determining the fate of communities along the river. The town of St. Lawrence, for example, was originally accessed by steamboat. However, once the new railroad was built east of the town, it could no longer survive.

Europeans changed the landscape through non-subsistence agriculture, fire suppression, and wetland draining.

What are sustainable uses for the Minnesota River valley today?

Appropriate recreation is compatible with natural and cultural resource values in the Minnesota Valley.

4. U.S. - Dakota Relations from contact to removal centered in the Minnesota Valley.

Interaction between Dakota and early European Americans was established through treaties, the fur trade and missionary work and was determined by control and uses of the resources of the river valley.

The U.S.-Dakota Conflict culminated in the Dakota Concentration Camp and Dakota Removal at the site of what is today Fort Snelling State Park.

5. Many natural forces and human activities have contributed to the changing dynamics of the Minnesota River.

Glacial River Warren carved the Minnesota River valley.

Flooding is a natural process that has had an effect on human history and vice versa. Flooding frequency is changing due to human interactions with the landscape.

Land use practices have caused sedimentation, erosion and pollution of the river and tributaries.

What happens in the watershed affects the water quality and life in the Minnesota River.

Existing Interpretive Services (see “Recommendations” section)

In general, without a naturalist position, state park programs in the MVSRA are limited to special events, occasional programs, self-guided interpretation (signs, brochures & kiosks) and a yearly Scott County Environmental Education day.

Research and Study Needs

Results from the Household Survey and Trail User Survey: Interpretive Implications

Familiarity with the Minnesota River valley Area: One of the most significant findings of the Household Survey was that general awareness of the area is lower than what would have been expected based on results from a comparable study of the Twin Cities reach of the Mississippi River. In the Minnesota River valley Survey, nearly one-fourth of respondents had “never heard of the area before,” and another one-third “did not know very much.” Those who “knew a few things about the area” were a sizable portion (39%) and those who “knew a lot” comprised a small

portion (5%). Awareness of the area was higher for those living closer to the valley and for those living in the rural upstream segment (Belle Plaine to LeSueur). In addition, respondents are generally most familiar with the segment nearest their home.

How people get information about the area: Primary sources of information for people include “family and friends” and “I live near the area” as well as State Park sources. State Park sources are followed by newspapers, the Minnesota DNR website, road maps, recreation maps/directories, information at the Minnesota Valley National Wildlife Refuge and TV or radio.

What people do in the area: Of the respondents who have at least some awareness of the area, the majority has participated in an outdoor recreation activity in the area in the last 12 months. The specific activities respondents participate in are similar to what is found in Minnesota’s state parks and may well be similar for most large nature-based parks and refuges. Hiking/walking and sightseeing, coupled with observational/learning activities (“visiting historic/cultural sites,” “self-guided nature walk,” “nature/wildlife observation,” “looking at kiosks or visitor center exhibits”) are leading activities. These are followed by picnicking, biking (other than mountain biking), fishing and nature/wildlife photography. Cross-country skiing is the leading winter activity. Motorized activities, including snowmobiling, follow.

Awareness of the Valley as a Barrier to Use: The two most commonly cited barriers to use of the valley include lack of time and intervening opportunities. However, other leading factors depend on the level of awareness the respondent possesses of the area. For those with low awareness, lack of information is a barrier including “I don’t know enough about the area” and “I don’t know how to get into the area.”

Additional Research Needs: As evidenced above, the Minnesota River valley is a complex area that may be challenging for people to get to know. More research needs to be done on how to market the valley to people who do not have much knowledge of the area and how to direct people to the valley, once they know about it. Of note, the Friends of the Minnesota Valley and the St. Paul Area Chamber of Commerce are currently undertaking a joint effort to develop a visitor marketing plan for the Minnesota Valley National Wildlife Refuge.

General Interpretive Recommendations

The Interpretive workgroup of the Minnesota Valley State Recreation Area planning team identified the following issues and recommendations to consider when planning and implementing interpretation along the trail.

Interpretive Planning/Projects

- ❖ Safety and vandalism are major concerns for trail users and need to be taken into consideration when developing interpretation along the trail. Sign structures need to be as vandal-proof as possible and present a high quality image at the same time. Trail users may feel safer if interpretation is located in accessible and visible areas – such as trailheads, junctions and rest areas.
- ❖ In planning for interpretation, we should be looking for a process rather than a product; we need a system of interpretation that can grow and change. The interpretive needs and scope of the 72-mile trail corridor are too large to address specific, detailed interpretive actions within this management plan. A framework and identification of project phases should be outlined, building on this and other documents.
- ❖ Continue to use a variety of off-site media such as the Internet in order to provide information and interpretation for the valley corridor.

- ❖ Interpretation should include the valley bluff to bluff - rather than a narrow trail alignment in order to see the big picture, tell integrated stories and to include all features and visitor attractions near the trail.
- ❖ The ongoing process should include an effort to include the participation of the many agencies and communities along the corridor in interpretive planning and delivery of services.
- ❖ Recognized Dakota Communities, such as the Shakopee Mdewakanton and the Lower Sioux, should play a lead role in interpretation of Dakota history and management of sacred sites. An ongoing cooperative relationship is essential to the proper management and interpretation of Dakota cultural sites.
- ❖ Develop cooperative agreements for interpretation with the Dakota Communities to provide meaningful interpretation of Dakota history and culture.
- ❖ Use a unified, recognizable style and graphic elements to tie together interpretation along the trail instead of a mixed, multi-agency approach.
- ❖ Provide interpretation in languages other than English as appropriate (Spanish, Hmong or Dakota, for example).
- ❖ Theme development is the best organizing framework in interpreting natural and cultural history along the trail.

Staffing

Both self-guided and personal interpretation should be increased in the Minnesota Valley State Recreation Area. Ideally, because this unit is so large and so rich in terms of its natural and cultural resources, it should have a full-time State Park naturalist assigned to it. In the short-term, the DNR Division of Parks and Recreation should work with other personal program providers and partners to provide an overview of information and materials on the MVSRA and to provide cooperative programming in the form of special events and tours.

Way finding and Information

Way finding is the basic information and design elements that orient and direct visitors on the trail, at units and in parking areas. The primary concerns are safety, helping people have the experience they planned, and informing users about the location of other visitor facilities. In order to do this in the Minnesota Valley the planning group recommends that the many agencies that manage the trail and adjacent areas use a coordinated system of way finding. This will provide information that crosses agency boundaries, which only confuse visitors to the area. Leaving out features or information on a map that refers to another agency can seriously misinform a park visitor. Both the Citizen Advisory Committee and the Interagency Technical Team discussed this issue and stated that the priority for signage should be to give visitors to the valley way finding information in a unified manner.

In the past, the USFWS and the DNR had collaborated on a joint map and brochure that included information and facilities from county and local governments. This is no longer in use. The common Minnesota Valley logo, the wood duck, still appears on road signs and brochures. This kind of coordination was viewed as helpful to the public and the DNR was encouraged to do more in this area. The major land managers, the DNR and The USFWS should work to coordinate the development of maps and directional signing where appropriate.

Interpretive Sites, Trail Heads and Corresponding Themes and Actions by Geographic Area:

Site-specific interpretive recommendations are included in the Recommendations Section of this plan.

Regional Interpretive Partners and Cooperative Efforts

Fort Snelling State Park (FSSP), managed by the DNR, Division of Parks and Recreation, plays a major role by providing interpretation related to the MVSRA at the Fort Snelling State Park Visitor Center in the park and by providing occasional programming in the valley.

Historic Fort Snelling, managed by the Minnesota Historical Society (MHS), provides interpretation of the U.S. military presence in a living history program. Historic Fort Snelling coordinates and collaborates

on development of interpretive signage in the park, on the Minnehaha Trail connections, at the Sibley Historic site and on the Mendota Trail.

Minnesota Valley National Wildlife Refuge/Minnesota Valley National Wildlife Trust (MVNWR) are the other major partners in the Minnesota Valley. The MVNWR's Comprehensive Conservation Plan lists MNDNR as a partner in management and interpretation. In the past, MNDNR and the MVNWR have collaborated on joint brochures, a common logo and kiosk designs. The Refuge plans to develop a new environmental education center in the Rapids Lake area of the Minnesota Valley. Coordination of interpretation, particularly in environmental education and personal interpretive programs, makes sense in this area of the trail. It is a recommendation of this plan that this collaboration should continue and if possible, increase.

The Friends of the Minnesota Valley (FMV) has been a major partner in supporting the MVNWR through the Heritage Registry, Community Partners Program and its Watershed Initiative Programs. Increased awareness and participation in activities in the MVSRA would benefit both DNR and FMV.

The Dakota Communities The cultural resource department of the SMDC has been an important partner in interpretive and management issues in the Minnesota Valley and at Fort Snelling State Park. MNDNR depends upon the Communities to provide consultation and interpretation of the Dakota Presence in the Minnesota Valley State Recreation Area. Joint signage, special events and collaborative programming are some of the ways we have agreed to cooperate. Areas of special interest and collaboration include: Fort Snelling State Park, Little Rapids, Shakopee Memorial Park and Murphy's Landing.

Scott County Historical Society (SCHS) has been cooperating with MNDNR in the reconstruction and operation of the historic Strait House at the Lawrence Unit of the MVSRA. The SCHS is the lead agency in a 1998 Federal Transportation grant to restore the 1857 structure and develop interpretive exhibits. An ongoing part of SCHS educational programming, an outreach unit, was developed for all Scott County fourth graders based upon the historic home. In the future, tours and special events at the Strait House will be increased to the benefit of visitors and both organizations.

Other potential partners that should be consulted for service coordination include:

Three Rivers Park System at Murphy's Landing, Shakopee

City of Bloomington

Nye Environmental Center, LeSueur County

Joseph R. Brown Minnesota River Center in Henderson

Pilot Knob Preservation Association of Mendota

Maps of cultural sites in the Lower Minnesota River valley are currently being completed by the Cultural Resources program of the SMDC.

VI. RECREATIONAL USE AND VISITOR SERVICES

Providing a spectrum of recreational opportunities is central to the mission of Minnesota State Parks. A major portion of the park planning process is to define what type of recreational opportunities people want to have and then to evaluate whether they are appropriate for that unit, given its natural setting and what's available in the surrounding community (ies).

The 2001 Minnesota State Park Visitor Survey:

What Visitors Want:

What we know about state park visitors in general is that when people visit state parks they want to attain experiences that add value to their lives. The experiences visitors seek are to enjoy nature, escape the pressures of daily life, bond with family and friends, learn and explore new things and to get some exercise. The activities that appear to be most important to them include hiking, sight seeing and nature observation. In addition, learning-related activities are an important part of their experiences.

Visitors generally support management actions that support the park system's core mission including expanding opportunities for wildlife viewing, quiet & solitude, hiking, education and interpretation. At the same time, visitors support *not* expanding development in state parks in order to protect the remaining natural and cultural resources. In addition, visitors are generally ambivalent about specific recreation development opportunities including paved trails, mountain biking opportunities and horse trails overall.

Who the Visitors Are:

In general, visitors to Minnesota's state parks come from all parts of the state, from all age classes, genders and socioeconomic levels. However, we also know that state parks are visited less frequently by people of color and are visited more frequently by middle-aged adults and children. The majority of state park visitors are college-educated and tend to have middle-incomes.

Attendance and Type of Use

Although annual attendance at Minnesota's state parks varies depending on the seasonal availability of camping and the weather, attendance is increasing gradually and this trend is likely to continue in the future. Spring flooding events have a major impact on the use of this recreation area.

Throughout Minnesota's state parks, the majority of the use is due to day users (86%). Campers make up just 14% of the overall park use (MN DNR 2002).

The 2002-2003 MVSRA User Survey:

What Visitors Want:

What we know about the people who visit the Minnesota Valley State Recreation Area is due to a variety sources: informal contacts with visitors along the trail system, registered campers at the Lawrence Unit, discussing issues with participants at the Citizen Advisory Committee meetings, and a limited 2002 User Survey, for example.

Based on input from the planning process and the 2001 User Survey, there are some generalizations that can be made about what people seem to want of this unit:

- 1) People want to have a safe, well-marked, and connected trail system that encourages responsible use (towards other users, neighbors, and the land)
- 2) People want a multiuse trail system, with differing uses being provided by different segments of the trail (not all portions of the trail have to accommodate all uses);

- 3) People want the trail system to be designed and maintained in an ecologically sensitive, sustainable, and fiscally responsible way;
- 4) People want the trail system to be part of an ecologically-connected greenway or corridor that includes many other areas adjacent to the river valley (connects to the tributaries, city parks and historical sites, overlooks, WMAs and SNAs and MVNWR sites);
- 5) People want to learn about the natural and cultural history of the area as they traverse parts of the trail or its adjacent units;
- 6) People want the wild character of the valley to be preserved; and
- 7) People want the cultural sites and landscapes in the valley to be preserved.

Desired Experiences

When asked to rate their desired experiences, visitors indicated the following as very important (not in priority order):

- To be able to enjoy scenery & the smells and sounds of nature
- To escape crowds
- To experience silence & solitude
- To escape from life's usual demands
- To rest mentally
- To get fit and feel healthier
- To experience spiritual renewal

Enjoyment

When asked what's important for their enjoyment, visitors indicated the following as very important (not in priority order):

- A natural setting
- Lakes & rivers
- Scenic beauty
- Water quality protection
- Wildlife protection
- A chance to bike & hike
- Cleanliness (facilities & trails)

Trails in General

When asked what's important to them in terms of trails, they indicated the following (not in priority order):

- Quality trail surfaces
- Quality trail maintenance
- Rules & etiquette signs
- Enforcement of trail rules
- Safe road crossings
- A chance to bike & hike
- A chance to see wildlife
- Informational brochures & maps
- Cleanliness

Other Amenities

Other amenities that were very important include:

- Picnic grounds
- Visitor centers
- Security
- Parking

- Toilets
- Benches

Trail Surface

When asked about whether they prefer a different trail surface, most people seem to be satisfied with the surface they are using. Those using the paved surface in Fort Snelling State Park prefer to stay on paved trails and those using the natural surface in the Bloomington area, for example, prefer that type of surface.

When asked what they think about more paved trails, users either strongly oppose or mildly oppose more paved trails.

Management in General:

Users support: hiking opportunities, biking opportunities, opportunities for quiet & solitude, zoned areas for quiet, and habitat protection over development. Users support better trail connections (with area or regional trail systems). In addition, the users indicated that they find informational signs, brochures and guide books to be very useful. The users strongly opposed opportunities for ATVs in the valley.

Demographics

- 55% of those sampled were male; 45% were female
- The mean age was 49 years old
- The mean years of residence was 13
- 96% of those sampled were Caucasian
- 34% had postgraduate degrees
- There were usually 2 people in households sampled (63%)
- 23% of those sampled made \$40,000-\$59,999 per year; only 14% made less than \$40,000

Attendance and Type of Use

Because the unit is long and linear, most visitors are familiar with the part of the trail or a unit nearest their home and the recreational uses along the trail differ depending on the location.

For example, in the Bloomington area, where the Minnesota Valley Trail has not been formally developed or designated, there are a variety of uses occurring including bird watching, dog walking, hiking and mountain biking. The portion of the trail that is paved (Shakopee) supports mostly bikers and some walkers. And south of the City of Shakopee, the uses also include snowmobiling, horseback riding and hunting in some areas. Overnight camping is currently limited to the Lawrence Unit, just outside of the City of Jordan.

Attendance statistics for this unit are difficult to ascertain since there are many ways to access the trail system and units. Numbers are primarily based on informal observations, parking lot counts and camping use at the Lawrence Unit. In 2002, the total visitor count for Minnesota Valley State Recreation Area was recorded as 131,617. As with the projections for overall state park attendance, it is likely that attendance at this unit will continue to increase over time, especially since the population growth in the counties surrounding the Minneapolis-St. Paul metropolitan area is growing exponentially and the whole unit is within an hour and a half drive from the center of the metro area.

Overnight Use

The Lawrence Unit, which has 25 rustic campsites and 8 walk-in sites, is 50-75% full on summer weekends and usually completely full on Holiday weekends. Most users come from a 25-mile radius, or come from greater Minnesota to camp while they visit other metro area attractions such as the Renaissance Fair, Valley Fair Amusement Park, the Mall of America, the Minnesota Zoo or athletic events. This type of use is different than that of a typical Minnesota state park where visitors typically come from metropolitan areas to visit the areas in greater Minnesota.

Trail Use

- **Snowmobile Use:** Depending on the snow conditions, portions of the trail have heavy snowmobile use each winter. Snowmobiles are allowed on the State Corridor/Trail from Shakopee to the south.
- **Biking:** Almost all portions of the trail are used by bikers, one way or another. The paved portions (part of Ft. Snelling State Park and the Shakopee to Chaska segment) are used by those bikers wanting a hardened trail surface; and the unpaved portions of the trail are used by visitors with hybrid or mountain-bikes.
- **Hiking/Bird watching:** people wishing to hike and/or observe wildlife use all portions of the trail frequently. During the spring and fall migration, birders are commonly seen on the trail.
- **Horse-back Riding:** All portions of the trail south of Shakopee are used by horse-back riders; the Rush River Unit has seen a dramatic increase in horse use over the last ten years.
- **Canoeing/Boating/Fishing:** canoeists, boaters and anglers currently use all portions of the Minnesota River.
- **Dog walking:** All portions of the trail are currently open to dog walking (on leash).

Existing Facilities

Traditional state park amenities are currently offered at the Lawrence Unit, just outside of Jordan, Minnesota. This includes a campground with 25 drive-in sites, 8 walk-in sites, a small group camp, and a picnic shelter.

The existing campground has several issues that affect its operation and occupancy.

- The campground is located within the floodplain. It is prone to closure due to spring flood events, shortening the overall camping season at MVSRA.
- The campground is not well-located within MVSRA to serve the identified target group – campers who are interested in visiting other metropolitan area attractions.
- The DNR is unlikely to add amenities or make other improvements to the campground because of its location in the floodplain.

Most of the units provide access to the trail system that can be used by hikers, birdwatchers, bikers, snowmobilers, cross-country skiers and horse enthusiasts. There are currently 6 miles of paved trail in the Shakopee area and the remaining trail is a natural mowed surface.

American Disabilities Act (ADA)

State and local governments may not discriminate on the basis of disability (Americans with Disabilities Act of 1990 and 28 CFR Part 36). 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 or 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 expectations.

Recreational Use and Visitor Services Recommendations

Specific recommendations developed by the Citizens Advisory Committee and the Technical Committee for recreational use and visitor services are included in the following sections on the trail and units.

There is one overall recommendation for Recreational Use and Visitor Services in MVSRA.

- ❖ Develop a semi-modern campground within MVSRA to replace the existing campground. The Lawrence Unit campground is prone to flooding and is not well-located to serve people wishing to visit other metropolitan area attractions during their stay. A site for the campground will need to be identified. Areas within the current state ownership will be investigated, and other sites outside of the current SRA that could be developed in conjunction with a segment of the state trail. Criteria for evaluating potential sites will include:

- Outside of floodplain areas
- Minimal impact to existing natural and cultural resources
- Proximity to other metropolitan area attractions
- Ease of access from major highways and the local road network.
- Ease of access to the state trail and other MVSRA facilities
- In harmony with the scenic qualities of the Minnesota River valley

The DNR will work with the local communities and the public during the site identification and campground design process to address any concerns and promote cooperative efforts for operating and patrolling the campground area, as well as links to local trails and other recreational facilities.

VII. SPECIFIC DESCRIPTIONS AND RECOMMENDATIONS FOR THE MINNESOTA VALLEY STATE RECREATION AREA

The Minnesota Valley Trail

History: The Minnesota Valley Trail was authorized in 1969 (M.S. Section 85.198) by the Minnesota State Legislature. Now part of the Minnesota Valley State Recreation Area, the trail was authorized to run from the confluence of the Mississippi and Minnesota Rivers in Fort Snelling State Park, upstream to the City of Le Sueur, a 72-mile length. Originally, the DNR Division of Trails and Waterways was charged with the development of the trail.

The 1984 Comprehensive Plan for the Minnesota Valley National Wildlife Refuge, Recreation Area and State Trail set broad guidelines for the development of the trail with its units (state recreation area). In essence, the trail was to be a multiuse corridor connecting the already established units of the state recreation area and the various units of the Minnesota Valley National Wildlife Refuge. This plan designated several alternative alignments for the trail on both sides of the river, with different uses planned for different segments of the trail. The trail was to be primarily for hiking and riding (horseback riding).

Goals: After many discussions with both the Citizens Advisory Committee and the Interagency Technical Committee, the following general goals have been established for the Minnesota Valley Trail:

- 1) The long-term goal is to establish a continuous corridor from Fort Snelling State Park to the City of LeSueur that is accessible by a variety of users;
- 2) This trail system should be the backbone of an open space system or greenway that protects and interprets the variety of cultural and natural resources in the Lower Minnesota River valley;
- 3) The trail system should focus on the natural and cultural resources of the valley from bluff to bluff, telling the story of the people who have lived in the valley over time, and the resources that the valley provides;
- 4) The trail system itself may accommodate different user groups and have different characteristics (for example, surface types) in different segments, due to differing visitor needs and differing natural and cultural resources in the area.

Challenges for trail maintenance & development

Since its authorization, various segments of the trail have been purchased, developed and designated. As the Minneapolis-St. Paul metropolitan area has expanded and developed, the acquisition of trail easements has been a challenging process and the options for trail alignments have become fewer. Moreover, due to the sensitivity of the natural and cultural resources in the valley, trail development itself is a complicated and slow process. Most of the current alignment, for example, traverses across either flood plain forests or other types of designated wetlands that need to be either protected or minimally impacted. Cultural resources like former Dakota villages are also common in the area and need to be evaluated and protected.

Table 3 notes the current segments of the Minnesota Valley Trail and its characteristics, recreational uses, access points, and points of interest.

Table 3: MVSRA-Recreational Opportunities by Segment

<i>Trail Segment</i>	<i>Access Points</i>	<i>Authorized Recreational Uses</i>	<i>Trail Character</i>	<i>Notes</i>
Confluence to Cedar Avenue	Historic Landing Road/Historic Fort Snelling; Minnehaha Regional Bike Trail; Fort Snelling State Park; Minnesota Valley National Wildlife Refuge Visitor Center	Hiking Biking/Mountain biking Cross-Country skiing on Dakota County side	Hennepin County: Paved in Fort Snelling State Park Dakota County: natural surface & gravel surface Hennepin County/MVNWR: gravel & natural surface	There is currently no connection between Hennepin County and Dakota County under the 494 bridge. Visitors can now access the MVNWR trails via the Visitor Center
Cedar Avenue to Bloomington Ferry	Jens Casperson Landing underneath Cedar Avenue (Dakota County) Lyndale Avenue parking lot/boat access (Hennepin County)	Hiking Cross-Country skiing	Natural Surface	The Old Cedar Avenue bridge across Long Meadow Lake is closed. The trail on the Hennepin County side crosses private property and is not designated or signed yet.
Bloomington Ferry to Memorial Park	Bloomington Ferry parking lot (Hennepin County) Parking lot off of 101 on Scott County side	Biking Walking/Hiking	Paved	The trail currently ends at the parking lot off of 101.
Memorial Park to Highway 41	Memorial Park, Shakopee; Under the 101 Bridge in Shakopee; Highway 41 near Gifford Lake	Biking/Mountain biking Hiking/Walking Snowmobiling & Horse back riding south of Shakopee	Paved for first 6 miles; natural surface south of Shakopee	

Highway 41 to Thompson Ferry (Co. Rd. 9)	Highway 41 near Gifford Lake; Louisville Swamp parking lot off of 169; Co. Rd. 9 landing	Snowmobiling Horseback riding Mountain biking Hiking	Natural surface	
Co. Rd. 9 to Belle Plaine	Co. Rd. 9 landing; Lawrence Unit; Belle Plaine landing	Snowmobiling Horseback riding Mountain biking Hiking	Natural surface	The trail ends at Belle Plaine
Belle Plaine to LeSueur	Not developed yet	Not developed yet	Not developed yet	Not developed yet

Recommendations per trail segment including units

Confluence to Cedar Ave. (Fort Snelling State Park-Hennepin County side)

See Figure 8: Fort Snelling State Park

Description: This portion of the Minnesota Valley Trail starts at the confluence of the Mississippi and Minnesota rivers, just below Historic Fort Snelling and within the boundaries of Fort Snelling State Park. Proceeding upstream on the Hennepin County side, the paved trail parallels the park road in Fort Snelling State Park and then terminates at Post Road. At this point bikers have the option of traveling on Post Road to 34th Avenue in Bloomington. 34th Avenue intersects with either Old Shakopee Road, or 80th Street East, which leads to the Minnesota Valley National Wildlife Refuge Headquarters and the 494 bridge.

Access: Visitors can access the trail directly from the Fort on a paved walking trail that leads down the hill (Historic Landing Road) to the park, or from the Minnehaha Regional Bike Trail or from the parking lots in Fort Snelling State Park situated across from the Thomas Savage Interpretive Center. Visitors can also access the MVNWR trails on the Hennepin County side at the MVNWR Visitor Center.

Other Trail Connections:

On the north end: the Highway 5 Bridge connects Fort Snelling State Park with Hidden Falls/Crosby Farm Regional Park, and the Mendota/Highway 55 Bridge connects Fort Snelling State Park with the Big Rivers Regional Trail.

On the south end, Post Road connects with 34th Avenue in Bloomington.

Interpretation:

This portion of the trail traverses a variety of natural communities and features including oak savanna, flood plain forest and Snelling Lake. Cultural sites include: Pike's Island, the confluence of the Minnesota and Mississippi rivers, the Dakota Concentration Camp and Camp Coldwater. Existing interpretive services include those within Fort Snelling State Park including the Thomas Savage Visitor Center and a variety of kiosks and signs.

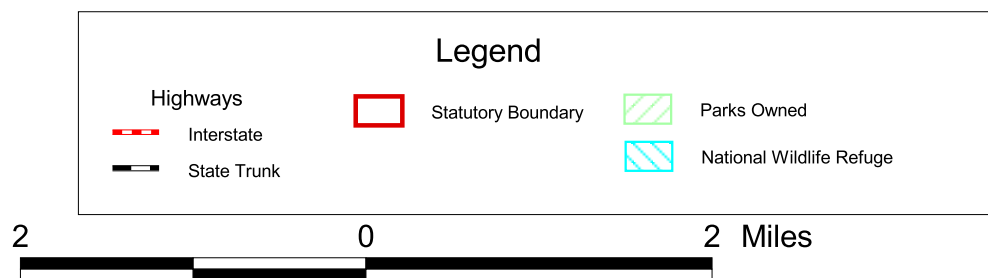
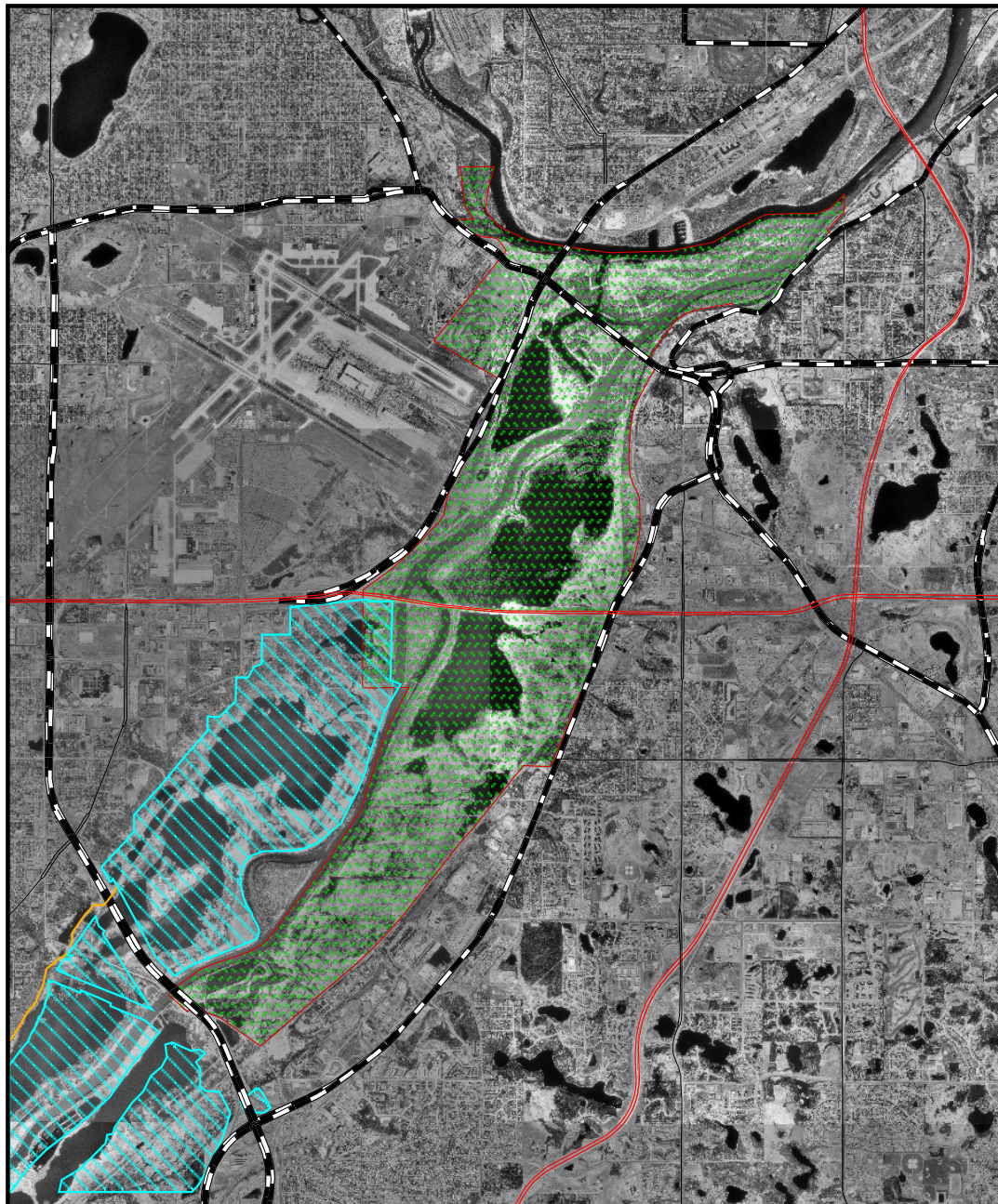
Potential interpretive themes include: the mosaic of the natural communities, European exploration, U.S.-Dakota relations, river confluence, and transportation. Cooperating partners in interpretation include the Shakopee Mdewakanton Dakota Community, the Minnesota Historical Society and the Mississippi National River and Recreation Area. The lead role is played by Fort Snelling State Park.

Issues and Recommendations for the future:

Discussion: Most visitors who access the trail in Fort Snelling State Park enter from the Minnehaha trail system and are not aware that they have entered the Minnesota Valley Trail system. Trail markers or signs announcing the Minnesota Valley Trail should be added along the trail so that visitors are aware of this as they enter the park. As more visitors become aware of the Minnesota Valley Trail, use should increase as well as support for future trail development.

Figure 8: Fort Snelling State Park

Fort Snelling State Park



Recommendations per trail segment including units

Confluence to Cedar Ave. (Fort Snelling State Park- Dakota County side)

See Figure 8: Fort Snelling State Park

Description: This portion of the Minnesota Valley Trail is currently a gravel trail that runs along the Minnesota River between the Jens Casperson Landing (Highway 77), to the Sibley House Historic Site, in Mendota.

Access: Trail users can either park at the Jens Casperson Landing, accessed off of Nichols Road in Burnsville and head north, or park at the Sibley House Historic Site in Mendota and head south (parking is south of the site off Sibley Memorial Highway).

Other Trail Connections: On the south end, the Cedar Avenue bike ramp connects this trail to the Minnesota Valley National Wildlife Refuge, Long Meadow Lake Unit, and the rest of the Minnesota Valley Trail. The Long Meadow Lake Bridge (also known as the Old Cedar Avenue Bridge) is currently closed to all use due to structural instability, including bicycling and pedestrians, so access to Bloomington via Old Cedar Avenue is not possible at this time. On the north end, visitors can access Dakota County's Big Rivers Regional Trail near the Sibley House Historic Site in Mendota.

Interpretation:

This portion of the trail traverses a variety of natural communities and rare features including fens, flood plain forest, and several lakes & their associated wetlands. Cultural sites include: Black Dog's Village and Faribault's fur post. In addition, Pilot Knob is within site. Existing interpretive services are very limited.

Potential interpretive themes include: the mosaic of the natural communities, Dakota village sites, European exploration, U.S.-Dakota relations, river confluence, and transportation. Cooperating partners in interpretation include the Shakopee Mdewakanton Dakota Community, the Minnesota Historical Society and the Mississippi National River and Recreation Area. The lead role is played by Fort Snelling State Park.

Issues and Recommendations for the future:

- ❖ The 1984 plan showed the trail in Fort Snelling State Park to be totally on the Hennepin County side, but due to concerns about nesting eagles, the trail alignment between 494 and Cedar Avenue was moved to the Dakota County side in the 1990s. In 2000, this eagle nest was destroyed by wind. Following recent discussions with the USFWS (MVNWR), it has been agreed that the trail should follow its original alignment on the Hennepin County side. This will allow greater access to the trail from the MVNWR Visitor Center in Bloomington as well as potentially reducing the trail's development cost by eliminating the need for bikeway access over or under I-494. When the I-494 bridge is eventually rehabilitated, plans should include a bikeway connection to the Minnesota Valley Trail system below.
- ❖ Develop major non-personal interpretation at the Cedar Avenue boat access, trail head and parking area (Jens Casperson Landing).

Recommendations per trail segment including units

Cedar Avenue to Bloomington Ferry

See Figure 9: Bloomington Area

Description: This portion of the trail starts on the Dakota County side. Visitors must use the bike ramp attached to the Cedar Avenue Bridge to cross the main channel of the Minnesota River west to Hennepin County, just south of Long Meadow Lake. At that point, the trail is an undeveloped natural surface trail that proceeds west on USFWS property to the Lyndale Avenue boat ramp. At this point in time, the portion of this trail from the Lyndale access to the Bloomington Ferry parking lot is not designated nor developed for public use and crosses parcels of private land.

Access: Access to this portion of the trail includes the Jens Casperson Landing parking lot underneath the Cedar Avenue bridge on the Dakota County side. Access to the Minnesota Valley Trail (MVT) from the City of Bloomington (via the Long Meadow Lake/Old Cedar Avenue Bridge) is now prohibited due the closure of the Long Meadow Lake Bridge.

Other Trail Connections: Bikers can access city streets in Bloomington from the Lyndale Avenue parking lot. In addition, there are hiking trails on Minnesota Valley National Wildlife Refuge property that run east of the Lyndale access to Old Cedar Avenue (called the “Bluff Trail”).

Interpretation: This portion of the trail traverses Long Meadow Lake and its associated wetlands and flood plain forest. Cultural sites include the Gideon Pond Dakota Mission site, Dakota village sites and the Bloomington Ferry site. Existing interpretive services include a kiosk developed by the Minnesota Valley National Wildlife Refuge at the Lyndale Avenue parking lot.

Potential interpretive themes include: Dakota villages, missions, and transportation. Partners include the Shakopee Mdewakanton Dakota Community, the Minnesota Valley National Wildlife Refuge, the City of Bloomington and the Gideon Pond Society. The City of Bloomington and the Minnesota Valley National Wildlife Refuge play the lead roles in interpretation in this trail segment.

Issues and Recommendations for the future:

Discussion: This portion of the Minnesota Valley Trail has several challenges facing it, including the loss of the Long Meadow Lake Bridge (Old Cedar Avenue Bridge) as an easy access from the City of Bloomington. The bridge was first closed to vehicular traffic in 1993 and then to all traffic, including pedestrians and bicycles, on December 6, 2002. The city determined that the railings do not meet current safety standards and that the stringers that support the deck can no longer support live loads. Alternatives include replacement of the bridge structure using existing abutments and piers or removal of the entire structure and replacement.

Other issues in this area: This portion of the Minnesota Valley Trail is not yet developed or authorized by the DNR. Current property owners include the City of Bloomington, the USFWS (MVNWR), and two private landowners. Before the trail can be designed and formally established, easements with these property owners will have to be acquired. Existing uses include hiking, birding, and a significant amount of mountain-biking. Current trail users are trespassing over the private parcels, although most likely without knowledge of where the parcels are. In lieu of official trail development, local biking groups such as MORC (Minnesota Off-Road Cyclists) have aligned and maintained an informal trail with volunteers. A significant amount of erosion is occurring on the bluffsides, and in the ravines in this area due to a variety of factors (topography, soils, run-off from the streets and developments along the bluff, and a proliferation

of trails due to difficult stream crossings). Because of this, the City of Bloomington is working with MORC to develop more sustainable mountain-biking trails in this area.

Once easements with the public and private landowners have been acquired, an alignment will need to be designated through this area. Cooperation between adjacent private landowners, public landowners and trail users will be necessary. The specifics for alignment and consequent design (width, surface, safety standards) will be established once the segment has been assessed in a more formal design process. It should be noted that throughout the planning process, little-to-no support was expressed from the public for a traditional paved multiuse trail through this area.⁵

Major Recommendations include:

- 1) Maintain the River Crossings: The citizens who attended the meetings believe that the most important thing to do now is to maintain the river crossings so that people can access both the river and the trail from both sides.
 - ❖ Continue to work with the City of Bloomington in its efforts to replace or restore the Old Cedar Avenue bridge.
 - ❖ Work with partners to develop bridges for the stream crossings on the Hennepin County side.
- 2) Trail Designation and Trespass Issues: The second most important recommendation the Citizens Advisory Committee had was to immediately secure permission from the remaining private landowners in the Bloomington section of the trail in order that the trail can be formally developed and designated. There are currently two private landowners on the section of the (undesignated) trail just east of the Bloomington Ferry crossing.
 - ❖ Work with partners to secure fee title of easements from the remaining private landowners in the Bloomington section of the trail in order that the trail can be formally developed and designated.
- 3) Trail Alignment and General Nature:
 - ❖ Keep the main trail along the existing trail corridor, if possible. It is likely that there will be few options for moving the trail since most of it now is on the levee next to the river (the highest and most disturbed ground).
 - ❖ Minimize disturbance to important natural resources as the trail system is designed (rare plants, animals, habitats and communities).
 - ❖ Minimize disturbance to important cultural resources as the trail is designed by working with the Dakota Communities and other cultural resource specialists.
 - ❖ Use state-of-the-art trail design and construction techniques to minimize the potential for trail erosion.
 - ❖ Use bridges that will withstand frequent flooding and subsequent maintenance.
- 4) Trail Management
 - ❖ Work with partners to provide adequate enforcement and safety patrols along the trail; discourage littering and off-trail riding. Encourage the local community and user groups to self-patrol as well.
 - ❖ Control problem species such as European buckthorn (*Rhamnus cathartica*) along the trail.
 - ❖ Keep facilities (restrooms, water, picnic tables) near the trailheads and parking areas---include access for boaters.
 - ❖ Encourage the City of Bloomington to manage its open space along the trail as a park or natural area.

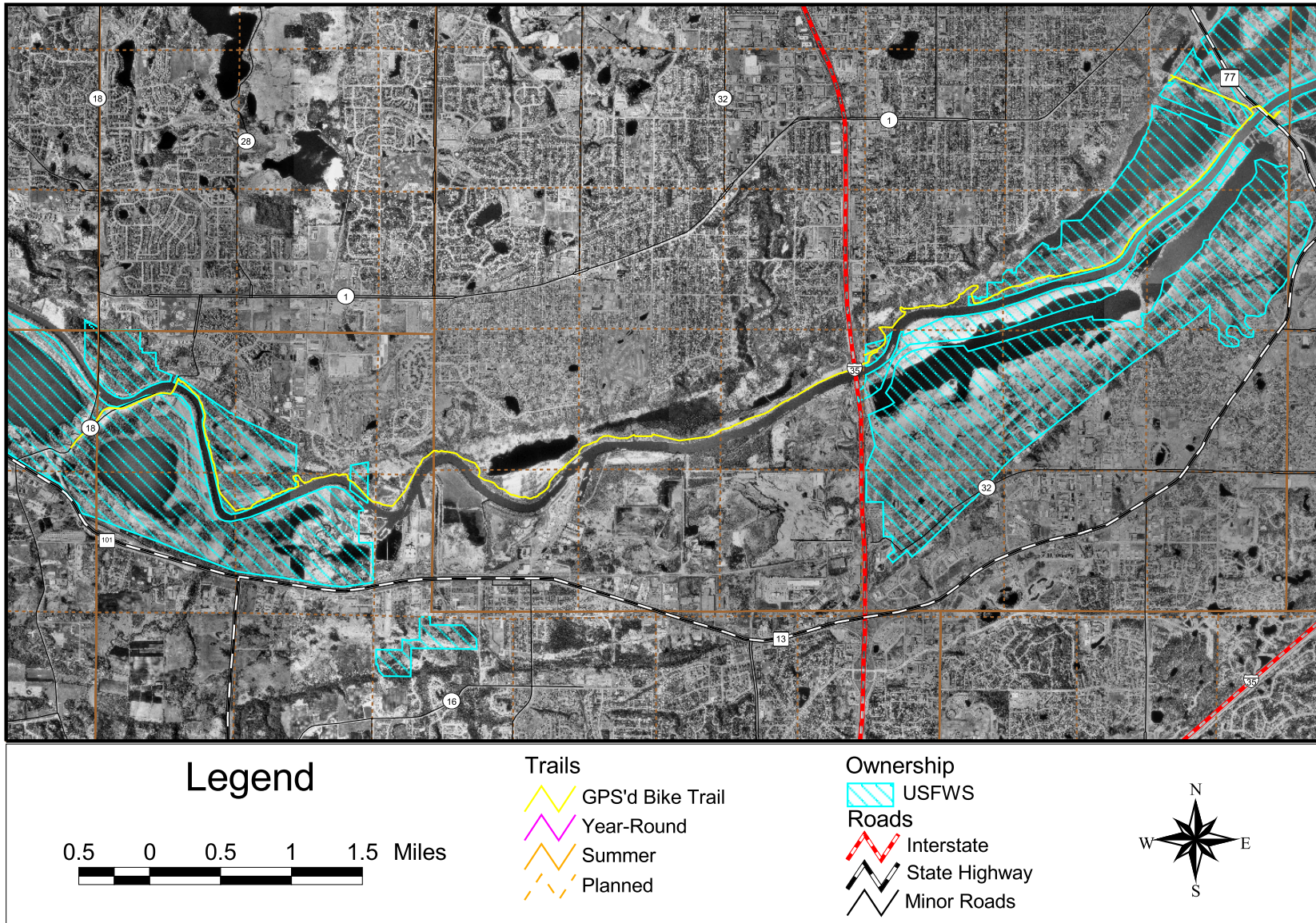
⁵ The public is defined as those who attended meetings, sent in written comments, or who participated in the Household and User Surveys.

5) Trail Interpretation/Signage/Wayfinding

- ❖ When developing trail signs, use the opportunity to talk about trail etiquette.
- ❖ Develop a map or brochure showing the starting and ending points for each section of the trail.
- ❖ Provide information on the historic Bloomington Ferry crossing and house, the Gideon Pond site and other sites of cultural significance.
- ❖ Consider providing environmentally sensitive boardwalks and observation decks on spur trails for wildlife observation.

Figure 9: Bloomington Area

Bloomington Unit



Recommendations per trail segment including units

Bloomington Ferry to Memorial Park

See Figure 10: Valley Fair Area and Figure 11: Shakopee Area

Description: This portion of the Minnesota Valley Trail is partially developed with a paved trail that originates at the Bloomington Ferry Parking Lot on the Hennepin County side and follows the old Bloomington Ferry roadbed across the Minnesota River where it terminates at a parking lot on Highway 101.

Access: Access to the paved trail is at the Bloomington Ferry parking lot where the old Bloomington Ferry Road crossed the river. The old bridge was replaced with a pedestrian/bike bridge.

Interpretation: This portion of the trail crosses the river at the original Bloomington Ferry site. Cultural sites include: Shakopee's villages, Memorial Park (cemetery), Murphy's Landing - ferry & steamboat landing; Thomas Holmes fur post & Shakopee landing; Bloomington Ferry. There is very little existing interpretation along this segment of the trail.

Primary themes include Dakota settlements, transportation, and fur trade (U.S.– Dakota relations). Cooperating partners include the Shakopee Mdewakanton Dakota Community, Three Rivers Park District at Murphy's Landing, Minnesota Valley National Wildlife Refuge, City of Bloomington, City of Shakopee.

Other Trail Connections: There is a gravel trail that proceeds west from the Bloomington Ferry Parking Lot on Refuge property.

Other Related Issues:

- ❖ Cooperate as requested with the City of Eden Prairie, MnDOT, the Metropolitan Airports Commission and the Shakopee Mdewakanton Dakota Community to interpret the historic overlook on Highway 212 (across from the Flying Cloud Airport).

Issues and Recommendations for the future:

- ❖ This portion of the Minnesota Valley Trail is currently under development. Once completed, it will provide access from the Hennepin County side (Bloomington) to the Scott County side (Shakopee), with attractions along the way such as Valley Fair Amusement Park and Murphy's Landing, now part of the Three Rivers Park District.
- ❖ Interpret Shakopee's Village site.

Figure 10: Valley Fair Area

Valley Fair Unit

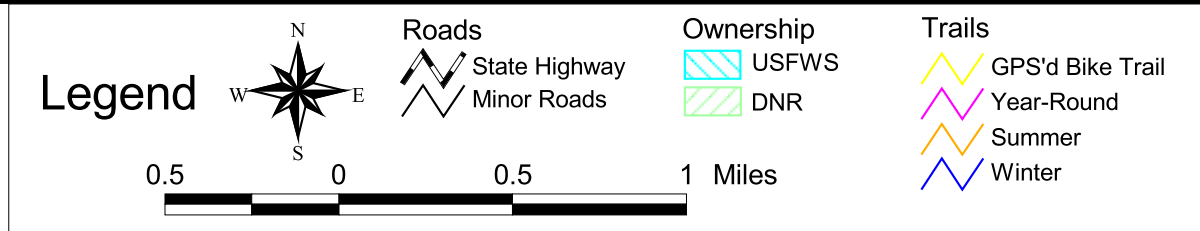
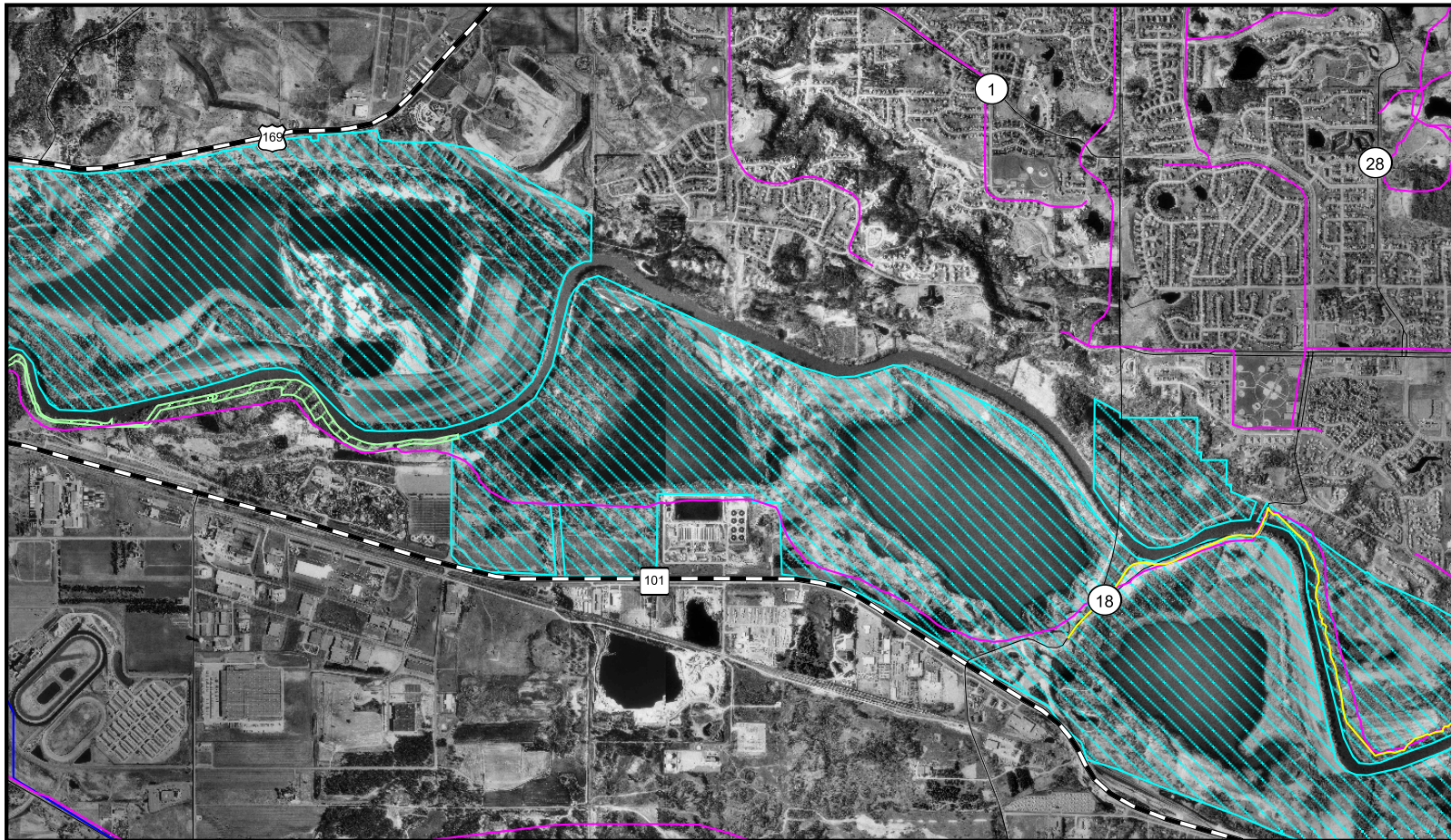
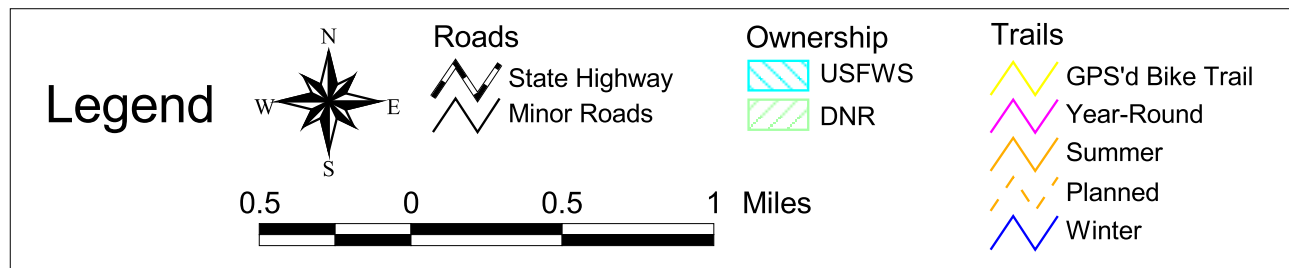
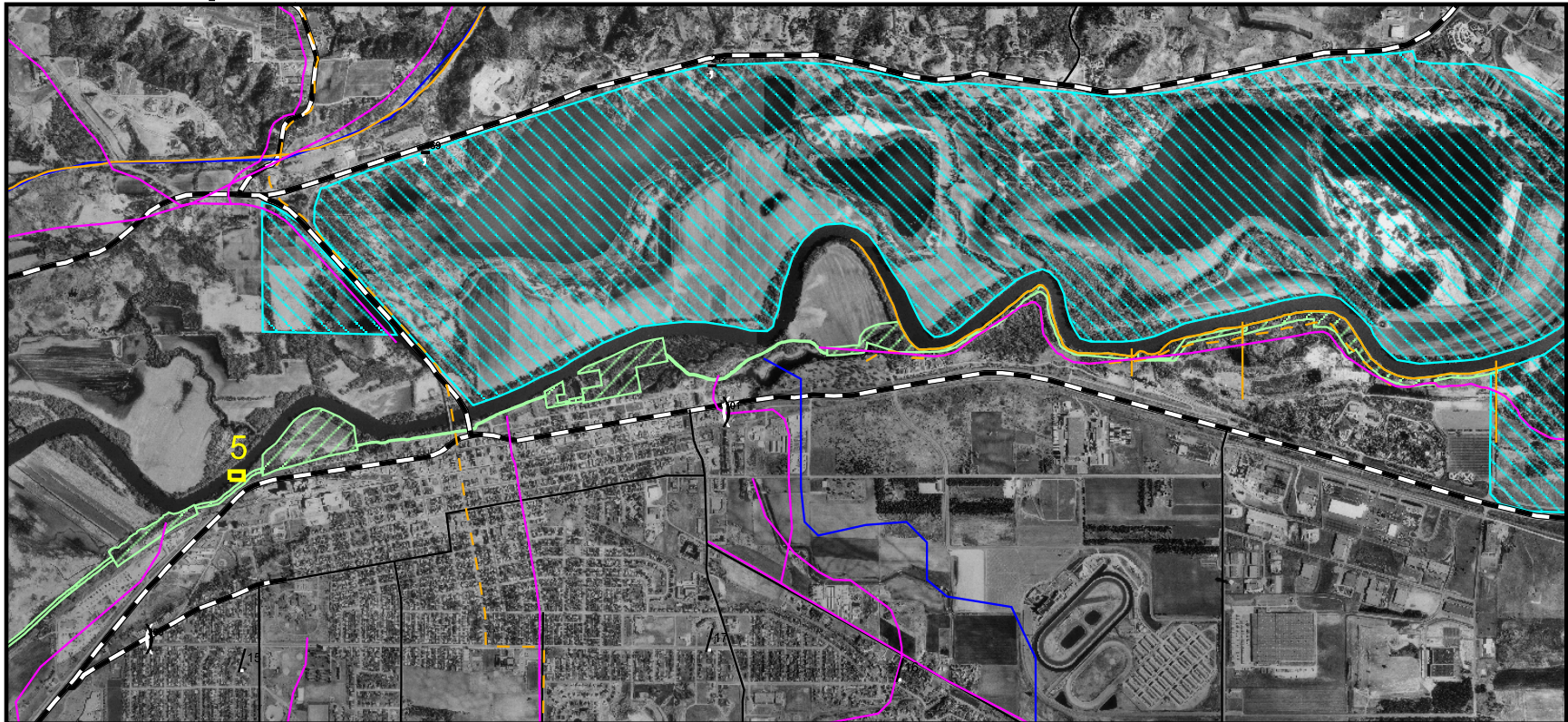


Figure 11: Shakopee Area



Shakopee Unit



Recommendations per trail segment including units

Memorial Park to Highway 41

Description: This part of the Minnesota Valley Trail originates at Memorial Park in Shakopee and extends upriver to Highway 41 in Scott County. The first 5 miles of the current trail is paved; the remainder is a mowed trail.

Access: Memorial Park, off Highway 101 in Shakopee; then at the landing under the 101 bridge in Shakopee.

Interpretation: This portion of the trail traverses flood plain forest along the river. Cultural sites include the Shakopee brickyards and limekiln, brewery, and railroad swing bridge (now destroyed). Existing interpretive services include:

- ❖ A Brochure Series: *People and the River*
Brickyards
Limekilns
Chaska Swing Bridge
Shakopee Brewery
- ❖ Trailhead kiosk at Memorial Park in Shakopee, which interprets the natural communities, and the historic sites in the Shakopee-Chaska section of the trail.
- ❖ Site-specific trailside interpretation: Shakopee brickyards and limekiln.
- ❖ Site-specific trailside interpretation of the Shakopee Brewery.
- ❖ Trailhead orientation and interpretation of the historic Chaska railroad swing bridge.

Primary themes in this segment of the trail focus on early industry in the area. The cooperating partners include the Scott County Historical Society, the Shakopee Visitors Bureau, and the cities of Shakopee & Chaska. The lead agencies are the Scott County Historical Society and the Minnesota Department of Natural Resources.

Issues and Recommendations for the future:

- ❖ This portion of the trail once connected to the City of Chaska via the historic railroad swing bridge, now removed due to its structural instability. The long-term goal is to move the crossing to the Highway 41 bridge once it is reconstructed.
- ❖ Revise and reprint brochure series.
- ❖ Revise and replace trail signage for brewery and limekiln.

Recommendations per trail segment including units

Highway 41 to Thompson Ferry (Scott Co. Rd. 9)

Description: This portion of the trail is a mowed surface and runs through the Gifford Lake Unit and Louisville Swamp/Carver Rapids to the Thompson Ferry bridge (Scott CSAH 9) where there is a small parking lot and boat landing.

Access: This portion of the trail can be accessed by parking at the Gifford Lake Unit (just off of Highway 41) or the Louisville Swamp Unit off 169, just south of Shakopee, or by parking at the Scott County Road 9 landing.

Other trail connections: The Louisville and Carver Rapids units have several hiking trails in addition to the Minnesota Valley Trail.

Interpretation: Natural resources along this stretch of the trail range widely from flood plain forest to oak savanna. Cultural sites include the Chaska Ferry Road, Jab's Farm, Little Rapids site, and Thompson's Ferry. Existing interpretive services include trailside signs, metal photo signs interpreting Jab's Farm (MVNWR) and a parking lot kiosk at the Louisville Swamp (MVNWR).

Interpretive themes include Dakota village/encampment and cemetery, transportation, and US-Dakota relations (fur trade). Partners include the Shakopee Mdewakanton Dakota Community & other bands, if interested, and the Minnesota Valley National Wildlife Refuge.

Gifford Lake Unit/Nyssen's Lake Unit: General Description from MN CBS Report # 72

The Gifford Lake Unit and the Nyssen's Lake Unit consist nearly entirely of river bottom within the active flood plain of the Minnesota River. The vegetation of these river bottoms at the time of European-American settlement was mostly flood plain forest interrupted by several large marshes and small lakes at Gifford, Strunk's and Nyssen's lakes (Marschner 1974, MCBS 1995). A large terrace composed of gravelly outwash deposits from Glacial River Warren overlies Prairie du Chien dolomite bedrock along the eastern and southern boundaries of these units. In the 1970s, an area of formerly grazed prairie known as "Louisville Prairie" occupied this terrace in sections 21 and 28, T115N R23W, which was destroyed in the 1990s by expansion of a rock quarry. Presently, most of the site is a formerly cultivated field, with strips of disturbed flood plain forest along the edges of the river. The site includes a small portion of a large area of intact mixed emergent marsh, which occurs around Nyssen's Lake at the far northeast end of the site. Most of this marsh is presently on private land.

The Gifford's Lake/Nyssen's Lake Unit is currently used by anglers, hunters and a variety of trail users.

See Figure 12: Gifford Lake Area

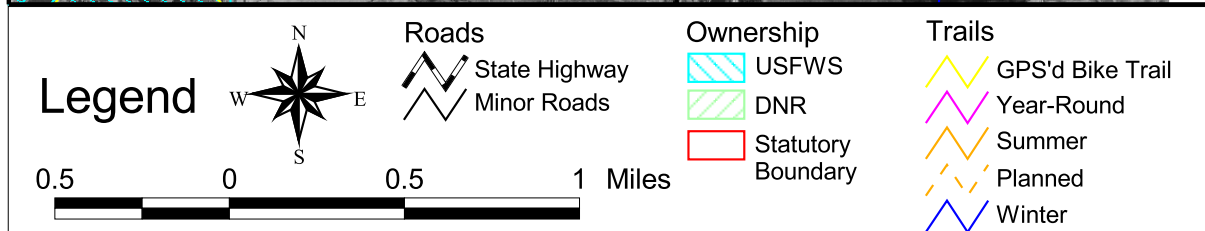
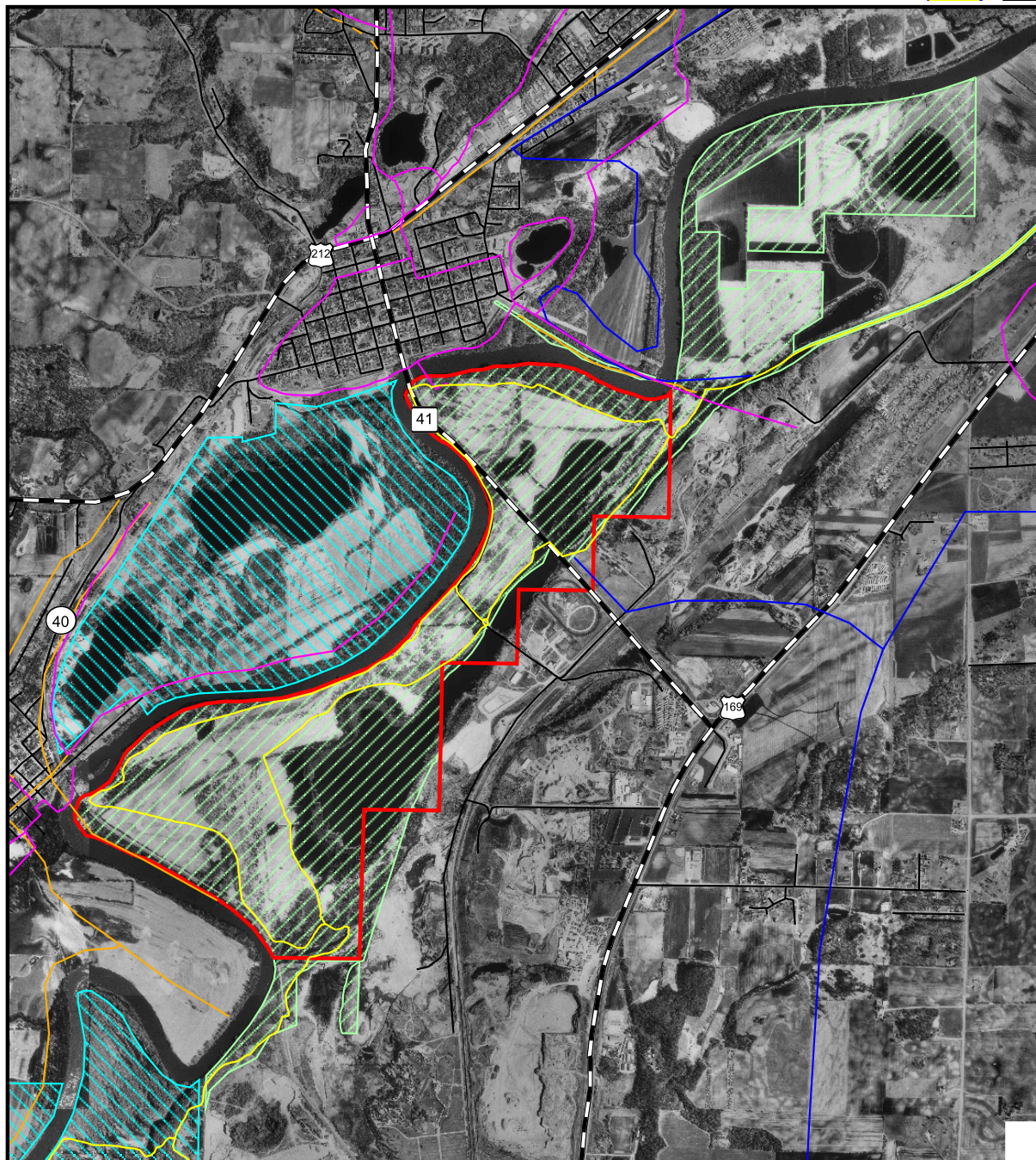
Endangered, Threatened, Special Concern Species:

This area includes high quality mixed emergent marsh on the south and east sides of Nyssen's Lake (Strunk's Lake). The only exotic species present is reed canary grass. Although no rare plants were recorded on this unit in 2000, there are historical records of both kitten-tails (*Besseyia bullii*) and Hill's thistle (*Cirsium hillii*) just outside the unit on the Louisville prairie (now destroyed).

Although no rare amphibians or reptiles are listed, it should be noted that these units are 15 miles upstream from Minnesota's only known existing population of northern cricket frog (*Acris crepitans*).

Figure 12: Gifford Lake Area

Gifford Lake Unit



Moreover, although no rare species of birds were found in the unit in 2000, two regionally uncommon species were found: the least flycatcher (*Empidonax minimus*) and the prothonotary warbler (*Prothonotaria citrea*). According to the CBS report, the area has marginal potential for habitat for the red-shouldered hawk (*Buteo lineatus*), cerulean warbler (*Dendroica cerulea*) and common moorhen (*Gallinula chloropus*).

Of the mussels, five live species were found, three of them state-listed. It is of note that the (dead) Higgen's eye is the only specimen of that species collected during the extensive survey of the Minnesota in 1989 by Robert Bright (Bright et al.1990).

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Plants (historical records only)		
<i>Besseyia bulli</i> (kitten-tails)	THR ⁶	
<i>Cirsium hillii</i> (Hill's thistle)	SPC	
Birds (historical record; nest gone)		
<i>Haliaeetus leucocephalus</i> (bald eagle)	SPC	THR
Mammals		
Bat concentration (little brown myotis)	NON	
Insects		
<i>Speyeria idalia</i> (regal fritillary)	SPC	
Fish (Historical records only)		
<i>Scaphirhynchus platorhynchus</i> (shovelnose sturgeon)	NON	
<i>Cycleptus elongatus</i> (blue sucker)	SPC	
Mussels (most likely extirpated)		
<i>Arcidens confragosus</i> (rock pocketbook mussel)	END	
<i>Actinonaias ligamentina</i> (mucket mussel)	THR	
<i>Quadrula nodulata</i> (wartback mussel)	END	
<i>Lampsilis teres</i> (yellow sandshell mussel)	END	
<i>Fusconaia ebena</i> (ebonyshell mussel)	END	
<i>Trigonia verrucosa</i> (pistolgrip mussel)	THR	
<i>Ligumia recta</i> (black sandshell mussel)	SPC	
<i>Quadrula metanevra</i> (monkeyface mussel)	THR	
<i>Lasmigona costata</i> (fluted-shell mussel)	SPC	

⁶ NON=species of interest, but not currently listed; SPC=special concern species; THR = threatened with extinction; END=endangered with extinction

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
<i>Lampsilis higginsii</i> (higgins eye mussel)	END	END
<i>Pleurobema coccineum</i> (round pigtoe mussel)	THR	

See Figure 13: Gifford Lake Area-Biological Significance

Refer to the Survey of Biological Features in the MVSRA, p. 15, for a map of the rare features and native plant communities of the Gifford Lake/Nyssen's Lake Unit (MN DNR 2002).

Carver Rapids Unit: General Description from MCBS Report #72:

The Carver Rapids Unit consists mostly of an "island" of Glacial River Warren terrace capped by Jordan Sandstone and isolated from the nearby uplands by the Sand Creek valley, containing the Louisville Swamp, and the Minnesota River valley. The site also includes adjacent portions of the Minnesota River bottomlands near rapids that form in the Minnesota River during periods of low water. On top of the bedrock plateau, the soils are predominantly excessively drained and formed in deep, nearly pure sand deposits (Umbanhowar 1996). Small areas on the uplands contain less well-drained, silty soils formed in alluvium. The bottomland vegetation of the unit at the time of European-American settlement consisted of flood plain forest on the Minnesota River bottomlands, separated from the rock-capped plateau by emergent marshes in Johnson Slough (Marschner 1974). The uplands consisted mostly of open dry prairie or savanna with scattered, open-grown bur oak (*Quercus macrocarpa*). In the mid 19th century, these uplands were the site of a Wahpeton Dakota summer encampment with some crop cultivation (Spector 1993). As late as approximately the 1950s, several small fields were cultivated or used for grazing in the area of Jabbs Farm (F. Knoke, MVSRA Manager, pers. comm.). Heavy grazing by sheep occurred on the uplands north and east of Louisville Swamp in the early 1970s (Cushing 1971) and may have occurred within the unit.

See Figure 14: Carver Rapids Area

Endangered, Threatened and Special Concern Species

The Carver Rapids Unit is considered a highly significant natural area of statewide importance due to its diversity of native plant communities and rare species. Important native communities include dry oak savanna, one of Minnesota's rarest communities, as well as small areas of maple-basswood forest. In addition, the area has significant dry-mesic woodlands, flood plain forest areas and mixed emergent marsh (Johnson Slough). Most significantly, the area supports an assemblage of very rare plant species on a small area of (sandstone) rock outcrops, the only known outcrop downstream of Mankato.

The Carver Rapids Unit, along with the associated Louisville Swamp, remains one of the larger tracts of mature deciduous forest (mostly flood plain) in the area. As such, it has attracted such birds as the red-shouldered hawk (*Buteo lineatus*), acadian flycatcher (*Empidonax virens*), cerulean warbler (*Dendroica cerulea*), eastern wood-pewee (*Contopus virens*), red-eyed vireo (*Vireo olivaceus*), ovenbird (*Seiurus aurocapillus*), scarlet tanager (*Piranga olivacea*), and bald eagles (*Haliaeetus leucocephalus*).

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Plants		
<i>Myosotis verna</i> (forget-me-not)	NON	
<i>Bacopa retundifolia</i> (water-hyssop)	SPC	
<i>Eleocharis wolfii</i> (Wolf's spike-rush)	END	
<i>Myosurus minimus</i> (mousetail)	NON	

Figure 13: Gifford Lake Area – Biological Significance

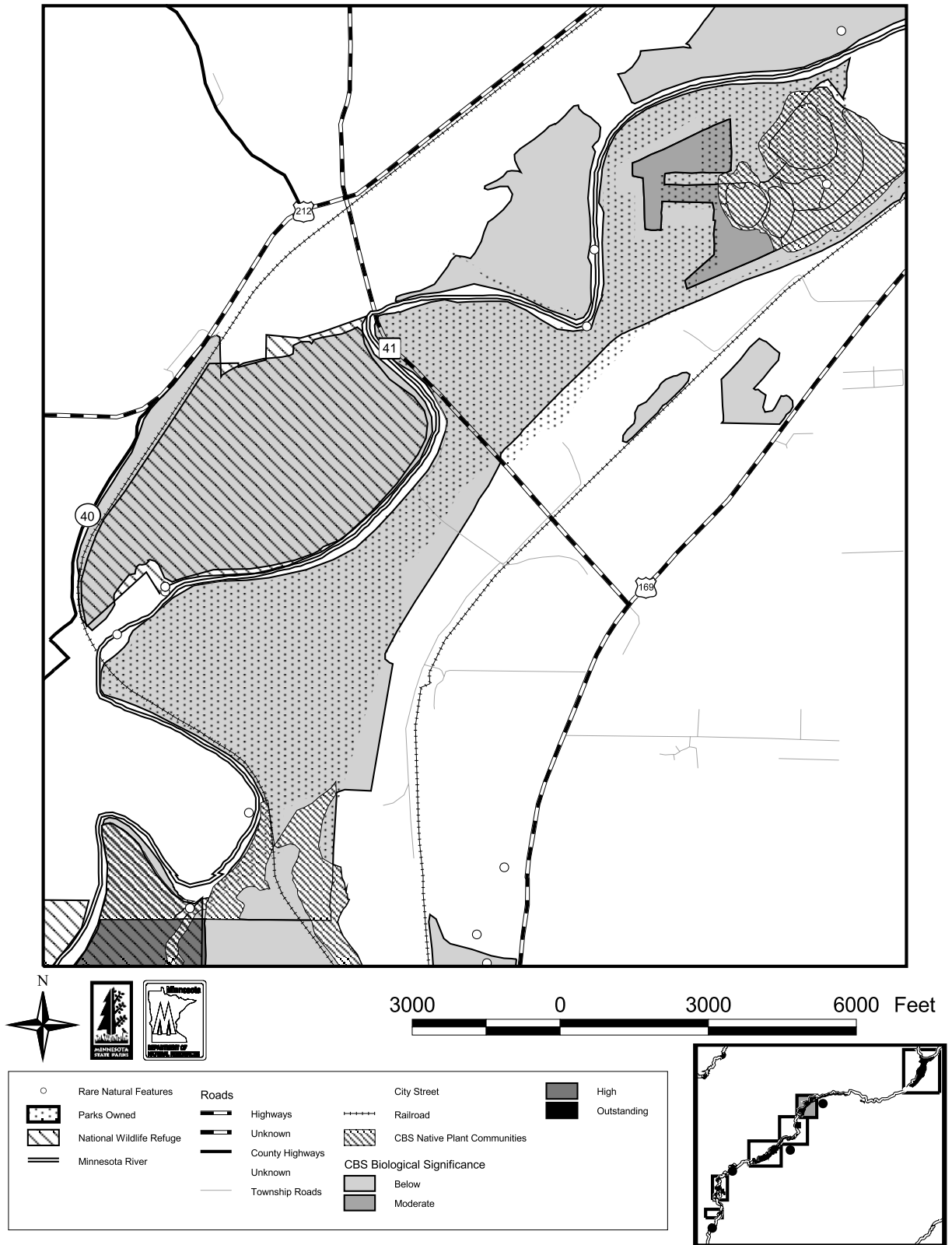
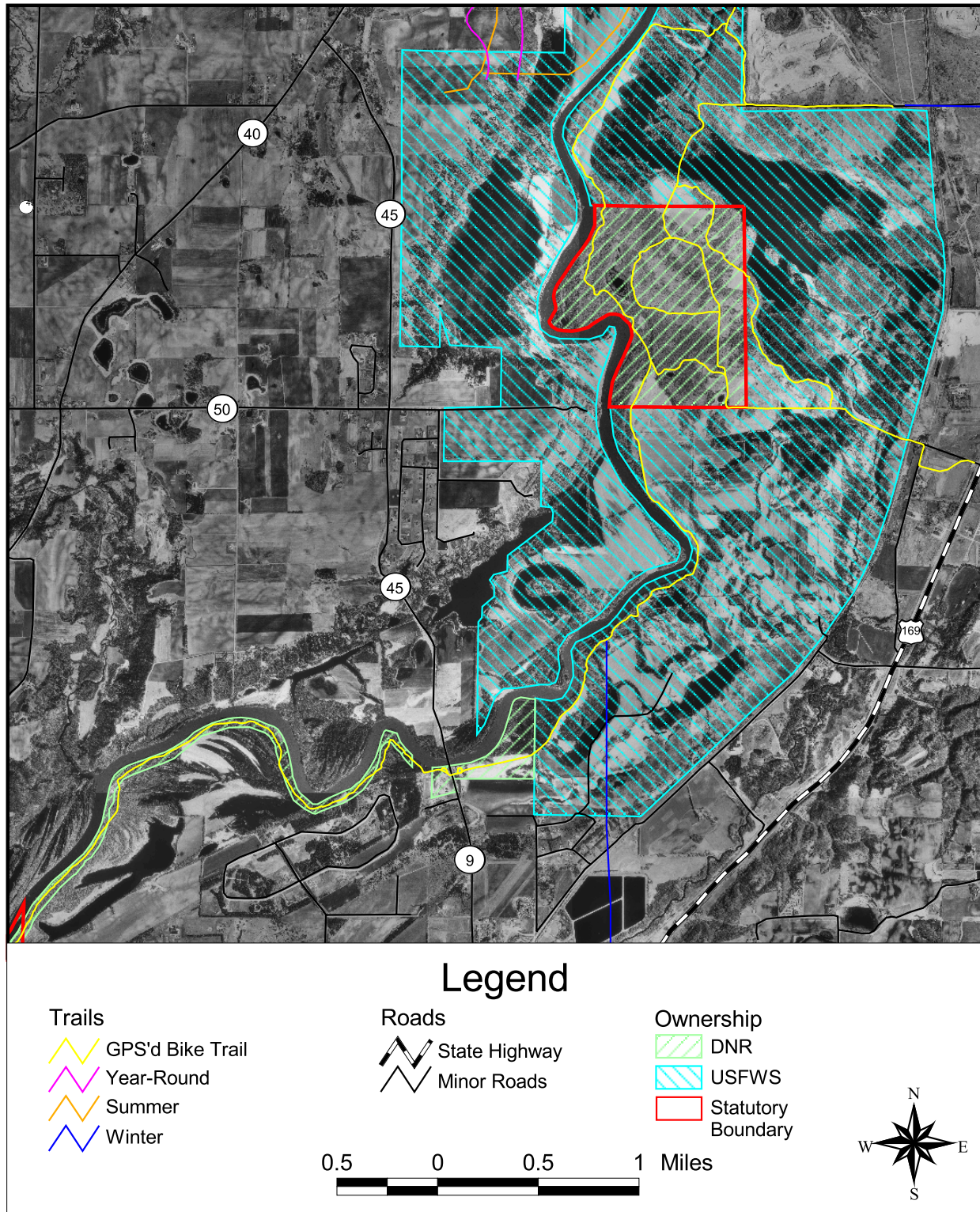


Figure 14: Carver Rapids Area

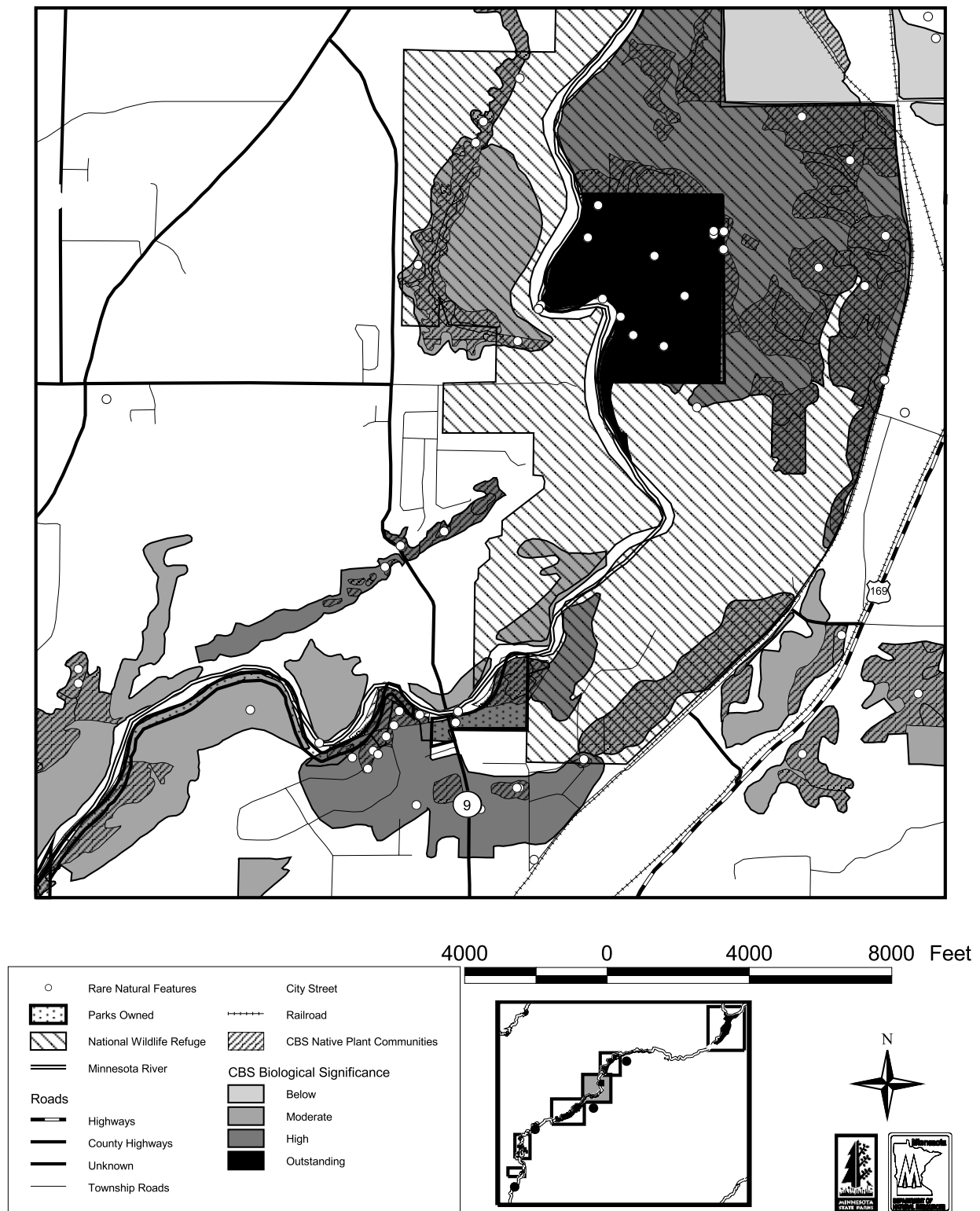
Carver Rapids Unit



<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Plants		
<i>Talinum rugospermum</i> (rough-seeded fameflower)	END	
<i>Alopecurus carolinianus</i> (Carolina foxtail)	NON	
<i>Besseyia bullii</i> (kitten-tails)	THR	
<i>Gymnocladus dioica</i> (Kentucky coffee tree)	NON	
Birds		
<i>Empidonax virescens</i> (Acadian flycatcher)	SPC	
<i>Dendroica cerulea</i> (cerulean warbler)	SPC	
<i>Buteo lineatus</i> (red-shouldered hawk)	SPC	
<i>Haliaeetus leucocephalus</i> (bald eagle)	SPC	THR
Fish		
<i>Scaphirhynchus platorhynchus</i> (shovelnose sturgeon)	NON	
Mammals		
Bat concentration (Big brown bat)	NON	
Mussels (all likely extirpated)		
<i>Quadrula metanevra</i> (monkeyface mussel)	THR	
<i>Arcidens confragosus</i> (rock pocketbook mussel)	END	
<i>Actinonaias ligamentina</i> (mucket mussel)	THR	
<i>Quadrula nodulata</i> (wartback mussel)	END	
<i>Lampsilis teres</i> (Yellow sandshell mussel)	END	
<i>Tritogonia verrucosa</i> (pistolgrip mussel)	THR	
<i>Elliptio crassidens</i> (elephant ear mussel)	END	
<i>Fusconaia ebena</i> (ebonyshell mussel)	END	
<i>Elliptio dilatata</i> (spike mussel)	SPC	
<i>Obovaria olivaria</i> (hickorynut mussel)	SPC	
<i>Lasmigona costata</i> (fluted-shell mussel)	SPC	

See Figure 15: Carver Rapids Unit: Biological Significance. Refer to MCBS 2002, p. 37, for a map of the rare features and native plant communities of the Carver Rapids Unit.

Figure 15: Carver Rapids Area – Biological Significance



Thompson Ferry Area: General Description from MN CBS Report #72

The Thompson Ferry Area is located immediately adjacent to where Scott County Highway 9 crosses the Minnesota River, just outside of Jordan. It is named after the ferry operation that was started by Peter Thompson in 1859 and continued until 1935 through a sequence of owners. The area also contains a significant cultural site with both precontact and post-contact deposits present. The site is currently being severely eroded as a result of river action. The Highway 9 bridge was recently rebuilt by Scott County.

The access is used by both anglers (boat landing) and by horseback riders (for the Minnesota Valley Trail). Access to the river over the cultural site has been blocked by moving the parking lot away from it. The park plans on rip-rapping the cultural site as well since more aesthetically pleasing types of protection for the bank are not likely to be successful (due to strong seasonal currents, unstable soils and the activities of beaver).

Refer to MCBS 2002, p. 79, for a map of the rare features and native plant communities of the Sioux Vista Dunes area and the Thompson Ferry Unit.

Issues and Recommendations:

- ❖ The area that includes Carver Rapids, Louisville Swamp, and the Rapids Lake Unit⁷ is the most ecologically significant area in the Lower Minnesota River valley. Initiate an interagency management planning group for the Rapids Lake, Louisville and Carver Rapids units together covering natural & cultural resource management, interpretation and recreation.
- ❖ The management plan for these areas should include the local tribes since the area is rich with cultural history and significant sites.
- ❖ Protect and restore the Little Rapids site in cooperation with the local bands.
- ❖ Develop an interpretive plan for the Little Rapids site in cooperation with the appropriate bands as well as the Minnesota Valley National Wildlife Refuge. Consider developing trailhead exhibits for the Dakota village sites and for the Louisville town site.
- ❖ Install erosion control measures at the Thompson Ferry site as soon as possible along the riverbank to protect the cultural site.
- ❖ Use historic photos to tell the story of the ferry at the site; perhaps develop a kiosk with the historic information, information on flood plain forests, and a map for visitors.
- ❖ Because habitat fragmentation is a serious issue in the river valley, it is recommended that the flood plain corridor should be widened, if possible, by restoring the flood plain forests and wet meadows. Soils should be checked prior to restoration so that the appropriate vegetation community is restored in the appropriate location. Seed sources should be from the local area.
- ❖ Reed canary grass can be an aggressive exotic, given the right conditions. Its presence should be controlled and monitored.
- ❖ Since many of these areas were formerly farmed, they should be checked for remaining tiling; remaining ditches should be plugged.

⁷ The Rapids Lake Unit is part of the Minnesota Valley National Wildlife Refuge.

- ❖ Continue to actively and cooperatively restore oak savanna.
- ❖ Rare plant populations, in particular, should be monitored as it is managed.
- ❖ Recreational use of these units includes seasonal hunting in some areas, trail use and fishing. The DNR Division of Parks and Recreation will work with interested citizens and the Refuge to further delineate which areas are still appropriate for public hunting and which areas should be closed to public hunting.
- ❖ Continue allowing for other multiple recreational uses of these areas.

Recommendations per trail segment including units

Scott Co. Rd. 9 to Belle Plaine

See Figure 16: Lawrence/Belle Plaine Units

Description: This portion of the Minnesota Valley Trail is either a natural surface trail or a mowed surface that runs along the river between the Scott County Road 9 bridge, just outside of Jordan, through the edge of the Sioux Vista dunes, the Lawrence Unit and then south to Belle Plaine Unit. There are also scattered ownerships on the Carver County side of the river including Kelly Lake and Carter's Corner. Currently, the Minnesota Valley Trail terminates at highway 25 in Scott County.

Access: Visitors can park at the Co. Rd. 9 landing/parking lot or at the Trail shelter in the Lawrence Unit, just off Park Rd. between Jordan and Belle Plaine.

Trail Connections: There are several hiking trails in the Lawrence Unit that can be accessed nearby.

Interpretation: This stretch of the trail runs mostly through flood plain forest. Cultural Sites include the Strait House, Corbell House and the St. Lawrence town site.

Themes include early town sites and paper towns. Partner(s) include the Scott County Historical Society.

Sioux Vista Dunes: General Description from MCBS Report #72

Sioux Vista Dunes consists of a portion of Glacial River Warren where deep deposits of fine sand have been reworked by wind into sand dunes. The area is adjacent to the present day Minnesota River. Most of the dunes have been converted into a housing development known as Sioux Vista Estates. The State Recreation Area land in lot 3 of section 5, along the Minnesota Valley Trail, contains dry barrens prairie on the dunes, as well as an area of flood plain forest on adjacent Minnesota River bottomlands. Sand dunes and corresponding habitats are very uncommon in Minnesota.

Endangered, Threatened and Special Concern Species

This area includes dry prairie on the Sioux Vista dunes with a moderate diversity of typical native plant species as well as mature flood plain forest along the river. The sand dunes that remain are considered very uncommon in Minnesota and support one of the rarest prairie types in the state.

Animal species that use this area include nesting riverine turtles along the banks of the Minnesota River, and a variety of snakes usually associated with sandy, well-drained soils including milk snakes (*Lampropeltis triangulum*), Eastern and Western hognose snakes (*Heterodon spp.*) and gopher snakes (*Pituophis catenifer*).

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Plants		
<i>Besseyia bullii</i> (kitten-tails)	THR	
<i>Baptisia alba</i> (white wild indigo)	SPC	
<i>Oenothera rhombipetala</i> (rhombic-petaled evening primrose)	SPC	

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Birds (former nest site) <i>Haliaeetus leucocephalus</i> (bald eagle)	SPC	THR
Snakes <i>Heterodon platirhinos</i> (eastern hognose snake)	SPC	
<i>Lampropeltis triangulum</i> (milk snake)	SPC	
<i>Pituophis catenifer</i> (gopher snake)	SPC	
Fish <i>Cypleptus elongates</i> (blue sucker)	SPC	
Mussels (likely extirpated) <i>Actinonaias ligamentina</i> (mucket mussel)	THR	

Lawrence/Belle Plaine Units: General Description from MCBS Report #72

The Lawrence and Belle Plaine units stretch along the Minnesota River from Scott County 9 (outside of Jordan) to just south of the city of Belle Plaine. Most of the state property is on the east side of the river. However, there are a few parcels on the west side as well (Kelly Lake, Carters Corner). The Lawrence Unit occupies a portion of the present Minnesota River flood plain as well as part of a large Glacial River Warren terrace. To the southwest, the Belle Plaine Unit exists completely within the active flood plain of the Minnesota River. The vegetation of the flood plain at the time of European-American settlement was mostly flood plain forest interrupted with several sloughs or small lakes that had open water and emergent marshes (MCBS 1995, Marshner 1974). Outside the flood plain, the terrace was covered with mesic-to-dry prairie and savanna communities with numerous small wetland swales and basins containing wet prairie, wet meadow or emergent marshes. Large portions of the site have been cultivated and exist today as old fields dominated mostly by smooth brome grass. The wetter old fields near the river are reverting to flood plain forest or to marsh communities. Much of the uncultivated uplands in these units were heavily grazed in the past.

Birds

The Lawrence and Belle Plaine units provide a variety of habitats for birds in the Minnesota River valley. As a result, the birds found in and near these units are varied and include species such as bobolinks, eastern meadowlark and northern harrier that prefer grasslands and savanna habitats, as well as eastern wood-pewees, red-eyed vireos and American redstarts that prefer closed-canopy forests.⁸ The wayside also provides habitat for prothonotary warblers in its flood plain forests. Sandhill cranes have been seen in the area; bald eagles are becoming more common. Unusual birds observed in this area include blue-winged, chestnut-sided, cerulean and mourning warblers, and the loggerhead shrike. Northern shrikes have also been observed wintering in the area. The Henslow's sparrow was observed in the Lawrence Unit on one occasion.

⁸ Kelly Lake area; Carver County.

Figure 16: Lawrence/Belle Plaine Areas

Lawrence Unit

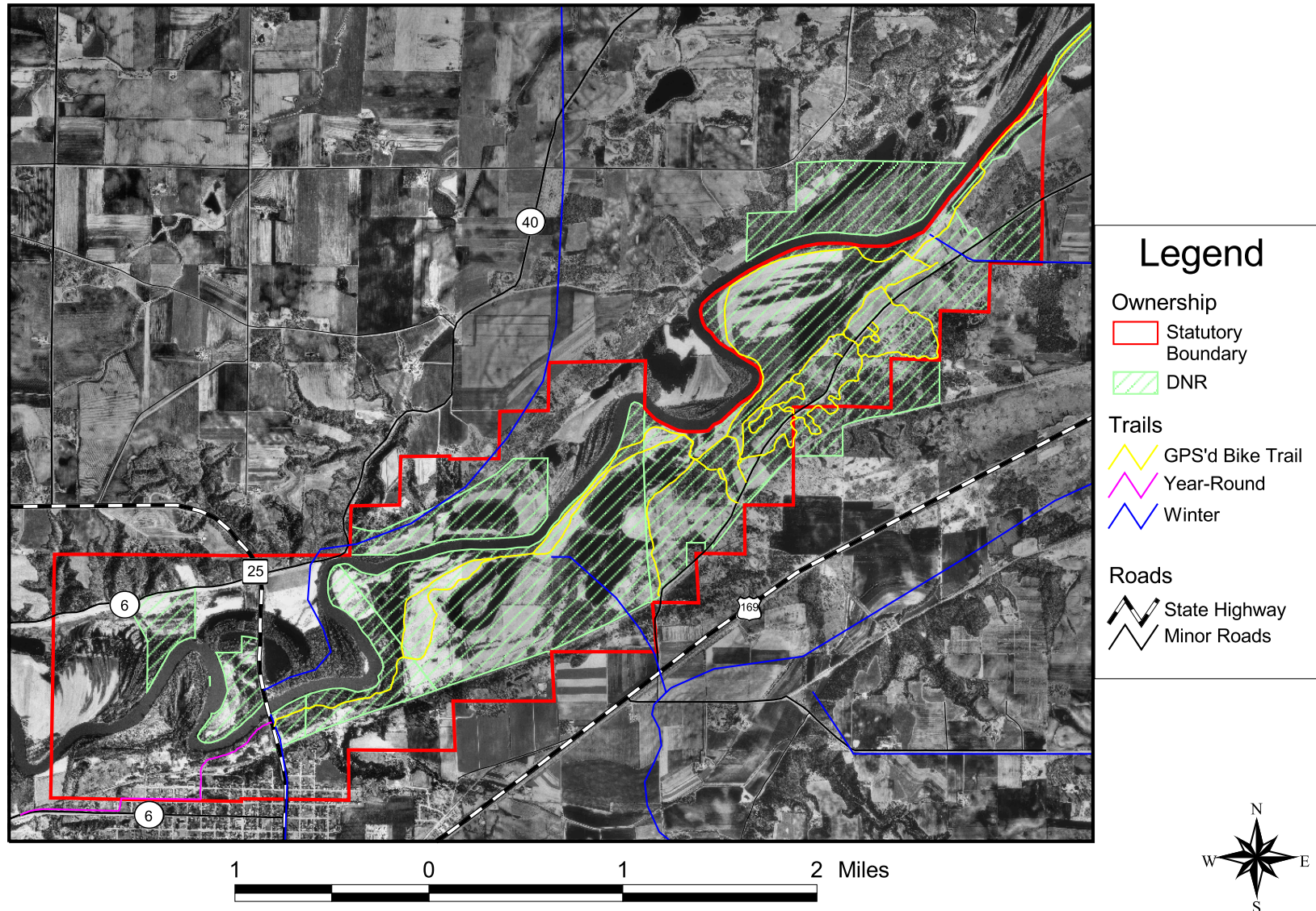
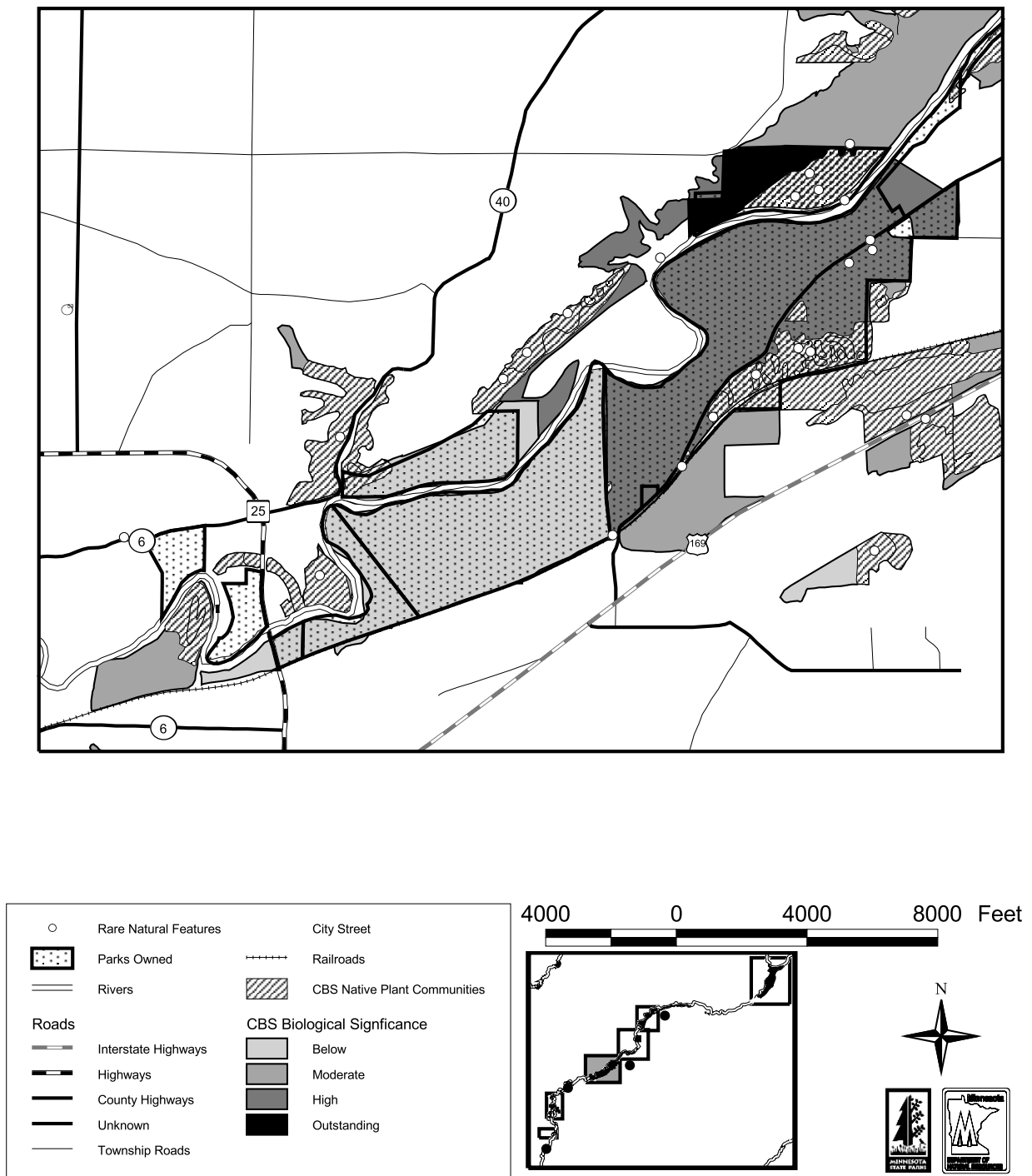


Figure 17: Lawrence/Belle Plaine Areas – Biological Significance



Endangered, Threatened, Special Concern Species

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Plants		
<i>Eryngium yuccifolium</i> (rattlesnake master)	SPC	
<i>Cypripedium candidum</i> (small white lady's slipper)	SPC	
<i>Gymnocladus dioica</i> (Kentucky coffee tree)	NON	
<i>Besseyia bullii</i> (kitten-tails)	THR	
Birds		
<i>Haliaeetus leucocephalus</i> (bald eagle)	SPC	THR
<i>Ammodramus henslowii</i> (Henslow's sparrow)	END	
<i>Lanius ludovicianus</i> (loggerhead shrike)	THR	
<i>Dendroica cerulea</i> (cerulean warbler)	SPC	
<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Snakes		
<i>Pituophis catenifer</i> (gopher snake)	SPC	
<i>Elaphe vulpine</i> (fox snake)	NON	
Mammals		
Bat concentration	NON	

See Figure 17: Lawrence/Belle Plaine Units: Biological Significance

Refer to MCBS 2002, p.95, for a map of the rare features and native plant communities of the Lawrence/Belle Plaine Units.

Issues and Recommendations

- ❖ Increase programming at the Strait House⁹ in cooperation with the Scott County Historical Society.
- ❖ At Sioux Vista, manage the state-owned piece of sand prairie as a natural area, do not provide for public access or trails through it; it is too small and fragile.
- ❖ For natural resource management at Sioux Vista:
 - Search for rare prairie plants, animals, and insects.
 - Keep removing cedars and pines.

⁹ a restored 1857 historic house with interpretive exhibits that tell the story of paper towns, transportation and the town of St Lawrence.

- Use prescribed burns on the site, if possible.
- Reseed with sources native to the site.
- Consult with the neighboring landowners about how best to sign the state property.
- Work with other organizations such as the Friends of the Minnesota Valley and Great River Greening, to set up meetings with the neighbors to discuss stewardship of native communities (sand prairie, flood plain forest) on their individual properties and in the community as a whole.
- Acquire more land in the area, if possible.
- ❖ Along the active flood plain of the Minnesota River, continue to allow natural regeneration of the flood plain forest; compliment the natural regeneration with prescribed restoration (plant native trees).
- ❖ Along the terrace areas, restore oak savanna and woodlands, working toward a mosaic of savanna, woodlands and prairie (with some old field and cedar for species such as shrikes and Henslow's sparrows).
- ❖ In the Lawrence Unit:
 - Check soils to guide future natural community restoration efforts.
 - Explore a vendor contract to remove 40 year-old oaks and/or continue prescribed burning in the oak areas.
 - For the area between the railroad tracks and the park road, do a site-specific inventory and plan.
 - Contract or otherwise provide for a site review and management plan for these areas in the Lawrence Unit (wet meadows to savanna).
 - Develop a restoration plan for the existing campground area when the new campground is developed elsewhere in the MVSRA.
- ❖ To the south and east of Kelly Lake is an outstanding remnant of flood plain forest. Keep the area off limits to tree removal of any type and monitor it for exotic species.
- ❖ Retain Kelly Lake and Carter's Corner in public ownership. Work with USFWS and other partners to determine how best to protect and manage these properties as well as the 1-mile stretch of prairie on the southeast facing slopes between them.
- ❖ Coordinate with the City of Belle Plaine's long-term planning efforts to connect the city's elementary school prairie with the prairie efforts west of town and the planned bike trail.
- ❖ Allow nature to restore the former Voss property site; do not encourage increased public use in the short-term; continue clean-up efforts.

Recommendations per trail segment including units

Belle Plaine to LeSueur

See Figure 18: Blakeley Area

Description: The 1984 Comprehensive Plan describes a multi-use trail (snowmobiling, horseback riding, cross-country skiing & hiking) on both sides of the river from Belle Plaine to Henderson. Bicycle routes were to follow county roads, first on the Scott County side and then on the Sibley County side with a crossing on the Blakeley Bridge. On the Scott County side, the trail was to run through the western edge of the Blakeley Unit. At the City of Henderson, these trails were to join, cross the river and then go cross-country to the Rush River Unit, west of Henderson. The trail then follows the bluff line to the Riverside Park Trailhead in LeSueur. These proposed alignments have not been completed for a variety of reasons.

Access: Potential access to the trail(s) include the river crossings (Blakeley, Henderson & LeSueur) and at the Blakeley and Rush River Units.

Interpretation: This section of the trail, when completed, will traverse through flood plain forest as well as more upland vegetation types. Cultural sites include the Hooper-Bowler House – Belle Plaine, the stone arch railroad bridge at Blakeley, the Salisbury Hill Road log barn (ruins), Dakota villages, the J.R. Brown Minnesota River Center in Henderson, and the Henderson Ferry.

Primary themes include early town sites, transportation/bridges, Dakota presence, and river flooding. Cooperating partners include the J.R. Brown Minnesota River Center and the Ney Environmental Center.

Trail Connections: Throughout this portion of the Minnesota Valley Trail, there is the potential for several trail connections including the trails now being planned by the City of Belle Plaine and the Ney Environmental Center.

Blakeley Unit/Jessenland 25: General Description from MN CBS Report #72

The Blakeley Unit occurs on the Altamont ground moraine of the Des Moines Lobe of the Late Wisconsin glacialiation (Hobbs and Goebel 1982). Upland soils in the site are predominantly formed in loamy, calcareous gray till (Harms 1959). The site is situated just outside the edge of the Glacial River Warren valley. The topography is highly dissected with steep-sided ravines draining into the Minnesota River. The unit includes remnants of the “Big Woods”, a large area of American elm, basswood, red oak and sugar maple-dominated forests located between present-day Mankato and St. Cloud on the edge of the prairies at the time of European-American settlement in the mid-1800s (Marschner 1974, Grimm 1984). At that time, the vegetation of the unit consisted of mesic maple-basswood and oak forests on steep north-facing slopes and level uplands, and oak woodlands/savanna on steep south and west-facing slopes. Small areas of dry hill prairie occurred on steep, excessively drained south-to-southwest-facing slopes. Approximately 98 percent of the Big Woods has since been destroyed by clearing for agriculture and urban development (Wovcha and Harris 1998). This unit and adjacent forested tracts constitutes one of the largest forest remnants left in the Big Woods and Scott County.

Near the Blakeley Unit in Sibley County, the Minnesota Valley State Recreation Area tract in Jessenland Township section 25 includes a stand of flood plain forest surrounding an old Minnesota River oxbow on the valley bottomlands.

Figure 18: Blakeley Area

Blakeley Unit

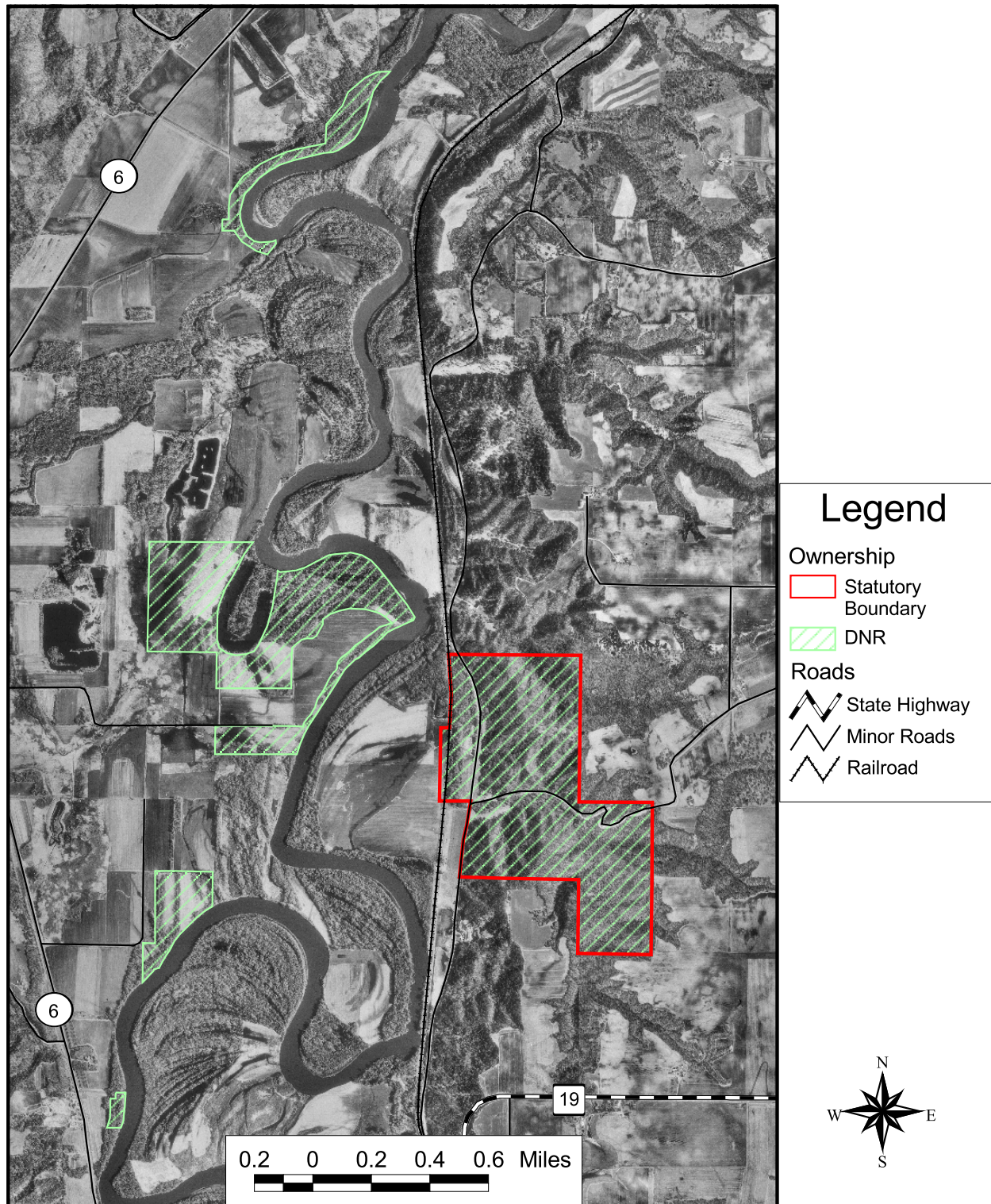
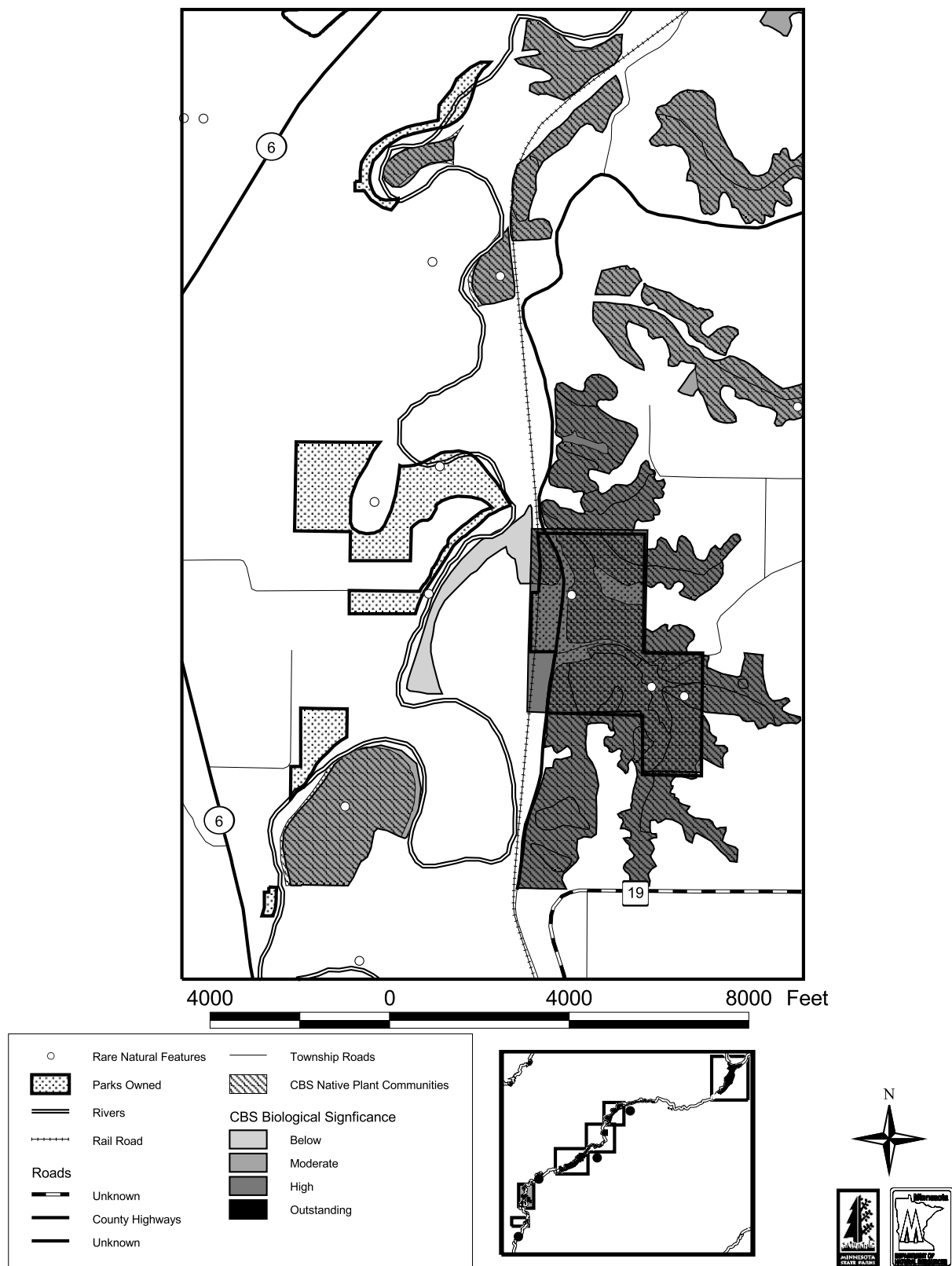


Figure 19: Blakeley Area - Biological Significance



Endangered, Threatened, Special Concern Species

<u>Species</u>	<u>MN Status</u>	<u>Federal Status</u>
Colonial waterbird Nesting Site (Great Blue Heron)	NON	

See Figure 19: Blakeley Unit-Biological Significance

Refer to MCBS 2002, p. 129, for a map of the rare features and native plant communities of the Blakeley Unit.

Issues and Recommendations:

- ❖ Develop a sign for the Blakeley Unit explaining that all migratory birds are protected in the appropriate languages.
- ❖ Work with interpretive partners to develop overlooks along the trail.
- ❖ Limit additional recreational trails in the Belle Plaine Unit.
- ❖ Work with local partners to align and develop a trail system between the cities of Belle Plaine and LeSueur (Scott, Sibley and LeSueur counties). Use the 1984 plan as a guide.
- ❖ For Jessenland 25, allow natural regeneration of flood plain forest, and widen the riparian corridor if possible.
- ❖ For the Blakeley Unit:
 - o Work with the adjacent landowners to identify the gullies above the unit and repair them; monitor and repair other erosion problems as well.
 - o Continue to enforce no ATV use and no dumping on the unit.
 - o Look at converting the old logging road into a birding trail.
 - o Restore the wetland across the road from the unit.
 - o Post the Blakeley Unit as State Park.
 - o Protect existing cultural resources in the unit.
 - o Cooperate with partners to protect cultural resources in the general area.

VIII. PARK BOUNDARY

General Guidelines for Boundary Changes

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

Federal funds from the Land and Water Conservation Fund (L&WCF) have been used to acquire land or construct recreational facilities in this park. L&WCF grants have contributed to outdoor recreation throughout the U.S. since 1966. By using these funds, the state has agreed to maintain recreational facilities in a manner that promotes safe use and invites public use, and to retain the land in this park solely for outdoor recreation and support facilities. If the Minnesota Department of Natural Resources decides that it is essential that lands that were part of a L&WCF project be used for another purpose, it may be possible to replace those lands with other lands that have at least the same fair market value and provide equivalent recreational opportunities. This conversion can only be done with the approval of the National Park Service (NPS) Regional Director (pursuant to Section 6(f)(3) of the L&WCF Act and 36 CFR part 59). Conversions are coordinated through the Minnesota State Liaison Officer to the NPS. The NPS Regional Director has authority to approve or disapprove conversion requests and/or to reject proposed property substitutions. All actions that would cause a significant change of use or park boundary change should be reviewed by the Minnesota State Liaison Officer who administers the L&WCF program.

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

Specific Guidelines for MVSRA Boundary Changes

According to MS Laws 1994 Section 2, Subdivision 1, the “trail” and “unit” designations no longer apply to the SRA and the “boundary” of the Minnesota Valley SRA is no longer defined by a legal description.

In addition, according to this statute, the SRA can expand as lands are acquired under MS Section 85.021. MS 85.021 (1975) states that the Department of Natural Resources may acquire any interest in a tract of land for purposes of the Minnesota Valley Trail. This statutory authority has been interpreted by the State Attorney General’s Office to include being able to acquire lands to expand campgrounds for trail users, for example.

Existing Boundary/Land Ownership Issues

Boundary Posting

According to MS Laws 1994, Section 2, Subd. 1, Minnesota Valley State Recreation Area was established by combining the Minnesota Valley State Trail and the existing units. Therefore, all boundaries will eventually be posted “State Recreation area”. Areas to be posted immediately include the lands downriver from the Lawrence Unit to the Thompson Ferry Unit and then on to the Carver Rapids

/Louisville Swamp Unit. Areas posted as “State Recreation Area” will be managed consistent with the relevant state park and state recreation area statutes.

Appropriate public notice through local newspapers and other avenues will precede the posting of new areas.

Park Boundary/Acquisition Recommendations

Discussions with the Technical Committee and the Citizens Advisory Committee led to the following general recommendations:

- ❖ Consider the Minnesota Valley National Wildlife Refuge and the Minnesota Valley National Wildlife Trust programs and priorities in setting conservation & recreation priorities in the area for future acquisition. At the time of this plan being completed, the Refuge was also completing its general management plan, the Comprehensive Conservation Plan.
- ❖ For conservation purposes, continue to use the whole spectrum of land conservation programs in the Lower Minnesota River valley including programs like CREP (Conservation Reserve Enhancement Program), RIM (Reinvest in Minnesota) and other easement programs.
- ❖ Future land acquisition in the valley should focus on buying large blocks of land along the river for public access and conservation, if possible.

In general, high priority habitat and recreational areas include:

- Trail connections
- Wildlife habitat
- Trout streams
- Wetlands (especially wet meadows, emergent marshes)
- Farmed flood plain
- Flood plain forest/bottomlands (rare if intact)
- Minnesota County Biological Survey elements
- River accesses
- Backwater lakes
- Riparian areas
- Steep slopes (ravines are threatened by development)
- Public vistas

Specific areas that were discussed included:

- ❖ Belle Plaine Unit: Future acquisitions should focus on the lands immediately adjacent to the unit on the north side of Scott County Highway 6.
- ❖ Carter’s Corner, Kelly Lake, and other scattered ownerships: Although these properties are somewhat disjunct from the rest of the state ownership in the area, retain them in public ownership. Work with USFWS, and other partners to determine how best to protect and manage these properties as well as the 1-mile stretch of prairie on the southeast facing slopes between them.
- ❖ Secure easements from the USFWS and the two remaining private landowners for trail development between Cedar Avenue and the Bloomington Ferry parking lot (Hennepin County).
- ❖ Work with local authorities and interested support groups to secure easements for the trail system from Belle Plaine to LeSueur.

- ❖ Due to lack of state funding and logistics issues for management, the Rush River Unit was transferred to Sibley County to be managed as a County Park during this planning process. The State recognizes the ecological and recreational potential of this unit and would entertain the idea of acquiring and managing the unit in the future, should funding allow.

IX. PARK OPERATIONS

Current Staffing Issues

Erosion of State Park staff and maintenance budget

Discussion: Due to a variety of factors, the maintenance and staffing budget for Minnesota Valley State Recreation Area has decreased significantly in recent years. At the time of writing for this plan, the unit is managed by the equivalent of 2 FTE's for maintenance (building and grounds workers) and one FT Park Manager. During FY 02, the unit was operating with 4.5 FTE's for maintenance and 2 FT Park Managers.

A comparison between the FTE's assigned to the Minnesota Valley National Wildlife Refuge and the State Park units in the Lower Minnesota River valley is presented in Table 4.

Table 4: FTE Comparison

Park/Refuge	#Acres ¹⁰	# Visitors	#FTE's (03)
Minnesota Valley State Recreation Area	5490 (includes 1822 trail acres)	173,363	3
Fort Snelling State Park	2931	411,825	13
Minnesota Valley National Wildlife Refuge	12,500	300,000	24

Staffing and Operational Recommendations

The DNR Division of Parks and Recreation will experience increased staffing needs and work loads as a result of this plan's implementation. If all of the recommendations in this plan were implemented, the division would need to increase the park's operational budget significantly. Moreover, staff time in natural resource management and interpretation will need to be increased significantly. Therefore, accomplishing these tasks with reduced resources will require innovation and efficiency in the future.

Other DNR disciplines may also experience some increased workload in the implementation of certain recommended actions. For example, the DNR Division of Enforcement may experience an increased workload as the trail is developed and used by more people. Regional and area team members participated in this planning process and are familiar with what their role(s) may be in the future.

One of the biggest challenges in the Minnesota Valley State Recreation Area is the ability to complete maintenance projects. Due to its location near the metropolitan area, it is often subject to vandalism, arson and trash dumping. In addition, periodic spring and summer flooding requires extensive trail maintenance. It is fairly common to have a large backlog of maintenance and clean-up projects.

Other areas that will require extensive staff time include the posting of all boundaries along the trail and units as State Park and the continued clean up of the former Voss property, now part of the Belle Plaine Unit.

¹⁰ Number of acres in current ownership.

Specific recommendations include:

- ❖ Administer the MVSRA from Fort Snelling State Park during the off season in order to use resources more efficiently.
- ❖ Increase seasonal maintenance staff so that trail maintenance can be accomplished following spring flooding events and other facilities can be maintained as needed.
- ❖ Increase operational funds for natural and cultural resource management in the SRA
- ❖ Increase operational funds for interpretation in the SRA

Development and Other Project-Related Costs

The following list represents those actions that have development or project-related cost implications.

Development Projects

- | | |
|----------------------------|--|
| 1. Minnesota Valley Trail: | Work with partners to restore or replace the Long Meadow Lake Bridge (Old Cedar Avenue Bridge) (Hennepin County). |
| 2. Minnesota Valley Trail: | Work with partners to design and install a bridge over the Nine-Mile Creek (Hennepin County) and other crossings as necessary. |
| 3. Minnesota Valley Trail: | Work with partners to align and develop a multiuse trail <i>system</i> between Cedar Avenue and the Bloomington Ferry parking lot (Hennepin County). |
| 4. Minnesota Valley Trail: | Complete the trail development from the Bloomington Ferry crossing to Memorial Park in Shakopee (Scott County). |
| 5. Thompson Ferry: | Protect the cultural site (Scott County). |
| 6. Minnesota Valley Trail: | Work with local partners to align and develop a trail between the cities of Belle Plaine and LeSueur (Scott, Sibley and LeSueur counties). |
| 7. Minnesota Valley Trail: | Develop restroom facilities and picnic areas at trail access points as needed (all counties). |
| 8. Campground: | Develop a semi-modern campground at a site to be identified to replace the existing campground at the Lawrence Unit. |

Natural/Cultural Resource Management Projects:

1. Continue problem species control including European buckthorn, reed canary grass and sumac (all units and trail).
2. Continue flood plain restoration efforts with native seed sources (all units but especially Gifford Lake, Carver Rapids, and Lawrence).

3. Remove remaining tiling and restore natural hydrology (Gifford Lake and other units as necessary).
4. Continue savanna restoration (Carver Rapids, Lawrence Units).
5. Locate and monitor rare plant populations (all units but especially Carver Rapids).
6. Monitor and restore the Little Rapids cultural site with the appropriate band.
7. Continue prairie restoration at Sioux Vista.
8. Restore oak savanna, woodlands and prairie at the Lawrence Unit.
9. Locate and repair the gullies above the Blakeley Unit.
10. Restore the wetland across the road from the Blakeley Unit.
11. Continue inventorying the units for rare plants, animals and insects.
12. Research poorly known cultural resources.
13. Continue cultural resource reviews of development and resource management projects initiated by the Division of Park and Recreation
14. Evaluate the significance of the existing historic buildings
15. Evaluate known archaeological sites and document cemeteries

Interpretive Projects

1. Develop an overall brochure for the Minnesota Valley State Recreation Area that describes the trail segments, access points and features.
2. Jens Casperson Landing: Develop a kiosk/signs at the Cedar Avenue boat ramp, parking lot and trail head
3. Bloomington Ferry parking lot: Develop a kiosk and information about the historic Bloomington Ferry crossing, the Gideon Pond site and other sites of cultural significance along this stretch of the trail.
4. Interpret Shakopee's Village site (Scott County)
5. Revise and reprint the brochure series for the Shakopee section of the trail (Scott County)
6. Revise and replace the signs for the Shakopee Brewery and limekiln
7. Develop an interpretive plan and trailhead exhibits for the Little Rapids site and for the Louisville town site (Scott County)
8. Develop a kiosk with historic photos and ecological information at the Thompson Ferry site
9. Develop a sign explaining that migratory birds are protected in appropriate languages
10. Develop a kiosk at the Gifford Lake access

Acquisition Projects

1. Work with partners to secure trail easements from the USFWS and private landowners as needed.
2. Work with partners to acquire easements for the trail from Belle Plaine to LeSueur.
3. Work with partners to protect or acquire lands with significant natural resources (rare species or rare natural communities)

Enforcement

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.

The Park Manager is the Park Officer (employee with limited natural resource law enforcement authority) within the Minnesota Valley State Recreation Area. For assistance, he or she may call on other law enforcement agencies including DNR Conservation Officers and County Sheriff Departments. The DNR Division of Parks and Recreation will continue to work with local authorities to assure effective law enforcement in the park.

Examples of areas where increased enforcement is likely include:

Along the entire length of the trail to discourage littering, dumping, vandalism and off-trail riding, for example.

The southern units (Belle Plaine, Blakeley, and associated trail) to reduce unauthorized ATV use, dumping and poaching.

X. 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 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 Recreation as plan modifications. Larger issues that represent changes in management direction or involve other portions of the DNR or other state agencies are addressed as plan amendments. The DNR Division of Parks and Recreation Planning Manager will make the decision of whether a plan amendment or plan revision is appropriate

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

Plan Amendments

Plan Amendment Criteria

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

The proposed change:

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

Plan Amendment Process

The plan amendment process has a series of steps.

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 Recreation, the issue should be resolved within the Division, with input from the public. The proposed change is then reviewed with the DNR Division of Parks and Recreation Central Office Management Team
2. If the proposed change involves other DNR Divisions, the issue should be resolved by staff and approved by the affected Division Directors. This may require one or two area/regional integrated resource management team meetings. The proposed change will be reviewed through the DNR's Regional Interdisciplinary Review Service (or 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 Recreation Central Office 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 Recreation planning staff.

Plan Revisions

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

Revisions related to Physical Development Constraints and Resource Protection

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

Program Revisions

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

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XII. APPENDICIES

Appendix A – Plan Recommendations (complete listing from all sections)

Park Boundary Recommendations

- ❖ Consider the Minnesota Valley National Wildlife Refuge and the Minnesota Valley National Wildlife Trust programs and priorities in setting conservation & recreation priorities in the area for future acquisition. At the time of this plan being completed, the Refuge was also completing its general management plan, the Comprehensive Conservation Plan.
- ❖ Continue to use the whole spectrum of land conservation programs in the Lower Minnesota River valley including programs like CREP (Conservation Reserve Enhancement Program), RIM (Reinvest in Minnesota), and other easements.
- ❖ Belle Plaine Unit: Future acquisitions should focus on the lands immediately adjacent to the unit on the north side of Scott County Highway 6.
- ❖ Carter's Corner, Kelly Lake, and other scattered ownerships: Although these properties are somewhat disjunct from the rest of the state ownership in the area, retain them in public ownership. Work with USFWS and other partners to determine how best to protect and manage these properties as well as the 1-mile stretch of prairie on the southeast facing slopes between them.
- ❖ Future land acquisition in the valley should focus on buying large blocks of land along the river for public access and conservation, if possible.
- ❖ Secure easements from the USFWS and the two remaining private landowners for trail development between Cedar Avenue and the Bloomington Ferry parking lot (Hennepin County).
- ❖ Work with local authorities and interested support groups to secure easements for the trail system from Belle Plaine to LeSueur.
- ❖ Due to lack of state funding and logistics issues for management, the Rush River Unit was transferred to Sibley County to be managed as a County Park during this planning process. The State recognizes the ecological and recreational potential of this unit and would entertain the idea of acquiring and managing the unit in the future, should funding allow.

General Interpretive Recommendations

- ❖ Safety and vandalism are major concerns for trail users and need to be taken into consideration when developing interpretation along the trail. Sign structures need to be as vandal proof as possible and present a high quality image at the same time. Trail users may feel safer if interpretation is located in accessible and visible areas – such as trailheads, junctions and rest areas.
- ❖ In planning for interpretation, we should be looking for a process rather than a product; we need a system of interpretation that can grow and change. The interpretive needs and scope of the 72-mile trail corridor are too large to address specific, detailed interpretive actions within this management plan. A framework and identification of project phases should be outlined building on this and other documents.

- ❖ Continue to use a variety of off-site media such as the Internet in order to provide information and interpretation for the Valley corridor.
- ❖ Interpretation should include the valley – bluff to bluff - rather than a narrow trail alignment in order to see the big picture, tell integrated stories and to include all features and visitor attractions near the trail.
- ❖ The ongoing process should include an effort to include the participation of the many agencies and communities along the corridor in interpretive planning and delivery of services.
- ❖ Recognized Dakota Communities, such as the Shakopee Mdewakanton and the Lower Sioux, should play a lead role in interpretation of Dakota history and management of sacred sites. An ongoing cooperative relationship is essential to the proper management and interpretation of Dakota cultural sites.
- ❖ Develop cooperative agreements for interpretation with the Dakota Communities to provide meaningful interpretation of Dakota history and culture.
- ❖ Provide interpretation in languages other than English as appropriate (Spanish, Hmong, Dakota, for example).
- ❖ Use a unified, recognizable style and graphic elements to tie together interpretation along the trail instead of a mixed, multi-agency approach.
- ❖ Theme development is the best organizing framework in interpreting natural and cultural history along the trail.

General Natural Resource Recommendations:

- ❖ Recognize that we need to look at the whole valley as an important corridor for conservation. Areas such as Eagle Creek, Assumption Creek/Seminary Fen, and the Savage fen wetland complex are all connected to the river valley yet are not a part of the MVSRA. This will require a renewed cooperative effort between all partners in the Valley.
- ❖ Protect rare resources: Based on the recent work by the Minnesota County Biological Survey, the Lower Minnesota River valley is home to a number of rare species and significant natural communities.
- ❖ Continue to use the best resource management prescriptions and techniques.
- ❖ Continue cooperative management with city, county, state, and federal agencies as well as with private landowners. The local bands, as well as other organizations interested in cultural and historic resource management, must be included as part of the management of the natural and cultural resources in the Minnesota Valley.
- ❖ Inventory work in the valley should continue. Monitoring and management plans need to be written for species and native communities.

General Recreational Use and Visitor Services Recommendations

- ❖ Develop a semi-modern campground within MVSRA to replace the existing campground. The Lawrence Unit campground is prone to flooding and is not well-located to serve people wishing to visit other metropolitan area attractions during their stay. A site for the campground will need to be identified.

Recommendations Specific to Location

Confluence to Cedar Avenue

- ❖ The 1984 plan showed the trail in Fort Snelling State Park to be totally on the Hennepin County side, but due to concerns about nesting eagles, the trail alignment between I-494 and Cedar Avenue was moved to the Dakota County side in the 1990s. In 2000, this eagle nest was destroyed by wind. Following recent discussions with the USFWS (MVNWR), it has been agreed that the trail should follow its original alignment on the Hennepin County side. This will allow greater access to the trail from the MVNWR Visitor Center in Bloomington as well as potentially reducing the trail's development cost by eliminating the need for bikeway access over or under I-494. When the I-494 bridge is eventually rehabilitated, plans should include a bikeway connection to the Minnesota Valley Trail system below.
- ❖ Develop major non-personal interpretation at the Cedar Ave boat access, trail head and parking area (Jens Caspersen Landing).

Cedar Avenue to Bloomington Ferry

- ❖ Continue to work with the City of Bloomington in its efforts to replace or restore the Old Cedar Avenue bridge.
- ❖ Work with partners to develop bridges for the stream crossings on the Hennepin County side.
- ❖ Work with partners to secure fee title or easements from the remaining private landowners in the Bloomington section of the trail in order that the trail can be formally developed and designated.
- ❖ Keep the main trail along existing trail corridor, if possible. It is likely that there will be few options for moving the trail since most of it now is on the levee next to the river (the highest and most disturbed ground).
- ❖ Minimize disturbance to important natural resources as the trail is designed (rare plants, animals, habitats and communities).
- ❖ Minimize disturbance to important cultural resources as the trail is designed by working with the Dakota Communities and other cultural resource specialists.
- ❖ Use state-of-the-art trail design and construction techniques to minimize the potential for trail erosion.
- ❖ Use bridges that will withstand frequent flooding and subsequent maintenance.
- ❖ Work with partners to provide adequate enforcement and safety patrols along the trail; discourage littering and off-trail riding. Encourage the local community and user groups to self-patrol as well.
- ❖ Control problem species such as European buckthorn (*Rhamnus cathartica*) along the trail.

- ❖ Keep facilities (restrooms, water, picnic tables) near the trailheads and parking areas---include access for boaters.
- ❖ Encourage the City of Bloomington to manage its open space along the trail as a park or natural area.
- ❖ When developing trail signs, use the opportunity to talk about trail etiquette.
- ❖ Develop a map or brochure showing the starting and ending points for each section of the trail.
- ❖ Provide information on the historic Bloomington Ferry crossing and house, the Gideon Pond site and other sites of cultural significance.
- ❖ Consider providing environmentally sensitive boardwalks and observation decks on spur trails for wildlife observation.

Bloomington Ferry to Memorial Park

- ❖ Cooperate, as requested, with the City of Eden Prairie, MnDOT, the Metropolitan Airports Commission and the Shakopee Mdewakanton Dakota Community to interpret the historic overlook on Highway 212 (across from the Flying Cloud Airport).
- ❖ This portion of the Minnesota Valley Trail is currently under development. Once completed, it will provide access from the Hennepin County side (Bloomington) to the Scott County side (Shakopee), with attractions along the way such as Valley Fair Amusement Park and Murphy's Landing, now part of the Three Rivers Park District.
- ❖ Interpret Shakopee's Village site.

Memorial Park to Highway 41

- ❖ This portion of the trail once connected to the City of Chaska via the historic railroad swing bridge, now removed due to its structural instability. The long-term goal is to move the crossing to the Highway 41 Bridge, once it is reconstructed.
- ❖ Revise and reprint brochure series.
- ❖ Revise and replace trail signage for brewery and limekiln.

Highway 41 to Thompson Ferry (Scott County Road 9)

- ❖ The area that includes Carver Rapids, Louisville Swamp, and the Rapids Lake Unit is the most ecologically significant area in the Lower Minnesota River valley. Initiate an interagency management planning group for the Rapids Lake, Louisville and Carver Rapids units together covering natural & cultural resource management, interpretation and recreation.
- ❖ The management plan for these areas should include the local tribes since the area is rich with cultural history and significant sites.
- ❖ Protect and restore the Little Rapids site in cooperation with the local bands.

- ❖ Develop an interpretive plan for the Little Rapids site in cooperation with the appropriate bands as well as the Minnesota Valley National Wildlife Refuge. Consider developing trailhead exhibits for the Dakota village sites and for the Louisville town site.
- ❖ Install erosion control measures at the Thompson Ferry site as soon as possible along the riverbank to protect the cultural site.
- ❖ Use historic photos to tell the story of the ferry at the site; perhaps develop a kiosk with the historic information, information on flood plain forests, and a map for visitors.
- ❖ Because habitat fragmentation is a serious issue in the river valley, it is recommended that the flood plain corridor should be widened, if possible, by restoring the flood plain forests and wet meadows. Soils should be checked prior to restoration so that the appropriate vegetation community is restored in the appropriate location. Seed sources should be from the local area.
- ❖ Reed canary grass can be an aggressive exotic, given the right conditions. Its presence should be controlled and monitored.
- ❖ Since this many of these areas were formerly farmed, they should be checked for remaining tiling; remaining ditches should be plugged.
- ❖ Continue to actively and cooperatively restore oak savanna.
- ❖ Rare plant populations, in particular, should be monitored as it is managed.
- ❖ Recreational use of these units includes seasonal hunting in some areas, trail use and fishing. The DNR Division of Parks and Recreation will work with interested citizens and the Refuge to further delineate which areas are still appropriate for public hunting and which areas should be closed to public hunting.
- ❖ Continue allowing for other multiple recreational uses of these areas.

Scott County Road 9 to Belle Plaine

- ❖ Increase programming at the Strait House¹¹ in cooperation with the Scott County Historical Society.
- ❖ At Sioux Vista, manage the state-owned piece of sand prairie as a natural area, do not provide for public access or trails through it; it is too small and fragile.
- ❖ For natural resource management at Sioux Vista:
 - Search for rare prairie plants, animals, and insects.
 - Keep removing cedars and pines.
 - Use prescribed burns on the site, if possible.
 - Reseed with sources native to the site.

¹¹ a restored 1857 historic house with interpretive exhibits that tell the story of paper towns, transportation and the town of St Lawrence.

- Consult with the neighboring landowners about how best to sign the state property.
- Work with other organizations such as the Friends of the Minnesota Valley and Great River Greening to set up meetings with the neighbors to discuss stewardship of native communities (sand prairie, flood plain forest) on their individual properties and in the community as a whole.
- Acquire more land in the area, if possible.
- ❖ Along the active flood plain of the Minnesota River, continue to allow natural regeneration of the flood plain forest; compliment the natural regeneration with prescribed restoration (plant native trees).
- ❖ Along the terrace areas, restore oak savanna and woodlands, working toward a mosaic of savanna, woodlands and prairie (with some old field and cedar for species such as shrikes and Henslow's sparrows).
- ❖ In the Lawrence Unit:
 - Check soils to guide where to restore what.
 - Explore a vendor contract to remove 40-year-old oaks and/or continue prescribed burning in the oak areas.
 - For the area between the railroad tracks and the park road, do a site-specific inventory and plan.
 - Contract or otherwise provide for a site review and management plan for these areas in the Lawrence Unit (wet meadows to savanna).
- ❖ To the south and east of Kelly Lake is an outstanding remnant of flood plain forest. Keep the area off limits to tree removal of any type and monitor it for exotic species.
- ❖ Retain Kelly Lake and Carter's Corner in public ownership. Work with USFWS and other partners to determine how best to protect and manage these properties as well as the 1-mile stretch of prairie on the southeast facing slopes between them.
- ❖ Coordinate with the City of Belle Plaine's long-term planning efforts to connect the city's elementary school prairie with the prairie efforts west of town and the planned bike trail.
- ❖ Allow nature to restore the former Voss property site; do not encourage increased public use in the short-term; continue clean-up efforts.

Belle Plaine to LeSueur

- ❖ Develop a sign for the Blakeley Unit explaining that all migratory birds are protected in the appropriate languages.
- ❖ Work with interpretive partners to develop overlooks along the trail.
- ❖ Limit additional recreational trails in the Belle Plaine Unit.
- ❖ Work with local partners to align and develop a trail system between the cities of Belle Plaine and LeSueur (Scott, Sibley and LeSueur counties). Use the 1984 plan as a guide.

- ❖ For Jessenland 25, allow natural regeneration of flood plain forest, and widen the riparian corridor if possible.
- ❖ For the Blakeley Unit:
 - o Work with the adjacent landowners to identify the gullies above the unit and repair them; monitor and repair other erosion problems as well.
 - o Continue to enforce no ATV use and no dumping on the unit.
 - o Look at converting the old logging road into a birding trail.
 - o Restore the wetland across the road from the unit.
 - o Post the Blakeley Unit as State Park.
 - o Protect existing cultural resources in the unit.
 - o Cooperate with partners to protect cultural resources in the general area.

Other Operational Recommendations

- ❖ Administer the MVSRA from Fort Snelling State Park during the off season in order to use resources more efficiently.
- ❖ Increase seasonal maintenance staff so that trail maintenance can be accomplished following spring flooding events and other facilities can be maintained as needed.
- ❖ Increase operational funds for natural and cultural resource management in the SRA
- ❖ Increase operational funds for interpretation in the SRA

Appendix B – A List of Cultural Resources in and near the Minnesota River valley that need protection

(As Recommended by the Interagency Technical Committee on 8-24-01)

Shakopee limekilns and associated structures*

Shakopee brick yard and associated structures*

Shakopee brewery

Historic houses

 Strait House*

 Corbel House*

 Mittlested House

 Jabs Farm

 Old farmhouse on the east branch of Eagle Creek

 Seminary site on Seminary fen

 Ehmiller House

 Chambers House

 Gideon Pond House and associated structures, grounds

 Meetinghouse south of Chaska

WPA/Japanese language camp

CCC Overlooks: Highway 13 overlooking Fort Snelling State Park (Dakota County)*

 Highway 212 overlooking the Upgrala Unit (Hennepin County)

Pilot Knob Hill

Ferry Sites

Artesian well just west of Old Cedar Avenue Bridge

Historic bridges

 Long Meadow Lake Bridge (also known as the Old Cedar Avenue Bridge)

 Stone bridge near Henderson

 Railroad bridge east of Izaak Walton League property in Bloomington

Schaefer picnic ground

History of the local hunting clubs (e.g., Upgrala Hunt Club)

Boiling Springs/Eagle Creek

All burial mounds including those at Memorial Park in Shakopee and Murphy's Landing*

Little Rapids site: mound restoration and preservation of the landscape*

Confluence site: concentration camp and history*

Dakota village sites*

Former town sites and history (e.g., St. Lawrence)*

City histories

Eagle habitat for spiritual reasons*

History of the working river

Precontact sites discovered during recent trail surveys

*part or all included in the MVSRA

Appendix C – A List of Natural Resources in and near the Minnesota River valley that need protection

(As Recommended by the Interagency Technical Committee on 8-24-01)

- Emergent marshes*
- Intact flood plain forests (rare)*
- Wet meadows*
- 9-Mile Creek area:
 - Prairie with kitten-tails
 - Cricket frogs (only known location in the state)
- Savage fen wetland complex
- Dry oak savanna complexes near Savage & Shakopee
- Sand gravel prairies in Eden Prairie with kitten tails
- Riley Woods area
- Upgrala Unit and area
- Blue Lake rookery (only rookery of this size in the Lower MN River area)
 - Great blue herons
 - Black-crowned night herons
 - Egrets
 - Cormorants
- Seminary fen/Assumption Creek/Regae Unit
 - Best quality calcareous fen in the metro area
- Bluff Creek bluffs (maple-basswood & oak forest)
- Carver Rapids/Louisville Swamp*
 - Dry oak savanna*
 - Rare plants *
 - Forest interior birds*
- Rapids Lake Unit
 - Prairies on bluffs
 - Eagle nests
 - Sandhill crane habitat
- Sioux Vista Dunes*
- Lawrence Unit*
 - Henslow sparrow habitat*
 - Sandhill crane habitat *
 - Shrike habitat*
 - Oak savanna*
- Blakeley Unit*
 - Maple-basswood & oak forest*
- Rush River Park
 - Maple-basswood forest
 - Dry gravel prairie remnants

* part or all included in the MVSRA

Appendix D: Research Projects in the MVSRA

A number of research projects have been conducted in the Minnesota Valley State Recreation Area. Detailed records are available for the State Park Resource Management Coordinator or the Central Region Resource Management Office, both located in St. Paul. Another repository for completed research in the Lower Minnesota River valley is the library at the Minnesota Valley National Wildlife Refuge in Bloomington.

The following is a list of research projects for which permits were issued from Minnesota State Parks (mid-1990s to present).

Table 5: Recent Research in the MVSRA

Minnesota Invertebrate Inventory Ron Huber, Bloomington, MN System-wide permit	Fish Surveys Konrad Schmidt, St. Paul, MN System-wide permit
Mussel Life History Studies Mark Hove, St. Paul, MN System-wide permit	North American fireflies Kathrin Stanger-Hall, Austin, TX System-wide permit
Caddisflies in Minnesota David C. Houghton, St. Paul, MN System-wide permit	Mammal bones Geri Schlecht, Henderson, MN MVSRA
Little Rapids Site Mollie Lyon, St. Paul, MN MVSRA Carver Rapids Unit	Effects of Road Salt on Glacial Marshes Susan Galatowitsch, St. Paul, MN MVSRA
Prairie Soils & Vegetation Charles Umbanhower, Northfield, MN Selected parks including MVSRA	Lichens of Minnesota Jim Schuster, Mahtomedi, MN System-wide permit
Bryophytes of MN State Parks Jans Janssen, St. Paul, MN System-wide permit	MN County Biological Survey MN DNR Ecological Services, St. Paul, MN MVSRA
Minnesota River valley Household Survey MN DNR OMBS & Parks, St. Paul, MN MVSRA	Minnesota River valley User Survey MN DNR OMBS & Parks MVSRA
Rush River Cultural Survey, MN Historical Society David S. Radford, St. Paul, MN MVSRA Rush River Unit	Cultural Resource Study Norene Roberts et al. & Clark Dobbs, St. Paul, MN MVSRA
Memorial Park to USFWS Parking Lot, Scott County, Cultural Survey MN Historical Society David S. Radford. St. Paul, MN	