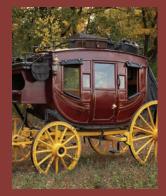
Stagecoach State Trail Master Plan

Minnesota Department of Natural Resources Parks and Trails Division March 2012











The Minnesota Department of Natural Resources, Parks and Trails Division would like to thank all who participated in this master planning process. Numerous individuals and groups in local communities throughout the search corridor have been working for many years to help establish this trail. Assistance and leadership from the Dodge County Trail Association (DCTA), the Olmsted County Stagecoach Trail Study Group, Steele County and City of Owatonna staff was greatly appreciated. Many other DNR staff, city and county officials, trail association members and local citizens contributed their time and energy to the planning process as well.

This Master Plan was prepared by: Diane K. Anderson, Principal Planner

March 2012, Minnesota Department of Natural Resources.

Equal opportunity to participate in and benefit from programs of the Minnesota Department of Natural Resources is available to all individuals regardless of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, age, sexual orientation, membership or activity in a local commission, or disability. Discrimination inquiries should be sent to MN-DNR, 500 Lafayette Road, St. Paul, MN 55155-4031; or the Equal Opportunity Office, Department of the Interior, Washington DC 20240.

This document is available in alternative formats to individuals with disabilities by calling 651-296-6157 (Metro Area) or 1-888-MINNDNR (MN Toll Free) or Telecommunication Device for the Deaf/TTY: 651-296-5484 (Metro Area) or 1-800-657-3929 (Toll Free TTY).

For general information regarding DNR's programs, contact:



Minnesota Department of Natural Resources 500 Lafayette Road St. Paul, MN 55155-4040

http://www.dnr.state.mn.us

651-296-6157 (Metro area and outside Minnesota) 1-888-MINNDNR (MN Toll Free) TDD: 651-296-5485 (Metro Area) TDD: 1-800-657-3929 (MN Toll Free)

Cover photo credits (top to bottom): Stagecoach (Sonja Miedtke); State Trail users (MN DNR); 3rd Minnesota Re-Enactors Spring Muster, 2009, Marching to Wasioja Seminary (Mantorville Chamber of Commerce); Bicycle Club in front of Hubbell House, ca. 1880 (Dodge County Historical Society and the Hubbell House).

Minnesota Department of Natural Resources

500 Lafayette Road • St. Paul, MN • 55155-40_



Minnesota Department of Natural Resources, Division of Parks and Trails Approval of the Stagecoach State Trail Master Plan

Minnesota Statutes, Section 86A.09, requires that a master plan be prepared for units of Minnesota's outdoor recreation system, including state trails. This master plan addresses the Stagecoach State Trail, spanning from Rochester to Owatonna, for a distance of approximately 35 – 50 miles, depending on routes selected. This trail was authorized in 1997, in Minnesota Statutes, Section 85.015, Subdivision 20.

The Minnesota Department of Natural Resources interdisciplinary team developed the Master Plan, with the assistance of the Dodge County Trail Association and the Olmsted County Stagecoach Trail Study Group and other citizen's committees from cities located within the search corridor. The plan received input and comments from the public, including three public open houses and additional meetings with city and county agencies.

The Stagecoach State Trail Master Plan has been reviewed by the DNR, Division of Parks and Trails, and by the Southern and Central Region Management Teams.

I have reviewed this master plan and determined that it complies with Minnesota Statutes 86A.09 and find it provides for the administration of the Stagecoach State Trail in a manner that is consistent with the purposes for which the trail was authorized.

Tom Landwehr, Commissioner Minnesota Department of Natural Resources

Date

Stagecoach State Trail Master Plan

Minnesota Department of Natural Resources Division of Parks and Trails March, 2012



Table of Contents

Executive Summary - Stagecoach State Trail Master Plan E	:S1
Section 1: Planning Process, Purpose and Scope	1
Planning Process, Purpose and Scope	1
Master Plan Process Flowchart	
Legislative Authorization	3
Vision and Goals for the Stagecoach State Trail	
Section 2: Summary of Recommended Trail Uses	
ہ Section 3: Trail Alignment and Development	
Overview of the Trail Alignment	
Segment 1: Douglas State Trail (Rochester) to Olmsted-Dodge County Border	14
Description of the trail environment	
Criteria for Trail Alignment	
Trail Alignment Options	
Local Trail and Park Connections	
Trail Access – Parking Areas, Rest Areas and Interpretive Sites	16
Communities and Connections	18
Segment 2: Olmsted – Dodge County Border to Mantorville	25
Description of the Alignment and Landscape	25
Criteria for Trail Alignment	
Trail Alignment Options	
Trail Access – Parking Areas, Rest Areas and Interpretive Sites	
Communities and Connections	
Segment 3: Mantorville to Wasioja	
Description of the Alignment and Landscape	
Criteria for Trail Alignment	
Trail Alignment Options	
Trail Access – Parking Areas, Rest Areas and Interpretive Sites	
Communities and Connections	
Segment 4: Wasioja to Dodge Center Description of the Alignment and Landscape	
Criteria for Trail Alignment	
Trail Alignment Options	
Trail Access – Parking Areas, Rest Areas and Interpretive Sites	
Communities and Connections	
Segment 5: Dodge Center to Claremont	
Description of the Alignment and Landscape	
Criteria for Trail Alignment	
Trail Alignment Options	
Trail Access – Parking Areas, Rest Areas and Interpretive Sites	41
Communities and Connections	
Segment 6: Claremont to Rice Lake State Park	
Description of the Alignment and Landscape	
Criteria for Trail Alignment	
Trail Alignment Options	
Trail Access – Parking Areas, Rest Areas and Interpretive Sites	
Communities and Connections	
Segment 7: Rice Lake State Park to Owatonna	
Description of the Alignment and Landscape	
Criteria for Trail Alignment	
Trail Alignment Options Trail Access – Parking Areas, Rest Areas and Interpretive Sites	
Communities and Connections	
	20

Section 4: Trail Management	54
Projected Trail Use	
Trail Maintenance	
Interrelationship of the Douglas State Trail	
Information and Education	
Trailside Art	
Enforcement	
Adjacent Landowners	
Trail Management Recommendations	
Section 5: Natural Resources	61
Trail Alignment Search	61
Ecological Regions	
Ecological Classification System	
Vegetation	
Water Resources	
Fisheries	67
Wildlife	68
Mussels	70
Park, Trail and Open Space Resources	70
Geology and Topography	
Climate	
Natural Resources Recommendations	
Section 6: Cultural and Socioeconomic Resources	75
Transportation History –Roads, Trails and Rails	
Socioeconomic Resources	
Section 7: Implementation	80
What happens after the Master Plan is completed?	80
Section 8: Plan Modification Process	
References	85

Appendix

Appendix Page

Appendix A.1: Plant Species - Special Concern, Threatened, or Endangered	2
Appendix A.2: Animals – Special Concern, Threatened, or Endangered Species	3
Appendix A.3: Ecological Units – Natural Communities identified in the Natural Heritage System	
Database	4
Appendix A.4: DNR Fact Sheets- Blanding's Turtle; Wood Turtle; Erosion Control and Plastic Mesh	
Netting	5
Blanding's Turtle Fact Sheet	6
Wood Turtle Fact Sheet	9
Wood Turtle Life History Information	10
Erosion Control and Plastic Mesh Netting Fact Sheet	11
Appendix B: Structures and Sites on the National Register of Historic Places	
Appendix C: Stagecoach State Trail Summary of Open House Meetings, Comments	17

List of Figures and TablesPageSection 1Figure 1.1 Minnesota State Trail SystemFigure 1.2 Southeast Minnesota Trail System7

Section 3

Figure 3.1 Stagecoach State Trail Overview Map	
Figure 3.2 Planning Segment 1 Search Corridor	17
Figure 3.3 Douglas State Trail Map	18
Figure 3.4 City of Rochester map with existing and proposed recreational trails	20
Figure 3.5 City of Byron Map	
Figure 3.6 Oxbow Park Map	23
Figure 3.7 Planning Segment 2 Search Corridor: Olmsted-Dodge County Border to Mantorville	
Figure 3.8 City of Mantorville Map	29
Figure 3.9 City of Kasson Map	30
Figure 3.10 Planning Segment 3 Search Corridor: Mantorville to Wasioja	34
Figure 3.11 Wasioja Township Map	36
Figure 3.12 Planning Segment 4 Search Corridor: Wasioja to Dodge Center	39
Figure 3.13 City of Dodge Center Map	40
Figure 3.14 Planning Segment 5 Search Corridor: Dodge Center to Claremont	42
Figure 3.15 City of Claremont Map	43
Figure 3.16 Planning Segment 6 Search Corridor: Claremont to Rice Lake State Park	46
Figure 3.17 Rice Lake State Park Map	48
Figure 3.18 Planning Segment 7 Search Corridor: Rice Lake State Park to Owatonna	51
Figure 3.19 City of Owatonna with existing recreational parks and trails identified	53
Section 4	

Section 4

Figure 4.1 Douglas State Trail - Change in Summer Use, 1997-2009

Section 5

Figure 5.1 Minnesota's Ecological Classification System Subsection Map	. 63
Figure 5.2 Stagecoach State Trail Search Corridor – Pre-Settlement Vegetation Map	. 64
Table 5.1 Live Mussel Specimens Found in 2009 – Survey of the South Branch Middle	
Fork Zumbro River	. 70
Table 5.2 Average precipitation and temperature recordings from Rochester, Minnesota	
(1971-2000)	. 72

Section 6

Figure 6.1 Maps depicting the Roads in the Minnesota Triangle, 1854 and 1860	76
Table 6.1 Population Estimates and Census Numbers	78

Executive Summary - Stagecoach State Trail Master Plan

Trail Alignment and Development

The Stagecoach State Trail is a legislatively authorized state trail which will connect to the Douglas State Trail in or near Rochester, Rice Lake State Park, and eventually the proposed Wildflower State Trail in or near Owatonna. These links also provide an opportunity to connect local trail systems in Southeast Minnesota, most notably the Rochester Area and Blufflands Trail systems. This link may also prove to be important in creating different loop systems in the region to the north, east and south of the trail.

For purposes of this plan, the trail has been divided into seven planning segments. The segments are Douglas State Trail to Highway 5 (Oxbow Park); Highway 5 to Mantorville; Mantorville to Wasioja; Wasioja to Dodge Center; Dodge Center to Claremont; Claremont to Rice Lake State Park; and Rice Lake State Park to Owatonna. Since the alignment has not been determined, criteria for location of the trail are provided, along with alternative corridor options being considered for each planning segment.

Recommended / Allowable Trail Uses

The Stagecoach State Trail is proposed to be a multi-use trail, however, the limitations of width dictate that not all uses can be accommodated at all times on the entire length of the trail. The following are the recommended trail uses for this trail: **bicycling**, **hiking and walking**, **dog walking**, **running/jogging**, **in-line skating/skate skiing**, **equestrian uses**, **cross country skiing**, **snowmobiling**, **and environmental education/interpretation**.

Trail development will take accessibility into consideration wherever practical. Certain segments of the trail may also be able to provide public access to waterways, for such uses as fishing and canoe launching, where appropriate.

Trail Management

This plan contains recommendations for maintenance, enforcement and interpretation of natural and cultural resources. Trail maintenance is critical to provide and sustain the experience trail users expect and appreciate. The plan recommends that an adequate level of enforcement be provided via a multifaceted approach to help maintain a safe and secure trail environment. It is also a goal to encourage trail users to understand and obey trail rules, respect other trail users and respect adjoining properties and landowners.

The plan recommends that the natural and cultural features along the trail be interpreted and that a standard kiosk design should be used in trail communities and at other locations where wayside exhibits are proposed. The kiosk design should reflect the stagecoach theme for which the trail is named.

Natural and Cultural Resources

The natural resources within the trail right-of-way will be enhanced and managed to provide a healthy diversity of native species. This will be achieved by planting native flowers, grasses, trees and shrubs that are consistent with the natural plant communities of the area. There will be opportunities for trail users to experience the stagecoach history of the area through existing historical and proposed interpretive sites.

Section 1: Planning Process, Purpose and Scope

Planning Process, Purpose and Scope

Master planning for the Stagecoach State Trail was conducted in order to:

- Provide a unifying vision for trail advocates who are working to secure a trail alignment and funds for development and maintenance of the trail.
- Guide the development, management, maintenance and operation of the Stagecoach State Trail so that quality recreational, transportation and healthful exercise opportunities are provided.
- Provide a forum for open public discussion concerning trail use and trail development options, trail maintenance and management issues, and trail operations and enforcement needs.
- Support partnerships and processes that will help execute the plan and contribute to providing quality trail opportunities.
- Assess the projected impacts of trail development on natural, cultural and historic resources in the area as well as the impacts on local communities.
- Satisfy the requirement of Minnesota Statutes, Section 86A.09, which requires that a master plan be prepared for state trails.

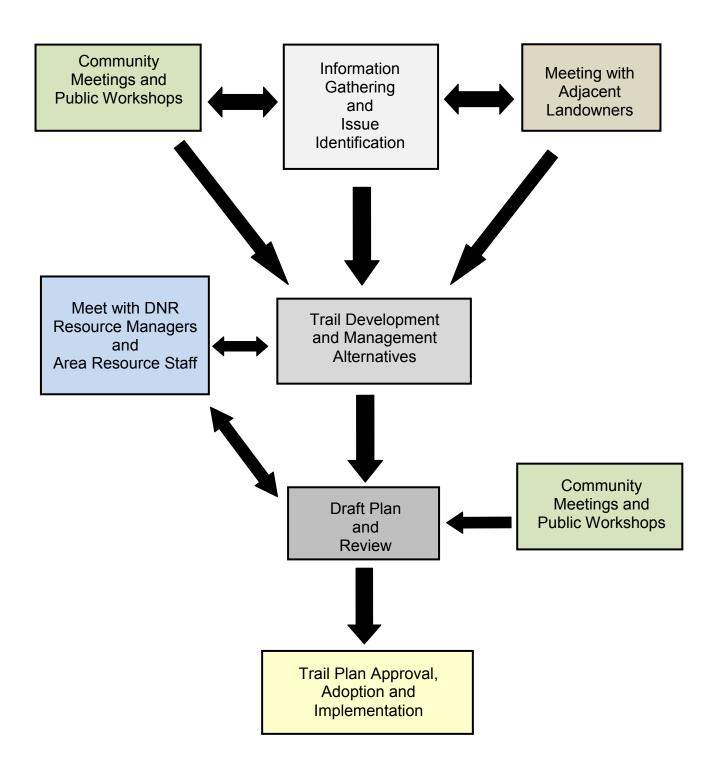
Guiding Principles for Sustainable Trails

Guiding principles for ecologically sustainable trails provide the underlying rationale for actions related to protecting, restoring, and managing natural environments associated with trail development. Minnesota DNR's *Trail Planning, Design and Development Guidelines* (2007) identify seven core principles:

- 1. Avoid sensitive ecological areas and critical habitats.
- 2. Develop trails in areas already influenced by human activity.
- 3. Provide buffers to protect sensitive ecological and hydrological systems.
- 4. Use natural infiltration and best practices for stormwater management.
- 5. Provide ongoing stewardship of the trails and adjoining natural systems.
- 6. Ensure that trails remain sustainable.
- 7. Formally decommission and restore unsustainable trail corridors.

Applications of these principles will minimize the impact of trails on natural resources and sensitive ecological systems. Importantly, the strict application of these guiding principles must be balanced with the need to locate trails where they will be of high recreational value to the intended users, who often want to be close to nature, enjoy beautiful scenes, and observe wildlife. This is an important consideration and underscores the need for resource managers, trail designers, and other interested individuals to work together to determine which values are most important for any given trail alignment.

Master Plan Process Flowchart



Legislative Authorization

The Stagecoach State Trail was legislatively authorized in 1997, Minnesota Statutes, Section 85.015, Subdivision 20.

Stagecoach Trail; Steele, Dodge, and Olmsted Counties. The trail shall originate at the Douglas Trail near the city of Rochester in Olmsted County and extend westerly along the Zumbro River Valley to the city of Mantorville and the village of Wasioja in Dodge County, following as closely as possible the Historic Stagecoach Trail to Wasioja, through Rice Lake State Park to the city of Owatonna in Steele County.

A connection to the City of Byron is mentioned in the legislative authorization for the Blufflands Trail System, MS 85.015, Subdivision 7.

Subd. 7. Blufflands Trail system, Fillmore, Olmsted, Winona, and Houston Counties. (a) The Root River Trail shall originate at Chatfield in Fillmore County, and thence extend easterly in the Root River Valley to the intersection of the river with Minnesota Trunk Highway No. 26 in Houston County, and extend to the Mississippi River.

(b) Additional trails may be established that extend the Blufflands Trail system to include La Crescent, Hokah, Caledonia, and Spring Grove in Houston County; Preston, Harmony, Fountain, Wykoff, Spring Valley, Mabel, Canton, and Ostrander in Fillmore County; Rochester, Dover, Eyota, Stewartville, Byron, and Chester Woods County Park in Olmsted County; and Winona, Minnesota City, Rollingstone, Altura, Lewiston, Utica, St. Charles, and Elba in Winona County.

(c) The trails shall be developed primarily for non-motorized riding and hiking.

In addition to the criteria in section <u>86A.05</u>, <u>subdivision 4</u>, these trails must utilize abandoned railroad rights-of-way where possible.

The Stagecoach State Trail is one of the legislatively authorized state trails in the State Trail System. (See **Figure 1.1**, Minnesota's State Trail System.) State trails are one type of unit of the state's outdoor recreation system established by the Legislature. In 1975, the Minnesota Legislature enacted the Outdoor Recreation Act (ORA) (Minnesota Statutes Section 86A.05, Subdivision 4 and Section 85.015). This act established an outdoor recreation system comprised of eleven components or "units" classifying all state-managed recreation lands. The ORA requires that the managing agency prepare a master plan for the establishment and development of each unit. This master plan fulfills this mandate.

The Stagecoach State Trail meets the following criteria established for state trails in the **Outdoor Recreation Act, Minnesota Statutes 86A.05, Subdivision 4, State Trail: purpose; resource and site qualifications; administration; designation.**

(a) A state trail shall be established to provide a recreational travel route which connects units of the outdoor recreation system or the national trail system, provides access to or passage through other areas which have significant scenic, historic, scientific, or recreational qualities or reestablishes or permits travel along an historically prominent travel route or which provides commuter transportation. The Stagecoach State Trail will be generally an east-west route that provides a connection to the Douglas State Trail in the Rochester area, Rice Lake State Park, and has the potential to connect with the future Prairie Wildflower State Trail, which is an authorized, but currently undeveloped, state trail in Owatonna. A portion of the Stagecoach State Trail will connect the City of Mantorville and to the Village of Wasioja, both with significant historic qualities, and will follow as closely as possible to historic stagecoach routes, such as the Winona – St. Peter Stage Road, through these communities and others in the vicinity.

(b) No unit shall be authorized as a state trail unless its proposed location substantially satisfies the following criteria:

(1) Permits travel in an appropriate manner along a route which provides at least one of the following recreational opportunities:

(i) travel along a route which connects areas or points of natural, scientific, cultural, and historic interest.

The Stagecoach State Trail will connect several points of interest. The most significant cultural and historical interests of this trail location includes original stagecoach roads or routes and stops in the area, for which the trail is named. While some specific segments of the stagecoach roads, or "trails" as they were called, remain unknown, much of the stagecoach trails have been incorporated into the present road system.

The trail will provide connections to, or be located near, culturally significant and historic sites, including the Wasioja Seminary, Wasioja Civil War Recruiting Station, Mantorville Historic District, and Rice Lake Church. Significant natural resource interests include the Zumbro River Valley, including the South Branch Middle Fork Zumbro River and Rice Lake State Park.

The Stagecoach State Trail will connect the communities of Mantorville, Wasioja, and Owatonna, along with the possibility of including connections or trail spurs to/from Rochester, Byron, Kasson, Dodge Center and Claremont.

(ii) travel through an area which possesses outstanding scenic beauty.

The trail will traverse landscape features and characteristics of two Ecological Subsections, Rochester Plateau and Oak Savanna. While much of the land throughout the area is now agricultural, the varied terrain still provides opportunities for scenic views and overlooks that trail users will be able to experience. The trail will connect users with rivers, streams, wetlands, oak forests, rolling hills and valleys.

(iii) travel over a route designed to enhance and utilize the unique qualities of a particular manner of travel in harmony with the natural environment.

The natural, rural character of the trail will be appreciated through the various modes of travel allowed on the trail. The slower modes of travel foster the opportunity to recreate in a natural setting and allow the trail user to observe their surroundings at a greater detail.

(iv) travel along a route which is historically significant as a route of migration, commerce, or communication.

Historic stagecoach routes were located throughout southeast Minnesota. One of the routes served as an important route from Winona to St. Peter, with stops in Rochester, Mantorville,

Claremont, Rice Lake and Owatonna. As the lands became more settled, additional stage routes were developed, many making stops at the Hubbell House in Mantorville. These stagecoach routes were important in transporting passengers and goods, and also became mail routes, proving to be vital connections for new immigrants and settlers throughout the region.

Many of these routes became railroads and then some also became primary roads. Some of the rail lines have since been abandoned. Much of the original stagecoach routes are believed to be located along existing roads that are used today. These corridors will be utilized where possible and where remnants no longer exist or could be utilized, efforts will be made to parallel, or follow as closely as possible, to those original, historic routes.

(v) travel between units of the state outdoor recreation system or the national trail system.

The Stagecoach State Trail is an important link in the trail system of southeast Minnesota. It provides an east-west link between the established Douglas State Trail to Rice Lake State Park, and potentially on to the future Prairie Wildflower State Trail in the Owatonna area. This trail, when completed, will be a key connection to a vast trail system throughout southeast Minnesota.

(2) Utilizes, to the greatest extent possible consistent with the purposes of this subdivision, public lands, rights-of-way, and the like.

Public land will be used when trail development is compatible with management objectives of the administering agency. State, County, and Township road rights-of-way may also be used.

(3) Provides maximum potential for the appreciation, conservation, and enjoyment of significant scenic, historical, natural, or cultural qualities of the areas through which the trail may pass.

Trailheads, rest stops and interpretive facilities are proposed to increase trail users' appreciation and understanding of the natural and cultural resources of the area. The trail will lead to, by, or follow closely to historic routes, historic sites, and local and state parks. The natural and cultural features of the region and importance of the historic stagecoach routes, for which this trail is named, will be a prominent focus of the educational and interpretive services that will be provided.

(4) Takes into consideration predicted public demand and future use.

The plan evaluates and uses the current research and trends on use of existing trails and demand for trail opportunities. Current demographic data is also taken into account. Information obtained at public open house meetings and numerous meetings of local trail organizations is also considered and incorporated into this plan.

Figure 1.1. Minnesota State Trail System.



Figure 1.2. Southeast Minnesota Trail System.



Vision and Goals for the Stagecoach State Trail

Vision

The Stagecoach State Trail will provide a connection to other state, county, and local trails and parks, showcasing local and national historic sites while respecting the rich cultural and natural resources of the area. Traveling a route as close as possible to a historic stagecoach road, this multiple-use trail will highlight the area's scenic, rolling hills of the Zumbro River Valley, promote and provide good health, recreation and economic benefits to several communities.

Goals

The Stagecoach State Trail will:

- Serve multiple user types throughout all seasons of the year;
- Increase awareness of the unique historical, cultural, and natural features of the Zumbro River Valley and Southeast Minnesota, including bird populations and other wildlife, rolling plains, geological formations of river bluffs and valleys, and limestone quarries;
- Preserve, protect and enhance these environmental resources within the trail corridor; (Trail corridors are often much wider than the actual trail, thus providing protection and possibly preservation or enhancement, depending on the situation. A resource inventory is required as part of the preparation of this Master Plan.)
- Will promote economic growth in the area by increasing tourism, attracting and retaining businesses, and linking various tourist destinations/attractions;
- Provide a safe, fun, recreational resource for residents and visitors of all ages and interests, thereby benefiting their health and improving their quality of life;
- Serve as an alternative means of transportation in the area, connecting rural areas to town centers, commercial districts, parks and schools;
- Connect to the existing and future trail networks in southeast Minnesota by providing a link between large cities and rural communities, and will connect local, county and state parks; and
- Showcase the unique cultural themes of southern Minnesota history, such as: an original stagecoach stop at the Hubbell House in Mantorville; a stagecoach route from Mantorville to Wasioja; the Civil War recruitment station and seminary ruins in Wasioja; and limestone guarries in the Zumbro River Valley.

Department of Natural Resources Mission

Our mission is to work with citizens to conserve 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.

Division of Parks and Trail Vision

Our vision is to create unforgettable park, trail, and water recreation experiences that inspire people to pass along the love for the outdoors to current and future generations.

Section 2: Summary of Recommended Trail Uses

The Stagecoach State Trail will be a multi-use, multi-seasonal trail. However, not all uses may be able to be accommodated on all sections of the trail. For example, dual treadways would be necessary to accommodate both biking or in-line skating and equestrian uses. Landowner agreements, land acquisitions, and trail width are examples of factors or limitations that will dictate whether a dual treadway is possible or not, and what uses may be accommodated. Trail development will consider accessibility throughout the trail (wherever practical).

The following are the recommended trail uses: bicycling, hiking and walking, dog walking, running/jogging, in-line skating/skate skiing, equestrian uses, cross-country skiing, snowmobiling, and environmental education/interpretation.

Ancillary activities that may occur within the trail right-of-way include activities such as camping, carry-in canoe/kayak launching, fishing and hunting. Hunting will be allowed in accordance with Minnesota Rules, except where discharge of firearms is regulated by community ordinances. Certain segments of the trail may provide adequate access to rivers or streams for fishing and/or carry-in canoe/kayak launching.

Accessibility - State Trails comply with the Americans with Disabilities Act (ADA) design standards. Effective March 15, 2011, rules issued by the U.S. Department of Justice allow "other power-driven mobility devices" (OPDMDs) to be used by individuals with mobility disabilities on all State or local government lands and facilities. The definitions of an OPDMD is broad and covers all devices used for locomotion by persons with mobility disabilities, except wheelchairs, but including Segway® PTs, electric assisted bicycles and off-highway vehicles. Under the rule, these devices are allowed to be used on all DNR parks, trails, lands and buildings unless an assessment is done which supports restrictions.

The rules allow certain restriction on the use of OPDMDs provided an assessment is completed showing, among other things, that there are legitimate safety concerns or a risk of serious harm to natural or cultural resources. The DNR has completed a preliminary assessment and posted an Interim Policy on the DNR website addressing restrictions on the use of OPDMDs on trails, lands, scientific and natural areas, wildlife and aquatic management areas and DNR buildings.

On paved and aggregate trails on DNR lands, the following OPDMDs are allowed: Electric personal assistive mobility devices, electric-assisted bicycles, and the following electric-powered devices: foot scooters, tracked mobility chairs or tricycles.

























Bicycling - Bicycling is recommended as a use for the entire length of the trail. Bicycling is the number one activity by numbers of summer users on state trails.

Cross-Country Skiing - Cross-country skiing may be able to be accommodated in some sections, where practical and desired, however, it is not likely to be a high-use activity. Cross country skiers typically enjoy loop trails, rather than long, linear trails. Trail grooming may also be an issue with the lack of consistent, sufficient snow cover during the winter months. Prohibiting this use is not recommended.



Environmental Education/Interpretation - Use of the trail for environmental education and nature study, whether for individual trail users or for groups, is encouraged. Nature photography is another popular activity. (In particular, oak savanna, maple-basswood forests, tall-grass prairie remnants and rolling plains are examples of representative landscape features that should be featured in interpretive sites or kiosks/panels.)

Equestrian Uses - Equestrian uses may be accommodated on some sections, where practical and desired, by developing a separate, natural surface treadway. (Recommend season end date of November 30 if using shared treadway with snowmobiles)

Health Education – Activity Stations - Local communities along the trail have expressed interest in providing health education opportunities along the trail. This may include activity stations adjacent to the trail, within the trail right-of-way. These stations may include equipment and/or a sign with exercise or activity instructions to help motivate users participating in a health or fitness program.

Hiking/Walking; Jogging/Running - On state trails, hiking or walking is second only to bicycling in numbers of summer users. Pushing strollers is also a popular use on state trails. Hiking and walking are recommended uses along the entire length of the trail. Jogging or running accommodates local users and is also recommended along the entire length of the trail.

Dog Walking - Dog walking is a recommended use for the trail as long as dogs are leashed and owners properly clean up and dispose of pet wastes. State Trail rules require all pets to be restrained by leashes not more than six feet in length.

In-Line Skating/Skate Skiing - In-line skating and skate skiing will accommodate local users, athletes training in the region, and recreationally-based tourists. These users need a smooth, wide surface, such as asphalt, that is well maintained. These uses are recommended on the entire length of the trail.

Snowmobiling - Snowmobiling will be accommodated wherever feasible and desired, which may include using a separate treadway from the paved treadway. Although snowmobilers are interested in connecting to the same communities as the summer trail users, the actual alignments for the two treadways will not necessarily be parallel or in the same corridor. Snowmobilers are most interested in securing a permanent alignment, whether seasonal or year-round, that provides a safe, high quality riding experience.

Camping - Camping was expressed as an interested use from the public comments received during various planning stages. Existing parks located within the search corridor currently allow camping and/or have camping facilities.

Canoe Launching - Canoe launching may be provided, where practical, to access public waters located within the trail right-of-way. While this is not a trail activity, the trail may lend itself to be able to provide a drop-in access to public waters.

Fishing - Fishing is a popular activity along the South Branch, Middle Fork Zumbro River and a



number of smaller creeks within the search area, however, access is currently limited. Depending upon the location and conditions of the trail corridor right-of-way, this activity may be accommodated from the trail where practical.

Hunting – (**During legal hunting season only**) - Currently, state trail rules allow hunting within the trail right-of-way, except where restricted by local ordinance. Communities may restrict firearms or bow and arrow discharge, or trapping, by ordinance. These ordinances take precedence over state trail rules. The current rule for hunting related to state trails states,

"No firearm or bow and arrow shall be discharged within the trail at any time, except for the purpose of lawful hunting during the period from September 15 to March 30 only. No rifle, shotgun with slug or bow and arrow shall be discharged upon, over, or across the trail treadway at any time." Minnesota Rules, 6100.3600, Hunting.

Section 3: Trail Alignment and Development

Overview of the Trail Alignment

The Stagecoach State Trail is a legislatively authorized state trail which, when complete, will connect the towns of Rochester, Mantorville, Wasioja, and Owatonna. This trail also serves as a connection between the Douglas State Trail, Rice Lake State Park, and the legislatively authorized, but currently undeveloped Prairie Wildflower State Trail. The Stagecoach State Trail is projected to be approximately 36 miles long, however, final route selection will determine the actual length.

For the purposes of this plan, the trail corridor has been divided into seven planning segments for ease of describing and discussing the resources and features along the trail corridor. No alignments have been secured at the time of writing this plan. These segments are independent of development opportunities and priorities.

The planning segments from east to west are identified as:

- 1. Douglas State Trail to Olmsted-Dodge County Border
- 2. Olmsted-Dodge County Border to Mantorville
- 3. Mantorville to Wasioja
- 4. Wasioja to Dodge Center
- 5. Dodge Center to Claremont
- 6. Claremont to Rice Lake State Park
- 7. Rice Lake State Park to Owatonna



This section of the plan includes:

- A description of landscape highlights for each trail segment listed above, segment criteria for the location of the trail corridor, and identification of trail alignment options;
- A map for each trail segment illustrating the search corridor and key features identified;
- A description and map of each community that may connect with the trail; and
- Descriptions and maps of county and state parks and trails or other recreational resources the trail will connect.

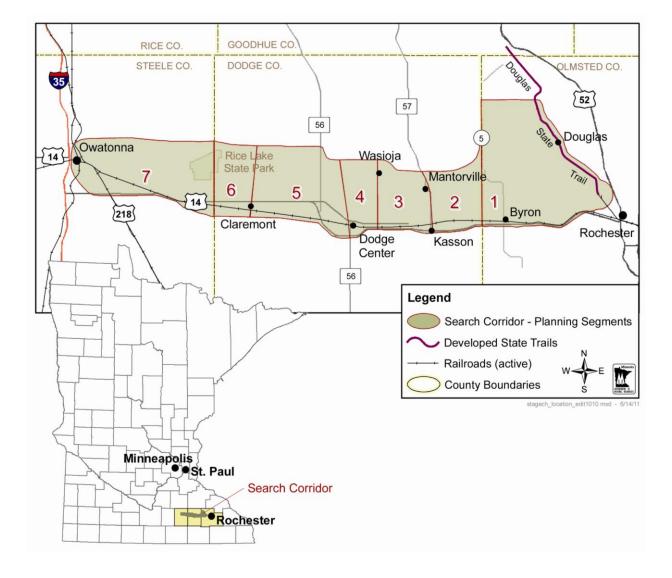


Figure 3.1. Stagecoach State Trail Overview Map with Planning Segments

Segment 1: Douglas State Trail (Rochester) to Olmsted-Dodge County Border

Description of the trail environment

The eastern terminus of the Stagecoach State Trail will be at a location along the existing Douglas State Trail. This location should share a trailhead including parking and restroom facilities at a minimum. Scope of the search corridor generally spans from the north end at Douglas, County Road 14, following Douglas State Trail southerly to the Rochester terminus, and further south to U.S. Highway 14 corridor, and westerly toward the Olmsted – Dodge County border, including areas encompassing the City of Byron, Oxbow Park and the South Branch Zumbro River.

Considering existing facilities, one option for trail connection is at the Douglas State Trail terminus in Rochester, and another option is located at the existing parking lot and Douglas State Trail trailhead located in Douglas. Other possibilities include creating a new trailhead between these two existing ones along the Douglas State Trail.

The existing trailhead in Douglas for the Douglas State Trail is located along County Road 14. Douglas is a small community and is primarily residential – rural residential in the close vicinity to the trailhead, but also is easily accessible from U.S. Highway 52, a major travel route to the City of Rochester. This location is suitable due to its accessible location and the potential for a more scenic route of the Stagecoach State Trail heading west toward the South Branch Zumbro River corridor. Upgrades or improvements to the existing facility may be necessary if this becomes a dual-trailhead.



Douglas State Trail, prairie restoration near Douglas, MN.

The landscape heading west from Douglas is largely comprised of rural farmlands. Rolling hills provide scenic views of the farmlands and wooded stream valleys that become more pronounced toward the county boundary. The Zumbro River Valley is especially scenic which also includes some steep terrain that may be challenging, or even unsuitable, for trail development.

Where the Douglas State Trail terminates in Rochester, at County Road 4, near the intersection of Hwy 22/West Circle Dr. NW and Valleyhigh Road NW (CR 4), the immediate area is zoned as mixed commercial – industrial, with several residential neighborhoods nearby. Once outside of the city limits of Rochester, much of the landscape is rural farmland. This location is suitable due to the close proximity of residential areas and the potential connections with the existing and proposed routes that are part of the Rochester Trail System.

It may be appropriate to consider more than one alternative in this segment as there has been interested expressed by potential trail users groups to have an alignment for equestrian use along this portion of the trail. Some segments may not lend themselves to being able to occupy a parallel dual treadway for bicycle and equestrian use. However, separate, non-parallel treadways may be pursued, as alternatives or opportunities arise.

Criteria for Trail Alignment

- Connection to Douglas State Trail
- Shared trailhead/parking location with Douglas State Trail
- Work with willing landowners to acquire right-of-way that showcases features of the landscape
- Minimize wetland impacts
- Enhance riparian buffers
- Avoid acquisition of high quality agricultural lands
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey or other resource inventories
- Use existing road right-of-way where practical or necessary, minimizing user exposure to traffic

Trail Alignment Options

- South Branch Zumbro River corridor
- County Road 14 in Douglas
- County Road 3 south to 66th St NW then westerly to South Branch Zumbro River corridor
- County Highway 4 to County Road 5 NW/County Highway 5
- Connection to, or through, Oxbow Park (Olmsted County Park)
- County Road 104 to County Road 4 or U.S. Hwy 14
- U.S. Highway 14, westerly to Byron, and on to county border
- Stemming from the Rochester terminus of Douglas State Trail, follow County Road 4 west toward Kalmar Reservoir and on toward Byron and county border
- County Road 104, potential corridor, as it planned to be upgraded to four-lane highway

Local Trail and Park Connections

The Stagecoach State Trail could connect to other local trails in Rochester and Byron to enhance recreational opportunities and experiences.

The state trail could connect with the existing or future stages of the local Byron Trail, which currently runs from a residential area to the high school campus along County Road 5 NW. Additional recreational trails are located within Byron, primarily through residential neighborhoods.

Oxbow Park is another potential connection point for the Stagecoach State Trail. Oxbow Park is located north of Byron, near the intersection of County Road 5 NW/County Highway 5 and County Road 105.

Trail Access – Parking Areas, Rest Areas and Interpretive Sites

A parking lot and a portable toilet are currently available at the Douglas State Trail in Douglas. Upgrades to the parking lot and toilets may be needed if this becomes a dual trail head.

Adequate parking and vault toilet facilities are at the Douglas State Trail, southern terminus in Rochester. Minor, if any improvements would be necessary at this location if it becomes a dual trail head.



Douglas State Trail.

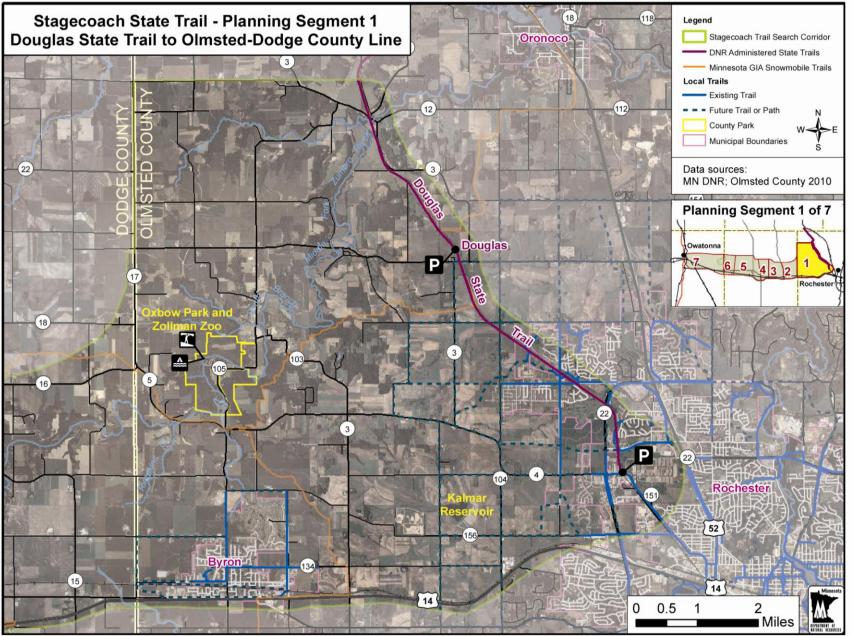
Additional locations for parking and other amenities or support facilities may be necessary

in the vicinity of the Olmsted and Dodge County boundary, depending upon trail location, (such as along County Highway 5 and Dodge County Road 16, Byron, Oxbow Park, etc).



Douglas State Trail, asphalt and natural surface treadways, also described as "dual treadway."

Figure 3.2. Planning Segment 1 Search Corridor: Douglas State Trail to Olmsted-Dodge County Line.



DNR, PAT June 2011 Stagecoach_Planning_Seg1.mxd

Communities and Connections

Douglas State Trail

The Douglas State Trail is a 12.5 mile, multiple use trail developed on an abandoned railroad grade. The trail consists of two separate, parallel treadways: one treadway is paved for multiple uses including bicycling, hiking, in-line skating in the summer; and the natural surface treadway is primarily used for horseback riding, mountain biking, and snowmobiling.

This trail crosses outstanding rural scenery, traversing some of the richest agricultural land in Minnesota. The northern trail terminus is located in Pine Island, and as the trail heads south, it travels through the small town of Douglas (for which the trail is named) and continues southerly and terminates in northwestern Rochester. Present access to the trail includes three parking lots with rest facilities.

According to a trail use and user surveys conducted by the DNR in 1997 and 2009 along the Douglas State Trail, approximately 80% of the trail users are local, traveling 10 miles or less to get to the trail. Bicycling was found to be the leading activity on the Douglas State Trail, with walking, running and inline skating also cited as frequent uses.

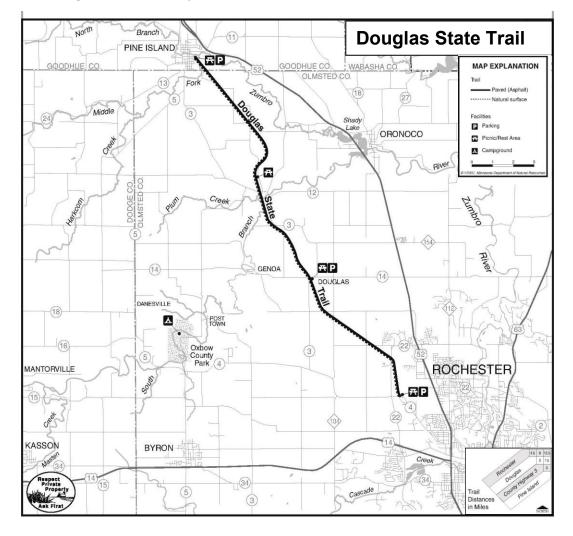


Figure 3.3. Douglas State Trail Map.

Rochester

Rochester is the county seat of Olmsted County. It was incorporated as a city on August 5, 1858 and was named after Rochester, New York by George Head, an early settler who is credited with founding the city of Rochester in 1854. He was one of the first to settle in the area of what is now part of the city's business district. By 1856, the population was 50, and by 1883 the city had 10,000 residents.

The city's location along the Dubuque Trail, a 272-mile stagecoach route from St. Paul to Dubuque, Iowa, aided to the growth of the city. Even more important for the growth of the city was the development of the Winona and St. Peter Railroad in 1864.



Streets of downtown Rochester in the1800s. (Source: Olmsted County Historical Society)

In 1863, Dr. William Worrall Mayo arrived in Rochester

as a medical examiner of Civil War recruits. He often brought his sons, Will and Charlie, with him on medical calls, and they eventually became doctors themselves. When a tornado devastated the northern end of town, killing and injuring many people on August 21, 1883, the Mayo's worked with the Sisters of St. Francis to care for the victims. After this tragic event, Sister Mary Alfred offered to build and maintain a hospital if Dr. Mayo would provide medical staff. This action set in motion what would become the world-renowned Mayo Clinic.

Today, the Mayo Clinic forms the core of Rochester's economy and is the largest employer in the city, employing nearly 30,000 people and drawing over 2 million visitors to the city each year. The Mayo Clinic and its associated facilities, along with hotels, restaurants, and retail stores, comprise nearly all of downtown Rochester. The second largest employer is IBM, which houses one of the company's most important manufacturing centers in Rochester. The economy of Rochester is also influenced by the agriculture in the region. Food processing plants and multiple dairy producers are active in the area.

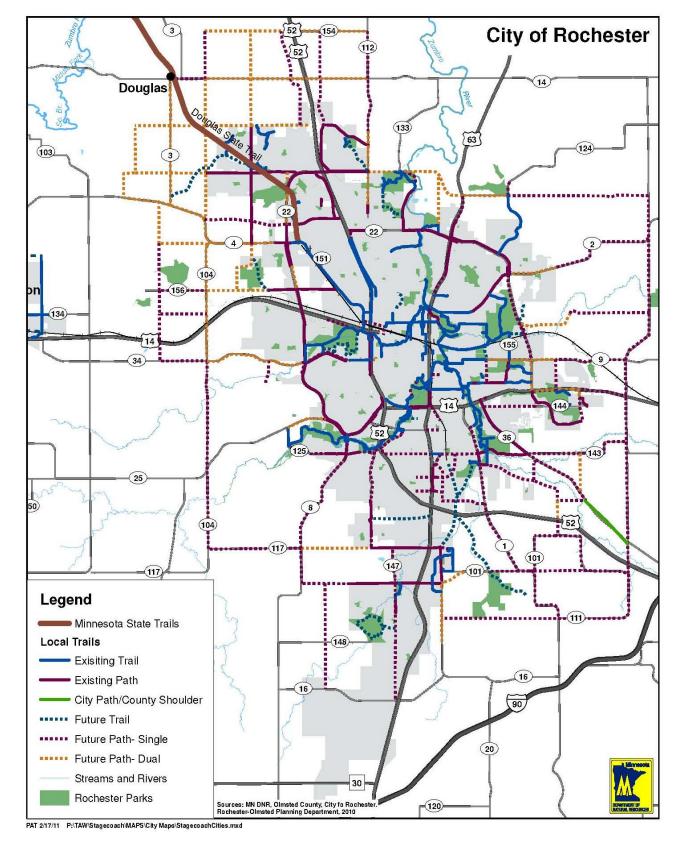
The population of Rochester was 85,806 at the 2000 Census. According to the 2010 Census, Rochester's population is 106,769. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

The City of Rochester has a large park system with more than 100 parks totaling more than 3500 acres, including playgrounds, neighborhood parks, community parks, sport complexes, open spaces and reserves. Rochester also has developed 85 miles of paved recreational trails available for walking, running, biking, in-line skating, wheelchair and stroller use.

Interrelationship to the Stagecoach State Trail

A specific alignment of the Stagecoach State Trail in Rochester has not been determined.

The eastern terminus of the Stagecoach State Trail could be developed in the western part of the City of Rochester, where the Douglas State Trail currently terminates. It may be possible to link to other local trails that are part of a larger local trail system throughout the City of Rochester. Rochester boasts a strong support for local trails and parks and has an extensive vision and bikeways plan in place.





Douglas

Douglas is a small unincorporated community in Olmsted County, located approximately two miles north of the city limits of Rochester. The estimated population of Douglas is 45 people. Douglas includes an existing trailhead for the Douglas State Trail, which with a few improvements could also be a trailhead for the Stagecoach State Trail if the Stagecoach Trail branches off of the Douglas at or near this facility.

The landscape just off of the main road quickly becomes primarily agricultural with varied topography including rolling hills and riparian hardwoods in the Zumbro River Valley.

Interrelationship with the Stagecoach State Trail

A trail alignment or connection to the Douglas State Trail has not been determined. A connection in the Douglas community at the existing parking/trailhead for the Douglas State Trail is a viable option. [City labeled on Figures 3.3 and 3.4.]

Byron

Byron is located approximately eight miles west of Rochester in Olmsted County. The first settlers arrived in 1854. In 1865, when the Winona St. Peter Railroad, now known as the Dakota, Minnesota and Eastern Railroad (DM&E), was being built, it was decided to establish a station ten miles west of Rochester close to a community then known as Bear Grove. A New York Millionaire named S. W. VanDusen, purchased land near this station and platted a village he named Byron, after his hometown in New York. The railroad became the lifeline of the village and at one time, at least eight passenger trains stopped daily in Byron. The bustling village had a hotel, town doctor, cheese factory, brick yard, several general stores, and a saloon. Little remains of the original buildings as many were destroyed by fires.

Today, the City of Byron includes local industries in the form of farm services and printing. A grain elevator is situated next to the Dakota, Minnesota and Eastern rail line that runs through the city. Byron schools include an elementary school, a middle school, and a high school. A local trail has been established that leads from a residential neighborhood to the high school campus. Additional recreational trails are located within residential areas.

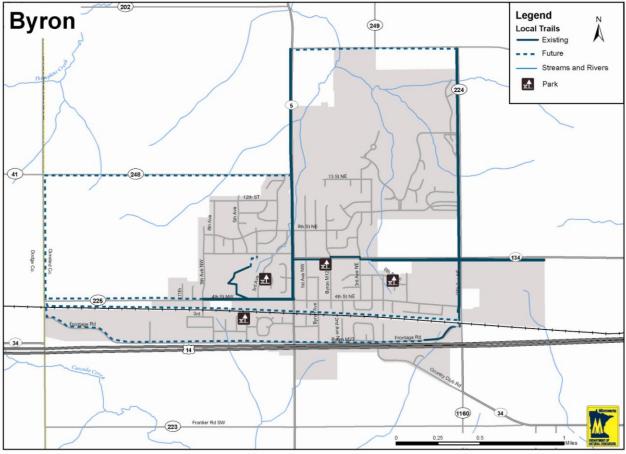
The population of Byron was 3,500 at the 2000 Census. The 2010 population was 4,914. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

Interrelationship to the Stagecoach State Trail

A trail connection or alignment to or through Byron has not been determined. Establishing an alignment that connects to the City of Byron remains a viable option.

The City of Byron has constructed several local multi-use recreational trails.

Figure 3.5. City of Byron Map.



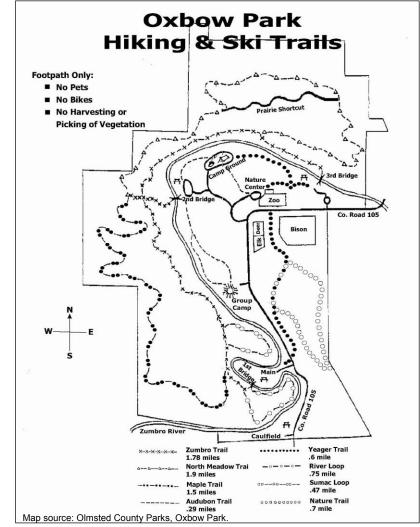
PAT 2/18/11 P:\TAW.Stagecoach\MAPS\City Maps\StagecoachCities.mxd

Oxbow Park and Zoo

Oxbow Park, administered by Olmsted County, is located in the Zumbro River Valley, 3.5 miles north of Byron. The park consists of over 620 acres, which includes eight miles of developed hiking trails, four different picnic areas, six separate picnic shelters and playground equipment. The park also has a semi-primitive campground with 29 campsites, one group camp site, ten electrical campsites, running water, restrooms and shower facilities.

The South Branch of the Zumbro River flows through the park. A large bend in the river, called an "oxbow" because of its resemblance to an ox yoke, gave the park its name. An "oxbow" of the river within the park has been preserved through bank stabilization and now surrounds the main picnic area.

The Dr. Paul E Zollman Zoo is located within the park boundary and houses over 30 native Minnesota animal species. Most



of the animals are permanently injured or surplus from other facilities and cannot be released to the wild. These animals provide opportunities for learning and enjoyment and are utilized in environmental education programs at the park.

Figure 3.6. Oxbow Park Map.

Oxbow Nature Center, also located in Oxbow Park, offers expanded educational and recreational programs and activities. The building includes a classroom, snake exhibit, and displays natural artifacts.

Oxbow Park and Zoo is a popular local destination for outdoor recreation. This park was frequently identified in public comments as a desired connection for the trail, and was often suggested as a potential trailhead location. Trail users are attracted to the park for its beautiful scenery, amenities, activities and wildlife viewing.

The area around and within Oxbow Park includes a concentration of rare and natural features that would be taken into careful consideration prior to any development plans. Currently, the park offers foot paths or hiking trails, where bicycles, pets or other activities such as berry picking, are prohibited. Other trail uses may or may not be compatible with the existing uses of park lands.

Interrelationship with the Stagecoach State Trail

A trail alignment to or through Oxbow Park has not been determined. Public comments identified this as a favorable destination or trail connection. Oxbow Park's relationship with the Stagecoach State Trail will depend upon the trail alignment location. Oxbow Park could be an important part of the future trail if the alignment reaches the park boundary or runs through it. However, if a trail alignment is not found near, to, or through the park boundary, it will not have a direct relationship to the trail.

Potential routes for the Stagecoach State Trail include staying outside the park boundary, following the northern park boundary, or going through the park by following the existing road. The alternatives included provide options that will continue to be considered as the trail alignment develops. However, support and agreement from Olmsted County Parks will be necessary in order for these options to be feasible.

Since there has been such strong public interest in having the Stagecoach State Trail connect with Oxbow Park, it remains as an option for consideration.

Segment 2: Olmsted – Dodge County Border to Mantorville

Description of the Alignment and Landscape

From the Olmsted-Dodge County border, the trail will continue westerly toward Mantorville. Route options include stemming from the Oxbow Park and County Road 5 area, or the City of Byron area.

The terrain in the area between the county border and Kasson – Mantorville area is diverse and scenic with steep to rolling hills and valleys, crossing numerous streams with views of rolling hills in the distance. Much of the landscape is cultivated farmland with pockets of suburban-like residential developments along with stands of hardwoods in the riparian zones. The northern edge of this search corridor includes more hills and streams than the southern area, however, both offer opportunities for scenic views.

Mantorville Township has officially expressed support for the Stagecoach State Trail to travel through the Township.

An exact alignment has not been determined for this segment. However, several alignment options exist.

Criteria for Trail Alignment

- Work with willing landowners to acquire right-of-way for the trail that showcases features of the natural landscape
- Minimize wetland impacts
- Enhance riparian buffers
- Avoid acquisition of high quality agricultural lands
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey or other resource inventories
- Use existing road right-of-way where practical or necessary, minimizing user exposure to traffic
- Provide scenic route into Mantorville
- Provide a trailhead facility in Mantorville
- Connect to Riverside Park and Welcome Center in Mantorville (potential trailhead site)
- Connect to existing local trails, Sunrise and/or Sunset Trails
- Potential connection through Kasson and local trails then to Mantorville
- Connect to Mantorville Historic District, and provide some interpretation of historic resources (coordinate with Minnesota Historical Society, Dodge County Historical Society)

Trail Alignment Options

 Northerly route – from Olmsted County Line, along County Road 16, to 260th Ave. to 608th St./5th St. into Mantorville

- Southerly route 625th St from Byron toward Kasson Mantorville School Campus, to Sunrise Trail, to Riverside Park in Mantorville
- Follow South Branch Middle Fork Zumbro River corridor

Trail Access – Parking Areas, Rest Areas and Interpretive Sites

Riverside Park in Mantorville presently includes parking, toilets, picnic tables, beverage vending machine, playground equipment, access to river. Utilizing this park as a trailhead for the state trail is well supported by the community and the Dodge County Trail Association.

The Historic District in Mantorville is adjacent to Riverside Park.

Alternative locations for rest areas or parking in Kasson may also be considered if the trail travels to or through Kasson.

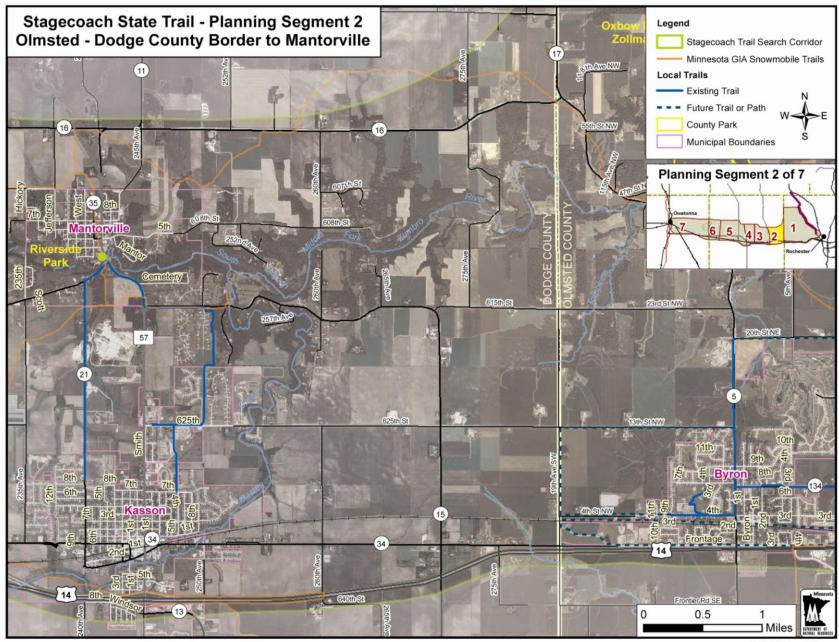


Covered bridge at Riverside Park leads to Goat Island, Mantorville. (Source: Mantorville Chamber of Commerce.)



Bicycle Club in front of the Hubbell House, Mantorville, Minnesota. Circa 1880's. (Photo provided by Dodge County Historical Society and the Hubbell House.)

Figure 3.7. Planning Segment 2 Search Corridor: Olmsted-Dodge County Border to Mantorville.



DNR, PAT June 2011 Stagecoach_Planning_Seg2.mxd

Communities and Connections

Mantorville

Mantorville is the county seat of Dodge County, and located approximately 15 miles west of Rochester. The flowing Zumbro River, the hilly acres of woodland layered with limestone and the rich, fertile soils add to the beauty of the area.

Mantorville is named after brothers Peter and Riley Mantor, who arrived in 1853. A group of homesteaders explored and settled in the area in 1854. Mantorville was platted in 1856 and incorporated in 1857.

The entire 12-block area of downtown Mantorville is listed on the National Register of Historic Places. The town's history is evident by the limestone buildings in its historic downtown area. Mantorville Limestone was a popular building material



and shipped to numerous locations throughout the United States. Many of the original limestone buildings remain viable to the community today, such as the original Dodge County Courthouse, completed in 1871, the oldest working courthouse in Minnesota; and the Hubbell House, built in 1856, is a fine dining establishment with a Civil War era atmosphere. Other original buildings include the Mantorville Saloon and the Opera House.

In 1855, the population was about 100, by 1857 the population grew to 500, and by 1860 the population jumped to 760. The population at the 2010 Census was 1,926. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

Today, Mantorville is a quaint hamlet, reminiscent of a time in the past. Visitors and residents enjoy the relaxed atmosphere and simplicity. Melodramas at the historic Opera House and the famous Hubbell House Restaurant continue to attract locals and tourists alike. Mantorville offers a high quality of life and is rich with opportunities for growth, enjoyment and development.

Interrelationship with the Stagecoach State Trail

An alignment through Mantorville has not been determined. Routes being considered that are believed to be part of the original stagecoach road include the north side of 5th Street, east of the junction with MN Hwy 57. According to the National Register of Historic Places, the "Mantorville and Red Wing Stage Road" was possibly located along this corridor. Other documents indicate that the Red Wing to Mantorville Stage Road entered Mantorville from the north, following what is now known as County Road 11 and a portion of 245th Ave to connect to Main Street, stopping at the Hubbell House. It is believed that multiple stage roads, original county roads (years 1854-1857) and territorial roads passed through the heart of Mantorville during the mid-1800s. (Hanson, 2011.)

The City of Mantorville currently maintains six city parks and a Welcome Center near Riverside Park and the historic downtown area at the intersection of Highway 57 (Main Street) and 4th Street. Riverside Park is a potential location for a trailhead, with existing parking spaces and wheelchair accessible restroom facilities. Riverside Park has a rich history of its own as the original site of the Chicago Great

Western Railroad depot and lumber mill, which may be featured through interpretive displays. Today, the park includes a playground, swings, picnic tables, accessible sidewalks, and a carry-in canoe access and shore fishing opportunities along the South Branch Middle Fork Zumbro River. Additional amenities could be added to the park area with trail development in order to better accommodate trail users and visitors.

The City of Mantorville, through the mayor and other city officials, has expressed interest and support in pursuing a trail route along 5th Street to Riverside Park, which follows in part what was believed to be the historic stagecoach route in town. The DNR will continue to work with the City and associated interest groups on establishing a trail route through Mantorville, while also seeking additional information regarding historic stage roads through the area.

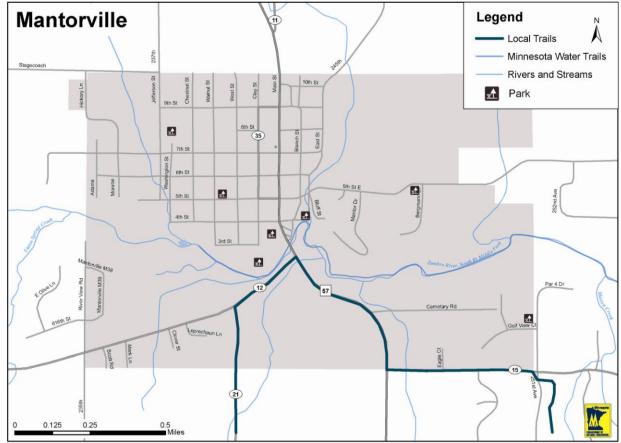


Figure 3.8. City of Mantorville Map.

PAT 2/18/11 P:\TAW.Stagecoach/MAPS\City Maps\StagecoachCities.mxd

Kasson

Kasson is located approximately 13 miles west of Rochester. The City of Kasson, named for Irish Pioneer Jabez Hyde Kasson, was incorporated on February 24, 1870. Kasson was a prairie at the time, and early settlers began planting trees.

When the Winona and St. Peter Railroad reached this place in the fall of 1865, this village was laid out by Kasson and others, the plat being recorded October 13, 1865, and in November the first passenger train came to Kasson. The village was incorporated on February 24, 1870, and again on April 22, 1916, separating from the township on March 21, 1917. Kasson had a station of the Chicago and Northwestern Railway, and its post office opened in 1866. (Minnesota Historical Society, 2009)

Today, the City holds the "Tree City USA" designation for its ongoing tree propagating and maintenance program. Kasson has several historic attractions, three of which are on the National Register of Historic Places, including the Municipal Building, Kasson Public School, and an original limestone water tower built in 1895. The population at the 2010 Census was 5,931. (MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

Interrelationship with the Stagecoach State Trail

An alignment through the area has not been determined. Potential alignment options include providing a connection directly to or through the city of Kasson. If the Stagecoach State Trail does not directly connect with the city, it will likely be connected through the local trail system, which also connects to the City of Mantorville.

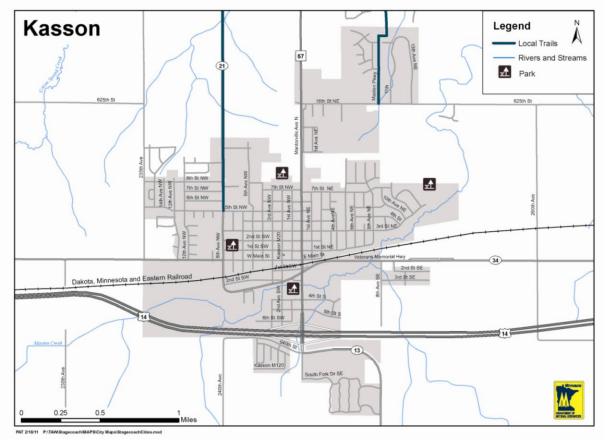


Figure 3.9. City of Kasson Map.

Segment 3: Mantorville to Wasioja

Description of the Alignment and Landscape

Mantorville to Wasioja is a relatively short distance of approximately 3 miles. Heading west out of Mantorville toward Wasioja will likely include several river or stream crossings over varied terrain. Some areas include steep ravines to the South Branch Middle Fork Zumbro River where new bridges would be required in order to span river crossings. A significant portion of the original stagecoach road was likely located along what is now appropriately named Stagecoach Road.

There is strong public interest in being able to accommodate multiple uses along this segment, including equestrian use such as horseback riding or carriage driving (stagecoach re-enactment or tourism functions), along with hiking and biking. A dual treadway may be pursued, parallel or not, to accommodate the interested uses in this segment.

The landscape includes varied terrain with gentle to rolling hills and some steep slopes closer to the streams and rivers. Potential deer wintering areas have been identified between Mantorville and Wasioja, where typically these locations provide sufficient cover and food sources for less than 50 deer. Much of the land outside the city limits is cultivated farmland. Historic limestone quarries provided the limestone for the Dodge County Courthouse, Hubbell House, Opera House, and many other buildings in the historic district within Mantorville. Active limestone quarries remain in the area.

An exact alignment has not been determined for this segment. However, several alignment options exist.

Criteria for Trail Alignment

- Work with willing landowners to acquire right-of-way that showcases features of the natural landscape
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey or other resource inventories
- Enhance riparian buffers
- Use existing road right-of-way only where necessary, minimizing user exposure to traffic
- Follow original stagecoach road from Mantorville to Wasioja and/or abandoned rail line as close as possible, as directed by legislation (The Chicago, Great Western (CGW) railroad was abandoned in 1935)
- Provide interpretation and connections to historic sites/districts in Mantorville and Wasioja

Trail Alignment Options

• Use abandoned rail line (Mantorville to Wasioja), where remnants remain intact

- Follow original stagecoach road as closely as possible, which may include portions of Stagecoach Road or County Road 16 between Mantorville and Wasioja (Winona - St. Peter Stage Road route likely followed County Road 16 with possible routes also following what is now named Stagecoach Road)
- Use of other County and Township roads rights-of-ways
- Follow Zumbro River corridor, in general

Trail Access – Parking Areas, Rest Areas and Interpretive Sites

Mantorville

Riverside Park in Mantorville is a potential location for a trailhead with parking, rest facilities including toilets, and it is adjacent to the Mantorville Welcome Center, which provides walking tour maps of the Historic District. The Historic District of Mantorville includes 25 sites or buildings and the walking tour includes additional points of interest.

Heading out of Mantorville towards Wasioja includes hilly terrain that may prove challenging for developing an accessible trail.

<u>Wasioja</u>

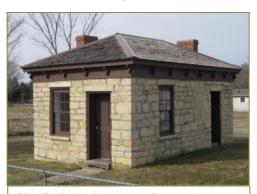
Six sites within Wasioja, including the remains of the Wasioja Seminary, the Civil War Recruiting Station, and school house, are listed on the National Historic Register. Additional historic points of interest include the First Baptist Church, Andrew Doig House, and Wildwood cemetery. These historic sites provide interesting interpretive opportunities that correlate with the stagecoach era and theme of this trail.

Wasioja Seminary

In 1858, Free Will Baptists founded a seminary in Wasioja, called "Minnesota Seminary." Its structure of native limestone was completed in 1860, and the Minnesota Seminary opened in November of that year with an enrollment of more than 300 students. By 1861, the school had been renamed Northwestern College and offered classes on all levels from primary to collegiate. A number of students and faculty enlisted to fight in the Civil War at what was then the law office of Captain James George. Although its enrollment had declined by over half, the school continued to operate. In 1868, the Free Will Baptists ceased their sponsorship and it was reopened as the Groveland Seminary. In 1872, it closed and was reopened in 1875, this time by the Wesleyan Methodist Conference. The school closed for its last time in 1894, and in 1905, a fire destroyed the building, leaving the ruins that stand today.

Civil War Recruiting Station

This building was built in 1855 by Colonel James George, a Mexican War veteran, to serve as his law office and as a bank, the building was the meeting center of the village of Wasioja in the late 1850's. In April, 1861, this building was converted to use as a Civil War recruiting station. Recruits from the Wasioja Station, numbering over 200, formed the nucleus of Company C of the Second Minnesota Volunteer Infantry Regiment. They were sworn in by Colonel James George, who later led them at the battle of Chickamauga, Georgia.



The Civil War Recruiting Station, located in Wasioja, is listed on the National Register of Historic Places.

In the years following the Civil War, this building was used as a jail, office, storeroom, post office and private residence. The Dodge County Historical Society purchased the building in the early 1960's in order to preserve what was by that time the only remaining Civil War recruiting station left in Minnesota. In 1987 the Society restored the building to its original appearance. The recruiting station stands today as a reminder of the sacrifices made by the men of Minnesota who fought and died to preserve the Union.

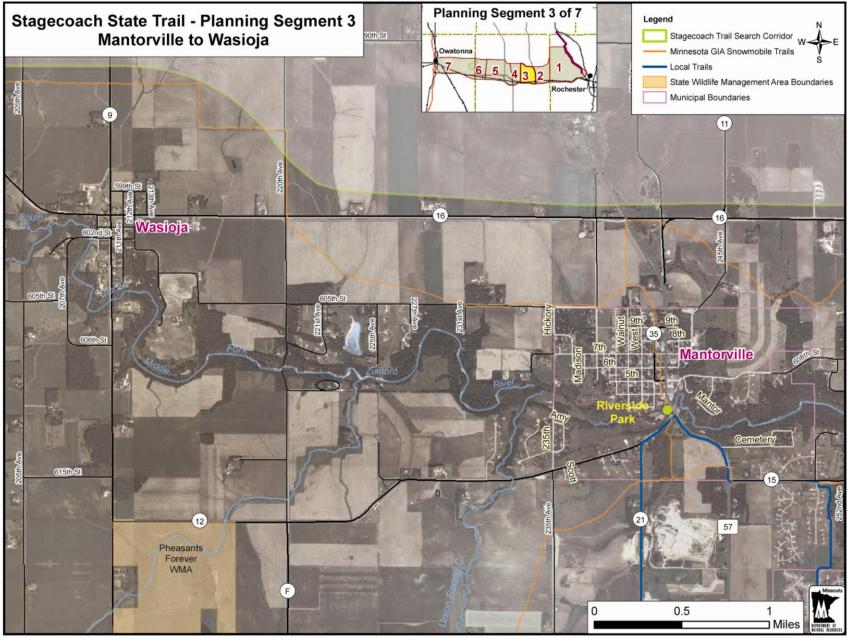


Union Soldier, portrayed by Wasioja native Ryan Peterson, during Wasioja Civil War Days, June 2011. Photo by Curt or Andie Sanders. ©Sanders Portrait Art, Rochester, MN.



Fife and Drum Corps marching to Civil War battle reenactment during Wasioja Civil War Days, June 2011. Photo by Curt or Andie Sanders. ©Sanders Portrait Art, Rochester, MN.

Figure 3.10. Planning Segment 3 Search Corridor: Mantorville to Wasioja.



DNR, PAT June 2011 Stagecoach_Planning_Seg3.mxd

Communities and Connections

Wasioja

In October 1854, the town of Wasioja, named after the Sioux pronunciation of the Zumbro River, was settled. According to *Nicollet's map of 1843*, the river was referred to as Wazi-Oju. This once was a prosperous town that rivaled the economy and population of Mantorville. The grid pattern of streets in the town remains as all other evidence of a successful business district has been destroyed. In 1854, early settlers from New England, New York, and other eastern states founded Wasioja Township. E. P. Waterman, a major figure in the development of Mantorville and Dodge County, built the first house. His law offices were located in Wasioja where he performed marriage ceremonies.

According to the *History of Dodge County*, Wasioja was a young city with a prosperous future. The village of Wasioja was platted in 1856. In 1862, the business district housed law offices, a dozen shops, a hotel, blacksmith shop, gristmill, furniture store and its own newspaper, "the Wasioja Gazette." It also had a station of the Chicago Great Western Railroad and post office from 1856 – 1911. With such economic diversity and opportunity, the town was in close competition with Mantorville for the county seat.

Founded by Free Will Baptists, Wasioja had a strong moral and educational component unlike other rural communities. Early settlers made a point early on to build a strong religious and educational ethic within the hearts and minds of Wasioja citizens. The construction of a Baptist church, schoolhouse and seminary set the standards for the community. With a powerful commitment to these standards, the town was considered a temperance town, fighting for the abolition of alcohol. The first women's crusade on record in the State of Minnesota occurred in Wasioja. A group of female temperance reformers fought against the indulgences of the community.

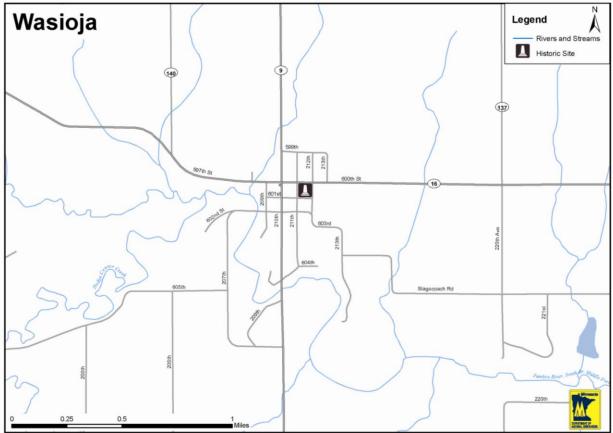


Old Settlers' meeting at the Wasioja Seminary, 1890. Minnesota Historical Society.

The population of Wasioja Township was 963 at the 2000 Census. The 2010 Census population was 914. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

Wasioja Township has officially expressed support for the Stagecoach State Trail to travel through the township.





PAT 2/18/11 P:/TAW/Stagecoach/MAPS/City Maps/StagecoachCities.ms

Segment 4: Wasioja to Dodge Center

Description of the Alignment and Landscape

The landscape is primarily agricultural, intersected with streams and rivers. Dodge Center Creek and South Branch Middle Fork Zumbro River are the most scenic watercourses in this area. Dodge Center Creek has a wooded riparian zone which provides habitat for a variety of wildlife. Potential deer wintering areas have been identified between Mantorville and Wasioja, where these locations typically provide sufficient cover and food sources for less than 50 deer.

An exact alignment has not been determined for this segment. Several options are being considered for this portion of the trail. The City of Dodge Center has expressed interest and support for the Stagecoach State Trail to connect to their community and serve as a destination and trailhead for trail users.

Criteria for Trail Alignment

- Work with willing landowners to acquire right-of-way that showcases features of the natural landscape
- Minimize wetland impacts
- Enhance riparian buffers
- Avoid acquisition of high quality agricultural lands
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey or other resource inventories
- Use existing road right-of-way only where necessary, minimizing user exposure to traffic
- Scenic route, follow Zumbro River valley or Dodge Center Creek
- Preferred connection to Dodge Center
- Preferred connection to Claremont Township and City of Claremont

Trail Alignment Options

- Follow abandoned rail line between Wasioja and Eden and between Eden and Dodge Center (future Iron Horse Trail – a north-south local trail proposal, following an abandoned railroad)
- Country and township roads such as following County Road 16, which was likely part of the Winona St. Peter Stage Road
- Follow as closely as possible South Branch Middle Fork Zumbro River and Dodge Center Creek for a more scenic route
- South along County Road 9 to U.S. Highway 14, then west following adjacent to U.S. Highway 14, north/northwest to Rice Lake State Park

Trail Access – Parking Areas, Rest Areas and Interpretive Sites

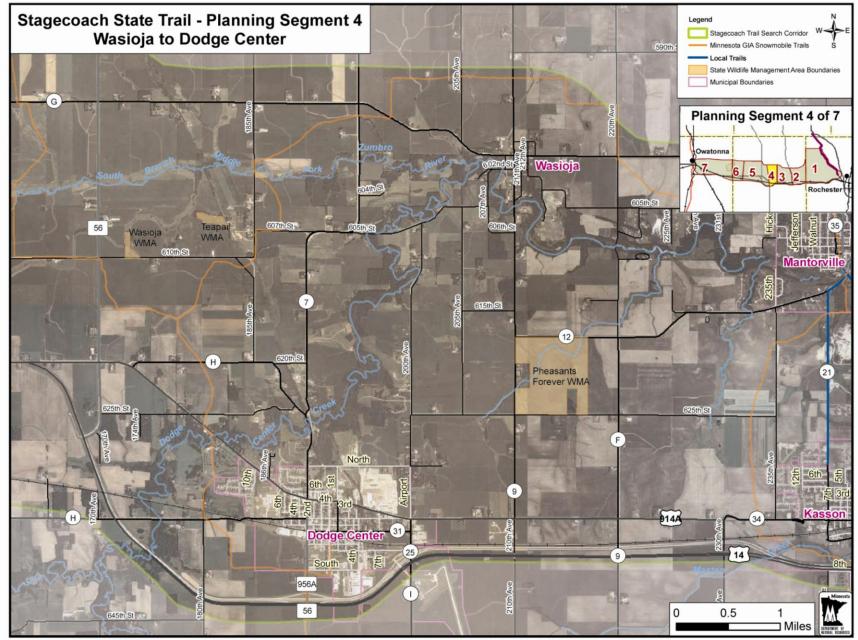
Rest areas consisting of a bench or pull off area of the trail may be located along this segment, as the right-of-way allows and as practical.

North Park in Dodge Center could be considered as a potential trail connection and/or trailhead for the Stagecoach State Trail.



Civil War battle re-enactment during Wasioja Civil War Days, June 2011. Photo by Curt or Andie Sanders. ©Sanders Portrait Art, Rochester, MN.





DNR, PAT June 2011 Stagecoach_planning_Seg4.mxd

Communities and Connections

Dodge Center

Dodge Center was platted in 1869, and incorporated in 1872 when the railroad was built through this area.

Today, the largest employer in Dodge Center is McNeilus, a manufacturer of ready-mixed concrete mixer trucks, garbage trucks, and related apparatus. McNeilus is a division of Oshkosh Truck Corporation.

The City's school district combined with the towns of Claremont and West Concord in 1990 to form Triton Public Schools. Dodge Center is home to Triton Primary and Triton High School, the intermediate school is located in West Concord. Dodge Center also has a Parks Board which manages four parks.

The population of Dodge Center was 2,226 at the 2000 Census. The population at the 2010 Census was 2,670. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2010.)

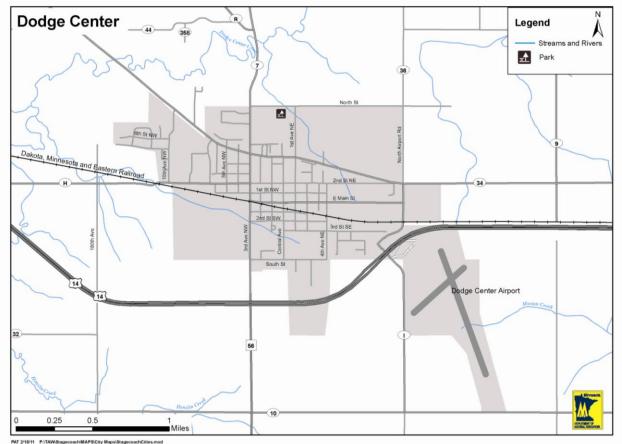


Figure 3.13. City of Dodge Center Map.

Segment 5: Dodge Center to Claremont

Description of the Alignment and Landscape

An exact alignment has not been determined for this segment. Several options are being considered for this portion of the trail.

The landscape between Dodge Center and Claremont consists of primarily agricultural lands with gentle hills, with slightly greater slopes along Dodge Center Creek. Several minor drainages originate within this search area and drain into the South Branch Middle Fork Zumbro River. Deer wintering areas have been identified near both Dodge Center and Claremont, where these locations typically exhibit heavy tree cover or marsh vegetation that provide sufficient cover and food sources for larger numbers of deer (50-100, or more).

The City of Claremont has expressed support for the Stagecoach State Trail and the Planning and Zoning Committee has discussed route options within the city limits. Options include a trail connection to Westside Park.

Criteria for Trail Alignment

- Work with willing landowners to acquire right-of-way that showcases features of the natural landscape
- Minimize wetland impacts
- Avoid acquisition of high quality agricultural lands
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey or other resource inventories
- Enhance riparian buffers
- Use existing road right-of-way only where necessary, minimizing user exposure to traffic

Trail Alignment Options

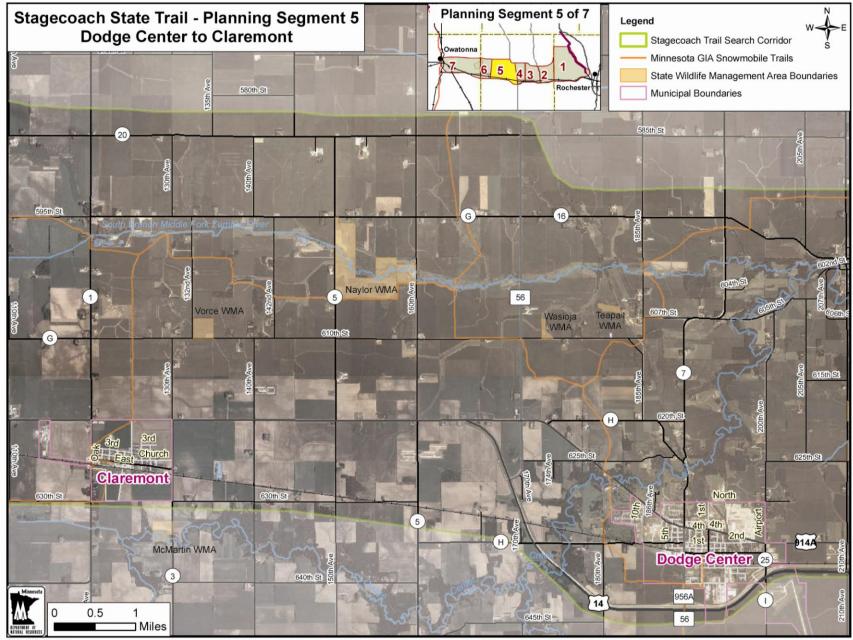
- Follow existing U.S. Hwy 14 Corridor between Dodge Center and Claremont
- Follow northerly edge of proposed U.S. Hwy 14 corridor between Dodge Center and Claremont
- Utilize segments of city, county or township road rights-of-ways, such as following County Road 16, which was likely part of the Winona St. Peter Stage Road
- Connect to local parks

Trail Access – Parking Areas, Rest Areas and Interpretive Sites

Potential trailhead locations include: West Park in Dodge Center, located on 2nd Street NW, which currently has restrooms, playground equipment, picnic pavilion, and parking facilities; and Westside Park in Claremont, located along County Road 3 between Main Street and Oak Street, which currently has restrooms and parking facilities.

Section 3: Trail Alignment and Development

Figure 3.14. Planning Segment 5 Search Corridor: Dodge Center to Claremont.



DNR, PAT June 2011 Stagecoach_planning_Seg5.mxd

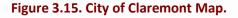
Communities and Connections

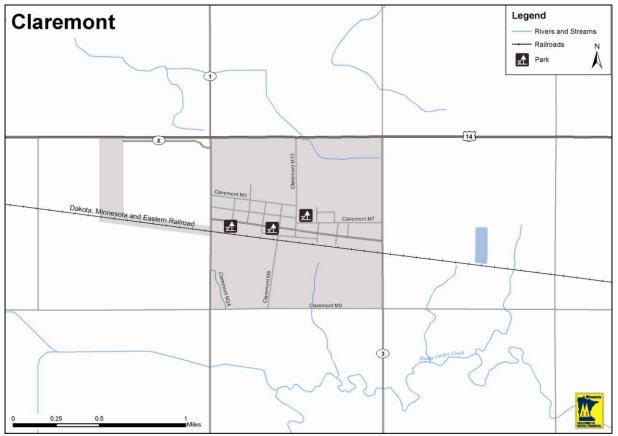
Claremont

The Village of Claremont was incorporated in 1878. The Winona and St. Peter Railway Company is credited with building the town of Claremont and obliterating the hamlet of Rice Lake, on the north shore of Rice Lake.

The population of Claremont was 620 at the 2000 Census. The population is declining with a population estimate of 548 at the 2010 Census. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

The City of Claremont has officially expressed support for the Stagecoach State Trail to travel through the city limits.





PAT 2/17/11 P:\TAW\Stagecoach\MAPS\City Maps\StagecoachCities.mxd

Segment 6: Claremont to Rice Lake State Park

Description of the Alignment and Landscape

The landscape from Claremont to Rice Lake State Park is relatively level to gentle rolling hills, with the slightly more varied terrain closer to Rice Lake State Park. Much of the land is cultivated farmland with some more wooded areas within the park boundary and along the rivers and streams. Rice Lake is the headwaters of the South Branch Middle Fork Zumbro River.

The small village of Rice Lake was a promising young town on the north shore of Rice Lake. The settlement of Rice Lake was platted in 1856, and included a post office, blacksmith shop, tavern, church and a few stores and pioneer houses. Rice Lake was also known as a stagecoach stop between Wasioja and Owatonna, along what was known as Ridge Road, now County Road 20. Then in 1865, the Winona and St. Peter Railroad tracks were laid several miles to the south, bypassing the small village of Rice Lake and subsequently creating the City of Claremont. All that remains of the former village of Rice Lake is the Rice Lake Church.

The Rice Lake Church is currently under efforts of restoration by the non-profit Rice Lake Church Restoration and Preservation Group, which is made up of a group of citizens, most of whom farm nearby and attended the church until it closed in the 1970s. (Kennedy and Westenberg, 2008.)

An exact alignment has not been determined for this segment. However, several alignment options exist.

Criteria for Trail Alignment

- Work with willing landowners to acquire right-of-way that showcases features of the natural landscape
- Minimize wetland impacts
- Enhance riparian buffers
- Avoid acquisition of high quality agricultural lands
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey or other resource inventories
- Use existing road right-of-way only where necessary, minimizing user exposure to traffic
- Additional criteria are provided below for locating the trail within or to Rice Lake State Park

Trail Alignment Options

- Country and township roads
 - County Road 1 to County Road 20 to Rice Lake State Park
 - County Road 1 to 105th Avenue to Rice Lake State Park and historic Rice Lake Church
 - From Wasioja, following County Road 16 and County Road G west to Rice Lake State Park
- Connect to Historic Rice Lake Church site on eastern boundary of State Park

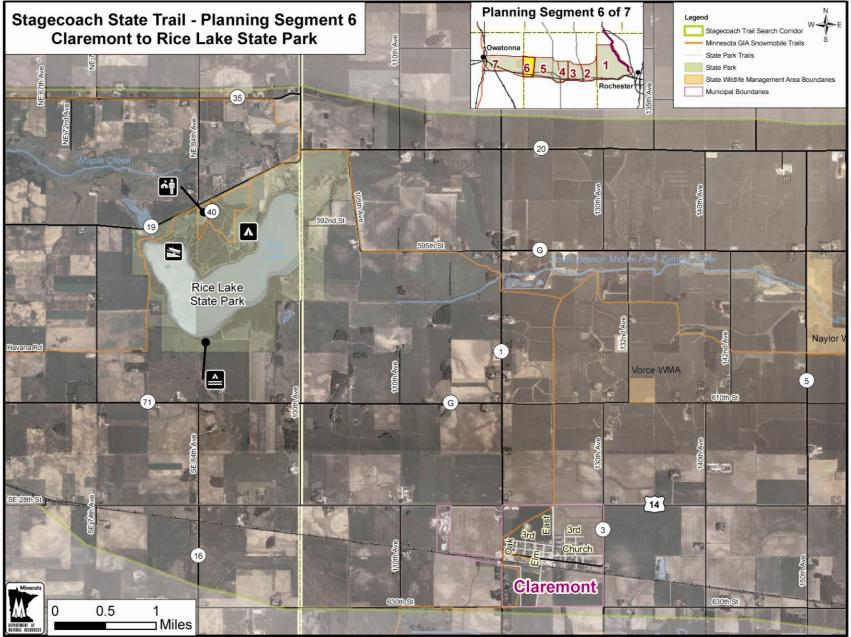
- Follow as closely as possible South Branch Middle Fork Zumbro River most scenic route, to Rice Lake State Park
- Follow as closely as possible historic stagecoach routes (where known and feasible), most of which may be incorporated into the current road system (such as County Road 16)
- Within Rice Lake State Park
 - Entry off of County Road 19, along existing snowmobile trail and former driveway corridor
 - Use main entrance road to vehicle/visitor check in office
 - Use existing park roadways or other existing corridors
 - Consider multiple entry points versus main road only with trail branching within park boundary

Trail Access – Parking Areas, Rest Areas and Interpretive Sites

A trailhead is proposed to be located in Rice Lake State Park. Currently, the state park provides a number of amenities that can jointly be used to serve trail users. Some modifications and improvements may be necessary to accommodate the increased use. Parking, restrooms, benches, drinking water, and picnic tables are currently available. The park also offers camping facilities.

Interpretive sites include Historic Rice Lake Church, its cemetery, and historical and cultural elements identified within the state park, as described below.

Figure 3.16. Planning Segment 6 Search Corridor: Claremont to Rice Lake State Park.



DNR, PAT June 2011 Stagecoach_planning_Seg6.mxd

Communities and Connections

Rice Lake State Park

Park Highlights

Rice Lake State Park is open for camping and day-use activities year-round. Currently, the park is 1,071 acres in size and includes a campground, group campground, public water access, hiking, snowmobile and cross country ski trails. In 2010, it is estimated that the park had over 32,800 annual visitors, with over 5,000 overnight (camping) visitors.



History

American Indians established camp sites here for food gathering, especially harvesting wild rice, which grew here and gave the lake its name. Well traveled trails to and from the lake were evident and one in particular was mentioned by early white settlers as running southeast from Rice Lake, perhaps to a wooded area on another branch of the Zumbro River.

Rice Lake is the headwater source for the South Branch Middle Fork Zumbro River. The lake was first dammed to provide energy for the water-powered mill located further to the east at Wasioja. Occasionally, Rice Lake became depleted, requiring the mill to shut down.

Along the northern boundary of the park, a stagecoach route followed "Ridge Road" in the mid-1800s where the promising village of Rice Lake was located. Today, all that remains of this village is the Rice Lake Church, built in 1857, located on the northern boundary of the park, along Dodge County Highway 20.

Role of the Park

The park may serve as a trailhead for the Stagecoach State Trail. The Stagecoach State Trail may simply connect to the existing entrance road, or it may traverse the park. Once inside the park, the trail may continue on as the Stagecoach State Trail, or it could create a connection to any new or existing trails within the park boundary. Several scenarios are being considered as viable options.

Criteria for Trail Location within Rice Lake State Park

The following objectives were identified to guide the location of the trail alignment through the state park:

- Provide a paved trail corridor within the park
- Use existing corridors where possible
- Connect to Rice Lake State Park, including historic church site at east boundary
- Provide parking for trail users
- Provide a rest area for trail users
- Provide trail and park orientation information
- Provide a trail connection to existing facilities campground, picnic areas, Rice Lake boat access, visitor center, etc
- Protect archaeological resources in the park
- Avoid segmenting natural plant communities

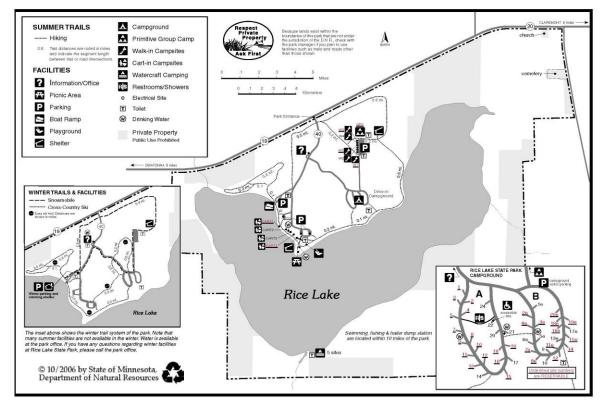


Figure 3.17. Rice Lake State Park Map.

Route Options within Rice Lake State Park

- Develop a trail entrance to the park off of County Road 19, west of the historic church site, entering the park along the existing snowmobile trail corridor, which was once a former driveway before becoming part of the park. The trail could then branch off to the west using an existing hiking trail corridor, and/or head south further into the park, passing by the group campsite and toward the drive-in campground area and park road. The trail could also follow the existing roads in the park to the main entrance road.
- Add the trail along the main entrance road. This option is suitable to being able to keep track of visitors and keeping one entry and exit point for all visitors. Bike trails could then be developed within the park using existing corridors or creating new trails, if desired.
- Utilize an existing corridor west of the main entrance road, which was formerly a driveway and now serves as a snowmobile trail. The trail could then branch off to the south or east to connect with the main entrance road and other roads or trails within the park boundary.

Whichever option succeeds or combination thereof, minor improvements to the park may be needed. Existing facilities are expected to be able to accommodate the new use at the park. However, picnic or rest facilities may become more in demand.

The Stagecoach State Trail is not addressed in the existing Rice Lake State Park Master Plan. Before a specific trail alignment to or through the park can be developed, the state park master plan must be amended or updated to include state trail features and facilities.

Segment 7: Rice Lake State Park to Owatonna

Description of the Alignment and Landscape

An exact alignment has not been determined for this segment. Several options are being considered for routing the trail. It is most ideal to find a scenic route that provides trail users an enjoyable experience that exhibits great views of the rolling landscape and unique mixture resources in the area.

An exact alignment has not been determined for this segment. However, several alignment options exist.

Criteria for Trail Alignment

- Work with willing landowners to acquire right-of-way that showcases features of the landscape
- Avoid acquisition of high quality agricultural lands
- Avoid negative impacts on rare, endangered, or threatened species, and avoid fragmentation or disturbance of significant native plant communities identified by the County Biological Survey
- Use existing road right-of-way where practical or necessary, minimizing user exposure to traffic
- Trailhead in State Park location, use of existing facilities
- Locate trail corridor along a scenic route
- Connect to Owatonna local trails, parks and other recreational facilities
- Connect to authorized Prairie Wildflower State Trail (Owatonna)
- Minimize wetland impacts
- Enhance riparian buffers

Trail Alignment Options

- Follow County Road 19/Rose Street, toward Owatonna (which was likely the location of the Winona St. Peter Stage Road around 1856)
- Follow County Road 35/Dane Road, to Owatonna
- Scenic routes may generally follow or provide views of the Maple Creek corridor from Rice Lake to Owatonna
- Connect to local Owatonna trail (Buxton Trail System) on north side of the city, near or at Kriesel Park

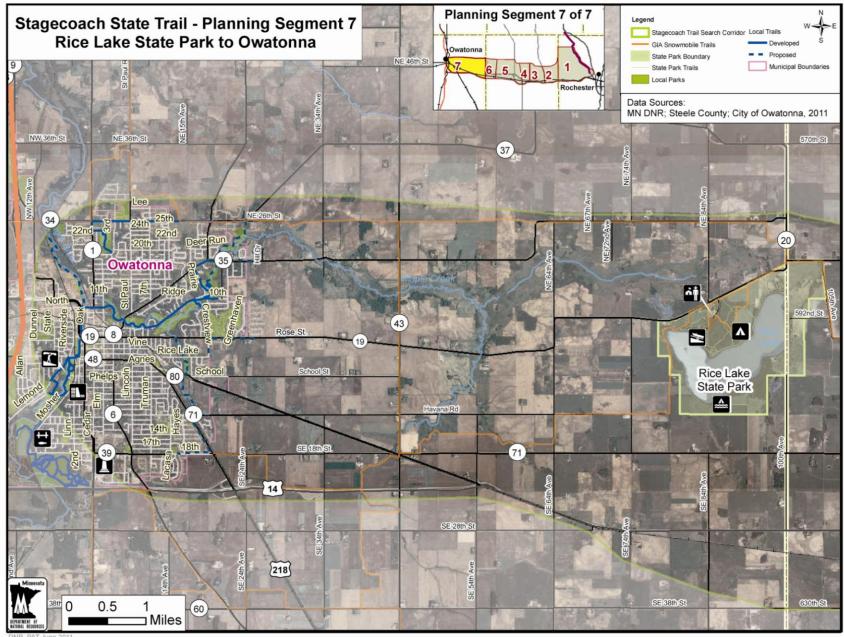
Trail Access – Parking Areas, Rest Areas and Interpretive Sites

Owatonna has an extensive network of local parks and recreational multi-use trails located throughout the city limits. Connecting the Stagecoach State Trail to one of the existing local trails, and thus linking into the expansive park and trail system of Owatonna, would provide for a unique and meaningful experience for all trail users.

One option would be to connect the Stagecoach State Trail to the Buxton Trail along Dane Road, before the trail heads north into Kriesel's Woods Park or south into Mineral Springs Park, where then the trail expands and continues to travel throughout the city. Mineral Springs Park is also a potential interpretive site as it is important to the cultural history of Owatonna.

Another option would be for the trail to connect at the more northern trail section, planned to be constructed in 2009, located along County Road 8/26th Street. This trail also is planned to connect to the Buxton Trail as it heads into Kriesel Park, Kriesel's Woods Park, and on to other trails. Multiple interpretive opportunities for interpretive sites and environmental education exist in these local parks.





Stagecoach_planning_Seg7.mxd

Communities and Connections

Owatonna

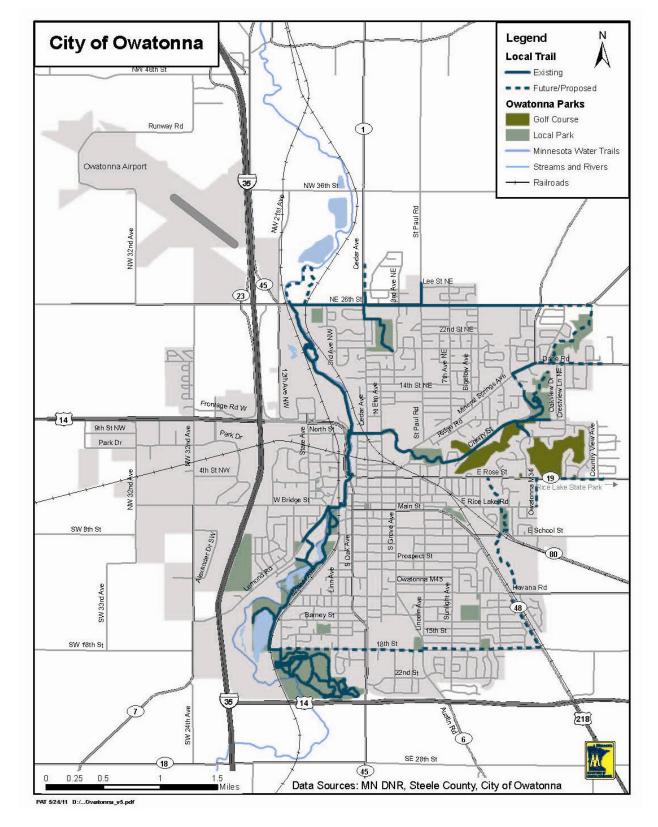
Prior to settlement by Europeans, Native Americans camped on the banks of the river they called "Ouitunya," which means "straight," its namesake today. Shortly after the 1851 Treaties of Traverse des Sioux and Mendota, where the Dakota Indians relinquished their tribal lands in this region to the United States Government, the first European settlers arrived. The first government surveys of the area that is now Steele County were conducted in 1854. Owatonna was platted in 1855, consisting of 120 acres into 21 blocks, including a town square and a station of the Chicago and North Western Railway. Owatonna was incorporated as a town in 1858, and then as a city in 1865.

The population of Owatonna was 22,434 at the 2000 Census. The population at the 2010 Census was 25,599. (U.S. Census Bureau, Census 2000; and MN Department of Administration, Office of Geographic and Demographic Analysis, 2011.)

Owatonna is an economic center of southern Minnesota, with diverse industries. The largest employer is Federated Insurance, with over 1,500 employees, followed by Viracon, with just over 1,400 employees, both of which have headquarters based in Owatonna.

Trail Alignment

Potential alignments for bringing the Stagecoach State Trail into the City of Owatonna include making a connection to one of the existing or future local bicycle trails that will also lead users into the local parks system. The Stagecoach State Trail will provide a recreational connection between Owatonna and Rice Lake State Park.





Section 4: Trail Management

Projected Trail Use

The Stagecoach State Trail will provide several important links to other trails and trail systems in the region. On the eastern end of the trail, it will link to the Douglas State Trail, which also connects to the City of Rochester trail system and further to the east, the Blufflands State Trail System of Southeast Minnesota. As the Stagecoach State Trail extends to the west, it will connect to local trails established in Byron, Mantorville to Kasson, Rice Lake State Park and the City of Owatonna Parks and Trails system. The Prairie Wildflower State Trail is authorized to travel through Owatonna, but it is not yet developed or in active planning stages at the time of this writing.

Data from surveys conducted on the Douglas State Trail can be used to provide estimates of the volume of trail users expected on the Stagecoach State Trail. The use patterns of these two trails is expected to be similar due to the similarities in location and surrounding population. The Douglas State Trail is considered primarily as a local use market, where approximately 80% of its users are located within 10 miles of the trail. Only 8% of users came from 50-miles or greater distance from the trail.

In July 2000, Minnesota DNR published the State Trail Use Survey which includes data and analysis of the Douglas State Trail from 1997. A second survey was conducted during the summer of 2009. Data gathered from the summers of 1997 and 2009 is reported in "user hours." One user hour is defined as one person using the trail for one hour. Two people using the trail for one hour is reported as two user hours. User hours are an effective way to combine and compare trail activities that have varied outing lengths.

Douglas State Trail	1997 Total summer	2009 Total summer	Percent change,
	user hours	user hours	1997 to 2009
Total User Hours	45,810	64,869	42% **
By Day of Week			
Weekends/Holidays	20,876	28,119	35% **
Weekdays	24,934	36,750	47% **
By Trail Segment			
Rochester to Douglas	22,905	36,169	58% **
Douglas to Pine Island	22,906	28,700	25%
By Trail Activity			
Biking	27,642	35,558	29% **
Skating	2,731	2,610	-4%
Walking	11,746	18,105	54% **
Running	2,709	8,281	206% **
Other, (including horse)	983	316	-68%
Walk + Run	14,454	26,386	83% **

Figure 4.1. Douglas State Trail - Change in Summer Use, 1997 to 2009*

* Summer extends from the Saturday of Memorial Day weekend to Labor Day, and the length of summer varies from year to year. User hours in 1997 are expanded to the length of summer in 2009.

** Change is statistically significant at the .05 probability level.

The intensity of summer use on the Douglas State Trail is 3,433 seasonal hours per trail mile, which is about average when compared to the other state trails.

While it is difficult to predict future trail use, it is anticipated that there would be a high percentage of local use on the Stagecoach State Trail, similar to that found on the Douglas State Trail. It could also be expected that trail users from the local trail systems such as Rochester, Mantorville, Byron and Owatonna, would continue their trail activities by also utilizing portions of the Stagecoach State Trail. This would be economically valuable for all the communities along the Stagecoach State Trail as users typically spend money in the communities they pass through, or use them as a destinations.

Trail Maintenance

Maintenance of the Stagecoach State Trail is critical to provide and sustain the experience trail users appreciate. Maintenance activities are numerous and diverse, as the following list illustrates.

- Monitoring trail conditions, which includes scheduling and documentation of inspections; monitoring the condition of railings, bridges, trail surfaces, and signage; hazard tree inspection; and removal of debris such as downed trees
- Scheduling of maintenance tasks
- Mowing of vegetation: shoulders, rest areas, parking lots
- Mowing and brushing farm crossings
- Cleaning out ditches and culverts, replacing failing culverts
- Vegetation management restoration/enhancement
- Controlling noxious weeds
- Tree and shrub pruning
- Winter grooming and plowing
- Maintaining bridge decking and railings
- Trail repair fixing washouts and controlling erosion
- Trail drainage control
- Trail surface maintenance
- Repair of animal damage to trail or facilities
- Checking and repairing fence lines, gates and cattle crossings
- Trash removal
- Maintaining equipment
- Painting posts and picnic tables
- Maintaining boundary signs and working to resolve encroachment issues
- Coordination of volunteer efforts
- Training and supervision of employees, Conservation Corps Minnesota, or Sentence-to-Service crews doing maintenance work
- Any future sections of the trail developed with asphalt will require sweeping

Interrelationship of the Douglas State Trail

The Stagecoach State Trail will connect to the Douglas State Trail in Olmsted County. The Douglas State Trail is currently developed for 23-miles, from Pine Island to the northwest Rochester area. The authorizing legislation for the Stagecoach State Trail specifies that the "...trail shall originate at the Douglas Trail near the city of Rochester in Olmsted County..." (MS 85.015, Subd 20). Several potential connection points along the Douglas Trail from Douglas to Rochester will be examined, including two existing trailhead locations.

The Douglas State Trail southern terminus is located within Rochester, in the northwestern area of the city limits. The existing trailhead at this location has restroom and parking facilities. It is also near a local trail where additional trail connections could be achieved. Because of its location, it would require coordination and partnership with the City of Rochester for shared use of an existing local trail corridor that is developed along Valleyhigh Road (CR 4) where the Stagecoach State Trail could then continue to head west toward the Olmsted - Dodge County border.

Another location for the Stagecoach State Trail to connect with the Douglas State Trail could be at the Douglas trailhead, where a gravel parking lot and a portable restroom are available. This option is favored by the equestrian user groups as the Douglas State Trail accommodates such use and equestrian trail users have expressed interest in additional opportunities in this area.

New locations for trailheads may also be considered where the trail crosses county or township roads (Main Street NW, or 65th Avenue NW) and where the Stagecoach State Trail could run parallel to the road and head west toward Byron, Oxbow Park, other possible destinations toward Mantorville.

Information and Education

Trail User Orientation

A mile marker system should be established along the trail. Mile markers will serve to orient trail users to their location as well as assist emergency responders in locating trail users in need of medical assistance.

Information boards at parking areas and in communities should be installed to provide an overview of the trail and to orient trail users. The DNR is developing standardized "You Are Here" signs for each of the state trails. A sample from the Sakatah Singing Hills State Trail can be seen below.

A standard kiosk design should be used in host communities and at other locations where wayside exhibits are proposed. The design should reflect the stagecoach theme for which the trail is named.



Examples of trail orientation signs used for state trails.

Trail Rules and Regulations

Trail courtesy and safety display boards that are aimed at educating trail users about appropriate behavior, promoting safe trail use and protecting the quality of the trail environment should be posted at information kiosks along the trail. This type of information is currently being incorporated into the designed "You Are Here" signs to minimize the clutter of regulatory signs that can occur at trailheads.

Trail users are legally responsible for obeying the rules and regulations provided in Minnesota Rules, State Recreational Trails, 6100.3000 through 6100.4300. Rules can be obtained from the internet at <u>www.leg.state.mn.us/leg/statutes.asp</u>.

Interpretation of Natural and Historical Resources

Interpretive signs and displays should be placed along the trail to provide information about natural resources of significance and interest (Zumbro River valley, Oak Savanna landscape, lakes, wetlands, forests and prairie vegetation) and at places that tell the history of the region. A stagecoach-based theme will be emphasized where practical.

Environmental Education

The trail has great potential for environmental education. The Dodge County Trail Association, local citizens and the DNR will work together to advocate appropriate environmental education programs along the trail.

Trailside Art

The use of art along the trail can be an effective way to provide interpretive information about the resources and the history of the trail. Practical and functional objects such as benches, gateways, bridges, water fountains and tables can be designed in such a manner that they are aesthetically

attractive and at the same time provide information about the area through design and use of materials. Sculpture for purely aesthetic purposes can also fulfill this purpose.

The Dodge County Trails Association in conjunction with the Mantorville Art Guild are seeking and exploring opportunities for displaying "bike art" along the Stagecoach State Trail within the City of Mantorville. It is envisioned that some of the works of art would emphasize bicycling or other trail uses supported by the trail, or works of art could also convey the local connection to the stagecoach era or other cultural interests. Some of the works could also be memorials to citizens that had a great influence in the process and completion of the trail.

Enforcement



Example of trailside art: a community garden located along Gateway State Trail.

Enforcement activities are a vital aspect of maintaining a safe and secure trail

environment. Enforcement of state trail rules and regulations, information and education, trail design, trail maintenance and the mix of trail uses are all factors that contribute to the maintenance of a safe, secure trail environment. DNR has the primary responsibility for law enforcement on DNR owned and operated recreation areas. Enforcement assistance will also be sought from the local Police Departments and the County Sheriffs as necessary.

Funding for law enforcement on state trails has not kept pace with the need created by new trail development. As miles are added to the state trail system, funds needed for additional law enforcement have not been appropriated. Sufficient law enforcement promotes public safety and natural resource enhancement.

Adjacent Landowners

A goal critical to the successful development of this trail is to work with landowners in the search corridor and potential adjacent landowners to address their concerns regarding this trail. Primary concerns of landowners to proposed trails are trespass, vandalism, litter, crime, and loss of privacy. Liability is also an often voiced concern. These concerns were voiced by landowners within the Stagecoach State Trail search corridor during publicly held open house meetings and public comment periods during the development of this master plan.

Several studies have shown that trespass, vandalism, litter, crime and invasion of privacy have not been problems experienced after trail development. "A 1988 survey of greenways in several states has found that such parks typically have not experienced serious problems regarding vandalism, crime, trespass, or invasion of privacy. Prior to developing park facilities, these concerns were strongly voiced in opposition of proposed trails. After park development, however, it was found that fears did not materialize. Concerns expressed by the neighbors opposed have not proven to be a post-development problem in any of the parks surveyed." (Oregon Department of Transportation, Parks and Recreation Division, 1988.) According to separate surveys conducted on the Root River and Douglas State Trails taken before and after trail construction, perception of potential problems by adjacent residents exceeded actual problems by wide margins.

DNR will work with adjacent landowners to address their issues and concerns. Strategies that can be used to address concerns include trail design details, screening (fencing and vegetation), enforcement of state trail rules and regulations, and trail user education. For example, the placement of the trail treadway within the right-of-way, development of cattle passes, and grading are strategies that have been used to address landowner concerns. Fencing and vegetative screening can be used to address privacy issues. Citations are issued when state trail or other applicable rules and regulations are violated, such as when unauthorized use of the trail occurs. Trail user education that emphasizes respecting adjacent landowner's property is also important.

DNR strives to be a good neighbor and resolve concerns promptly. DNR staff managing the trail will work with adjoining landowners to prevent or correct any issues.

Trail Management Recommendations

Maintenance

• DNR, Division of Parks and Trails should pursue the development of cooperative agreements with local cities to maintain the trail within or adjacent to the city, where feasible and desired.

Interrelationship of the Douglas State Trail

- Consider using an existing trailhead facility along the Douglas State Trail to be improved as a dual trailhead facility that will accommodate both Douglas and Stagecoach State Trail users.
- Ensure that adequate parking is provided at dual trailheads. Dual trailhead facilities should consider also providing restrooms and drinking water, if not already available.
- Where a trailhead is utilized for two state trails, the DNR will provide appropriate maps and information that clearly lets trail users know that there are two trails intersecting at or near the trailhead. Additional techniques and signage should be considered at trail intersections so trail users are aware of the different trails and potentially different trail uses allowed for each trail.

Information and Education

- Develop a kiosk design that reflects the historical stagecoach theme that can be used in the communities along the trail. Use of the same design helps build an identity for the trail and alerts users to trail information.
- Community services information, trail orientation, trail rules and trail courtesy information should be developed and installed on kiosks at the same time the trail is developed.
- Interpret the natural, historical and cultural features located or seen along the trail. In particular, Blanding's and wood turtle habitats; native plant communities; and historical points of interest.
- Interpret the natural communities in relation to the Oak Savanna and Rochester Plateau Subsection landscapes, as appropriate. Consult the associated DNR Landscape Teams or staff for assistance.

Trailside Art

• The Division of Parks and Trails, interested local citizens and community art groups should work cooperatively to develop trailside art in the right-of-way, at appropriate locations.

Enforcement

- Provide an adequate level of enforcement via a multifaceted approach to help maintain a safe and secure trail environment, to encourage trail users to understand and obey trail rules, and respect other trail users and adjoining properties.
- Develop on-site information that targets important trail courtesies (etiquette) and rules necessary for a safe and enjoyable experience, specific to uses of a particular segment and problems and conflicts occurring there.
- To the extent possible, keep designated or authorized trail uses consistent throughout the trail. Where changes in uses occur, provide clear and accurate information (including signage) at trail kiosks and along the trail.
- Increase visibility of DNR staff during peak use times for an enforcement effect.
- The Division of Parks and Trails will include the cost of enforcement when providing information about the overall cost of the trail to legislators, trail advocates, and local government officials.

Section 5: Natural Resources

Trail Alignment Search

It is essential that the trail be located, developed, and maintained in a way that does not detract from the landscape and the natural and cultural resources it has to offer. Both site and landscape level impacts of the trail will be assessed when a specific alignment is determined. It is a goal to minimally impact existing natural and cultural resources. Preliminary groundwork, pertaining to inventory of natural and cultural resources, has been completed to assess any potential impacts the trail may have. These impacts, both positive and negative, need to be evaluated on both a site and landscape level so that the negative impacts are minimized and the positive impacts are accentuated. The trail will most likely be located in existing, disturbed corridors.

The trail will attract additional people to experience the area as well as provide a recreational need for the residents of the area. Trail users will come to the trail to enjoy the landscape and the resources it has to offer. By providing people with access and opportunities for recreation, as well as education about the landscape they will be experiencing, trail users will develop an appreciation for the resources, which will translate into stewardship and appreciation for the landscape.

Ecological Regions

Three of North America's ecological regions, or biomes, representing the major climate zones converge in Minnesota: prairie, deciduous forest and coniferous forest. The presence of three biomes in one non-mountainous state is unusual, and accounts for the diversity of ecological communities in Minnesota.

The Stagecoach State Trail proposed corridor is located at the intersection of two of these biomes as the eastern deciduous forest gives way to the open prairies to the west. West of Mantorville, the corridor lies within the Eastern Iowa and Minnesota Drift Plains of the Western Corn Belt Plains Eco-region. This eco-region contains some of the most productive areas in the world for corn and soybean production. The eastern section is within the Rochester/Paleozoic Plateau of the Driftless Area Eco-region. The land is now used mostly for row crop agriculture and to produce forage for livestock. The western sections are characterized by level to gently rolling glaciated till plains while the Rochester Plateau is less influenced by recent glaciations and characterized by rolling older loess covered plains capping limestone and sandstone bed rock with more deeply dissected river valleys. This difference in the glacial history is reflected in the biological heritage of the area.

Ecological Classification System

Minnesota also uses an Ecological Classification System (ECS) that is part of a nationwide mapping initiative developed to improve our ability to manage all natural resources on a sustainable basis. Both systems integrate climatic, geologic, hydrologic and topographic, soil and vegetation data.

The corridor has a rich ecological legacy with differences recognized by the ECS. The trail corridor falls within two ecological sections the Paleozoic Plateau and the Minnesota and Northeast Iowa Moraines. These sections are further divided into subsections the Rochester Plateau to the east forms the western extent of the Paleozoic Plateau and the Oak Savanna to the west is located at the southern Minnesota extent of Minnesota and Northeast Iowa Moraines. These subsections generally correspond with the level IV eco-regions described above. See Figure 5.1.

The **Rochester Plateau Subsection** is an area of level to rolling terrain dissected by rivers and streams. Before conversion to agriculture, the predominant vegetation was tallgrass prairie and bur oak savanna. The lakes in this portion of the corridor are river reservoirs.

The **Oak Savanna Subsection** was historically an area also dominated by tallgrass prairie, brush prairie and bur oak savannas with occasional forests located along rivers and near lakes or large marshes where water or other natural breaks provided some protection from frequent fires. Drought also shaped the prairie landscape. The typical topography of this subsection is gently rolling. Complexes of shallow lakes and other wetlands were common in the Oak Savanna subsection. Although the corridor contains few natural lakes, wet prairies, swales, and fens were common features.

Presently, most of the area is cultivated within these two subsections. Agriculture is the major force shaping the ecology of the landscape and trail corridor. Because the proposed corridor does cross ecologically distinct areas the ECS will help provide guidance for development and maintenance of native plant and animal communities at the landscape level.

The above descriptions are from the MN DNR, Division of Ecological Services, Ecological Classification System website, <u>http://www.dnr.state.mn.us/ecs/index.html</u>.

Vegetation

F.J. Marschner, a researcher with the USDA, compiled a map in 1929-1930 titled, "The Original Vegetation of Minnesota" based on records from the US General Land Office Survey Notes (Coffin, 1988). Marschner based his compilations on plat maps and field notes of General Land Office surveyors who marked the corners of sections and quarter sections prior to initial public land offerings (Cunfer and Guse, 2001).

Pre-settlement Vegetation

Pre-settlement vegetation in the vicinity of the search corridor, based on Marschner's *Original Vegetation of Minnesota* map, consisted of the following types: aspen-oak land, big woods-hardwoods (oak, maple, basswood, hickory), brush prairie, lakes (open water – Rice Lake), oak openings and barrens, prairie, river bottom forests, and wet prairie.

- Aspen-Oak Land consisted of young, dense stands of quaking aspen and bigtooth aspen, northern pin oak, northern red oak, bur oak, elms, ash and basswood.
- **Big Woods-Hardwoods** (oak, maple, basswood, hickory) mapping unit was believed to be a sugar maple-basswood forest with a diverse shrub and ground layer. It consisted of bur oak, white oak, red oak, elm, basswood, ash, maple, hombeam, aspen, birch, hickory, butternut and black walnut.
- **Brush Prairie** mapping unit includes grass and brush of oak and aspen, dominated by bur oak, northern pin oak and white oak with the shrub layer patchy to dense with scattered prairie openings.
- Lakes open water (Rice Lake).
- **Oak Openings and Barrens** were usually a buffer between prairies and big woods. This mapping unit was characterized by oak groves or single bur oak mixed with tallgrass prairie.

- **Prairie** Typical vegetation found in the prairie mapping unit was big bluestem, little bluestem, Indian grass, prairie clover, goldenrods, and asters. Roses and wolfberry were the typical shrubs found in this unit.
- The **River Bottom Forest** mapping unit was used by Marschner to describe nearly all major floodplain and valley-bottom forests. The typical vegetation included elm, ash, cottonwood, boxelder, basswood, willow, aspen, hackberry and oaks.
- Wet Prairie consisted of bluejoint grass, big bluestem, cattails, bulrushes, many sedges, wild rice, willows, speckled alder and bog birch.

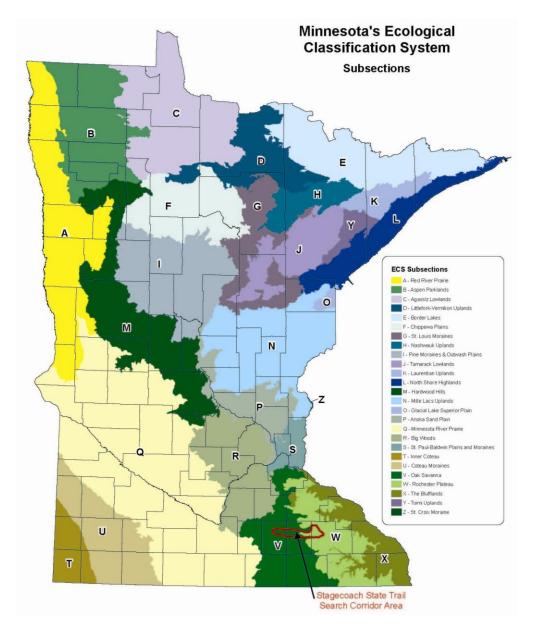


Figure 5.1. Minnesota's Ecological Classification System Subsection Map.

Present Day Vegetation

Vegetation along the proposed trail corridor is dominated by row crops, primarily corn and soybeans with some forage crops, small grains, pastures and conservation lands. Natural vegetation is a mixture of deciduous forest, wetland, brushland and grassland. Most natural vegetation is located along rivers and/or odd areas that are too steep or wet to use reliably for crop production. Natural habitats are highly fragmented by farmland, urban areas and other features such as roads. The Minnesota County Biological Survey has been completed for Olmsted County, and is in progress for Dodge and Steele Counties. (MCBS Map, MDNR, 1997).

The Natural Heritage Information System (NHIS) provides information on Minnesota's rare plants, animals, native plant communities, and other rare features. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. Its purpose is to foster better understanding and conservation of these features.

The NHIS database was used to obtain a list of species that are threatened or endangered and are reported to be within the vicinity of the trail search corridor. An inventory and evaluation of threatened or endangered vegetation that may be found in the vicinity of proposed trail alignments would be completed during planning and design of specific segments. Appendix 1 contains data from the Natural Heritage Information System database.

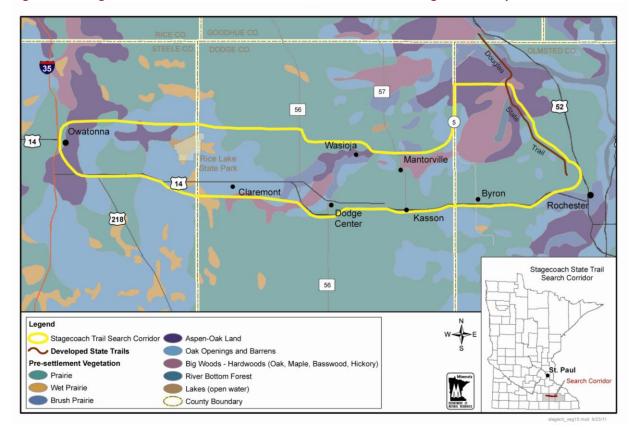


Figure 5.2. Stagecoach State Trail Search Corridor, Pre-Settlement Vegetation Map.

Water Resources

The Stagecoach State Trail search corridor is primarily within the Zumbro River Watershed. About two and a half miles west of Steele County's eastern border, the trail passes into the Cannon River Watershed. The most significant water body near the trail corridor in the Zumbro River Watershed is the South Branch Middle Fork of the Zumbro River, which drains 277,816 acres of land. The Straight River of the Cannon River Watershed passes near the western trailhead in the City of Owatonna.

Tributaries to the South Fork Middle Branch of the Zumbro River are first order, warmwater feeder streams surrounded by agricultural landscape. The upper reaches of the Zumbro and its tributaries have been channelized or tiled and otherwise affected by agricultural drainage. Flows in general have been rising over the last one hundred years to almost twice the original flow in the early years of the last century. Dodge Center Creek, a tributary of the South Branch of the Middle Fork of the Zumbro River in Dodge County, is also within the search corridor. Maple Creek in Steele County runs within the trail search corridor between Rice Lake and the City of Owatonna. Henslin, Masten, and Thompkins Creeks also lie within close proximity to potential routes for the trail corridor. Some wetlands are located near the western edge of the trail search corridor in Steele County. Stream habitats are also fragmented by dams and crossings that produce barriers to the movement of fishes and other aquatic wildlife.

Rice Lake, located in Rice Lake State Park, just west of the Dodge/Steele County border, is the only natural lake within the trail search corridor. Rice Lake is a shallow lake that periodically freezes out. The lake has a long history of being an important area for migratory waterfowl and other wildlife dependent on shallow lakes and marshes. The lake was named for wild rice that historically occurred there in abundance. The lake has been impacted by water pollution, drainage and outlet modifications affecting water clarity and aquatic vegetation. In 1984, the lake was designated as a wildlife management lake, providing the Department of Natural Resources greater management flexibility to address these issues. Fisheries potential for Rice Lake is limited by frequent periods of low dissolved oxygen, especially in winter and outlet modifications. Rice Lake's fishery is dominated by fish species tolerant of poor water quality and low dissolved oxygen, such as black bullheads and green sunfish. Recreational fishing, bird watching and hunting and trapping opportunities tend to follow a boom and bust cycle related to the periods of hypoxia and/or poor water quality.

East of Mantorville, the South Branch Middle Fork of the Zumbro River flows through the Rochester Plateau of the Driftless eco-region where the river valley is characteristically deeper with occasional limestone and sandstone bluffs and rocky outcrops. Trees in the river valley are predominantly elm, boxelder, willow, and cottonwood.

West of Mantorville, the South Branch Middle Fork of the Zumbro River courses through the Eastern Minnesota Drift Plains of the Corn Belt Plains eco-region and a much flatter terrain surrounds a much shallower river valley through mostly farmland. The upper reaches have been channelized and riparian lands are cropped up to the riverbanks. Un-channelized portions are flanked with wet meadows and lowland brush giving way to more forested cover near Wasioja.

North of Rice Lake State Park, Maple Creek arises, flowing west to the Straight River through a broad valley dominated by natural vegetation containing a mix of wet meadows, marshes and brushlands with grasslands and small stands of oak and aspen on the uplands. The riparian areas become more forested as Maple Creek enters Owatonna before joining the Straight River. The Straight River flows north to the

Cannon River along a forested moraine dominated by oaks, hickory, basswood, elm and maple trees. The dwarf trout lily is a federally endangered species that is found only along the Cannon, Straight and Zumbro Rivers and their tributaries. This plant is known to grow only in Minnesota. Other rare plants include the glade mallow, prairie bush clover, and kitten-tails.

Water Trails – State Designated Canoe and Boating Routes

The "Canoe and Boating Route" program was established in 1963 by the State Legislature in Minnesota Statutes 85.32. Currently, DNR manages more than 4,400 miles of "water trails" on 32 rivers throughout the state for canoeing and kayaking. A water trail can be found within about an hour or two of most parts of the state. River maps are available on the DNR website or from the DNR Information Center, which describe public access points, campsites, rest areas, navigational features and river miles.

Zumbro River

The Zumbro River is designated a State Canoe and Boating Route. The South Fork Middle Branch Zumbro River flows through Oxbow Park and Mantorville. While this is not the main branch of the Zumbro River, it is scenic and navigable with rest areas and campsites located along this portion of the river as it flows toward Oronoco where it joins the North Branch of the Zumbro River and Zumbro Lake. The Zumbro's original name aptly describes this aspect of the river. The French called it Rivere des Embarras, meaning river of difficulties. The snags, caused by widespread bank erosion, hindered the canoes of the French voyagers engaged in the fur trade. Erosion has also obliterated a small waterfall that was



once located just above the town of Zumbro Falls. At the site of the falls the river now flows rapidly over a sandstone rubble bed.

Limestone and sandstone bluffs watch over the Zumbro River as it winds through southeastern Minnesota to the Mississippi. The Zumbro flows through a deep, narrow valley hemmed in by rocky cliffs for much of its length below the Rochester power dam (river mile 60). Below Theilman to the river's mouth, however, the valley widens considerably and farmland stretches away from the banks.

Woods and marshes along the river offer a gentle contrast to the striking bluffs. Trees in the river valley are predominantly elm, boxelder, willow and cottonwood, with some walnut. Wildlife that can be found along the river includes deer, fox, grouse, bald eagles, and herons. The open marshes provide important habitat for sandhill cranes. The Zumbro is a good fishing river; anglers can take catfish, smallmouth bass, bullheads and suckers.

Straight River

Public access to the Straight River is available in the City of Owatonna near Morehouse Park, providing the opportunity to canoe north 30 miles to Faribault, where it joins the Cannon River. The Straight varies from 30 to 80 feet wide and from 1 to 4 feet deep. Erosion is common along the low grassy banks. Heavy deposits of sediment that build up on the riverbed are swept away during high spring flow. Away from the cities and the small rural communities situated on its banks, the Straight is a narrow, intimate stream. Fields, pastures and farm buildings are screened from the river by a narrow

strip of trees on either bank. Paddlers attempting this route will need skills to negotiate class II and class III rapids.

The trees, predominantly elm, willow, poplar and maple, reach out over the stream to form a leafy canopy. Wildlife along the Straight, typical of southeastern Minnesota, includes deer, rabbits, squirrels and other small mammals. Songbirds and waterfowl are especially plentiful during spring and fall migrations. Fish caught in the river include northern pike, crappies, smallmouth bass and carp.

Impaired Waters

Human practices have greatly increased the amount of runoff into the rivers in the trail corridor over the last century. Historically, most of the water in Minnesota's rivers came from ground water sources, while presently most of the flow is from surface runoff. Both urban and agricultural practices are contributing to environmental issues. Most waterways are affected by nutrient and chemical contaminations, siltation and increased thermal affects, especially in summer. Additionally, the rivers have been physically altered by dams, river crossings, removal of woody debris, channelization and tiling. The contributing watersheds have been extensively modified by wetland drainage and land uses that leave little perennial vegetation intact. Urban areas and roads create large areas impervious to water infiltration. This contributes to highly altered flow regimes, most notably increases in the volume of peak flows and the rapidity at which these flows are reached and recede.

The Minnesota Pollution Control Agency (MPCA) lists impaired waters (available from the MPCA web site: <u>http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/assessment-and-listing/303d-list-of-impaired-waters.html</u>). The list includes several streams within the search corridor. The South Branch Middle Fork Zumbro River is listed as impaired due to turbidity, and Maple Creek is listed as impaired due to fecal coliform. The Straight River is listed as impaired due to fecal coliform and turbidity.

Rice Lake is not presently listed as impaired. There is insufficient data for listing. However, water quality measurements in recent years indicate the lake is eutrophic and has poorer water quality than the majority of reference lakes in the eco-region.

Fisheries

In 2009, a DNR Fisheries staff completed a survey on the South Branch Middle Fork Zumbro River. During the 2009 survey, fish were sampled and physical habitats were qualitatively evaluated in seven stations. This river was previously surveyed in 1982 which allowed evaluation of changes in fish populations and physical habitat over the previous 27 years. An index of biotic integrity (IBI) was used to evaluate the fish community, and a qualitative habitat index was used to evaluate physical habitat in each sampling station.

A total of 31 fish species were collected, none of which were species of special concern in Minnesota. In general, habitat quality and fish populations were poorest in the two upstream sites with ratings improving in the middle stations then declining again downstream. The two stations with the highest fish IBI scores and habitat quality ratings were within Oxbow Park and approximately three miles downstream from the park.

Angling (fishing) activity is highest within Oxbow Park and the City of Mantorville, which provide public access to the river. Angler access to the remainder of the river is limited as most riparian lands are privately owned. Smallmouth bass and redhorse provide the best angling opportunities, particularly within Oxbow Park.

In general, the fish community and physical habitat of the South Branch Middle Fork Zumbro River appears to have improved slightly over the past 27 years. Fish species diversity is in accordance with expectations for a river of this size and condition in Minnesota. Physical habitat is better than anticipated in most of the river, particularly regarding stream bank erosion.

Wildlife

Trail development has potential to affect wildlife, important habitats and wildlife-based recreational opportunities both positively and negatively. There is a clear connection between habitat and quality outdoor recreation. Wildlife considerations need to be addressed on both local and landscape levels. The trail siting and development will need to balance wildlife-related interests that sometimes seem to conflict. Trail development should expand access to wildlife-based recreation and offer opportunities to learn about and enjoy wildlife resources; however, trail and use corridors can also impact wildlife through disturbance, harvest and collecting and habitat changes and fragmentation.

The trail corridor is located in an area with a rich wildlife legacy where the eastern deciduous forests transitioned to tallgrass prairie along the southeastern edge of the prairie pothole region. This legacy has been diminished by the intensity of land use for row crop production and urban/suburban development and transportation corridors. Species that depend on large areas of natural habitats, species with significant potential for conflicts with people or agriculture and species dependent on specific habitats for their life needs are rare or extirpated. Nevertheless, the diversity of habitats within the corridor still provides for a rich diversity of wildlife species. Important bird migration routes intersect the corridor as well. The trail should provide good wildlife viewing opportunities, especially during the spring and late summer – fall migration periods. The Rice Lake State Park Bird Checklist (MN DNR 2002) provides a fairly comprehensive bird list of species found within intensively farmed areas. Examples of common resident mammals include white-tailed deer, raccoon, red fox, opossum, cotton-tailed rabbit, fox and gray squirrels, thirteen-lined ground squirrels, mink, muskrat, white-footed deer mouse, meadow vole and big brown bat. Common herps include garter snake, snapping turtle, painted turtle, American toad, Cope's gray tree frog and western chorus frog.

GAP Analysis/Species of Greatest Conservation Need (SGCN)

The *Minnesota Statewide Conservation Plan* (University of Minnesota, 2008) and Minnesota's *State Wildlife Conservation Plan: Tomorrow's Habitat for the Wild and Rare* (MN DNR 2006) provide analysis and strategies for wildlife conservation and help to identify habitats and species of greatest conservation need. The MCBS, NHIS, GAP analysis and staff expertise will be used to identify potential opportunities and conflicts with trail location and development to better integrate conservation efforts. These plans seek to identify important factors affecting wildlife populations and habitats and to identify strategies to keep common species common as well as address conservation concerns for rare and declining species.

According to *Tomorrow's Habitat for the Wild and Rare – An Action Plan for Minnesota Wildlife* (MN DNR 2006), 94 Species of Greatest Conservation Need (SGCN) are known or predicted to occur within

the Rochester Plateau Subsection and 93 SGCN are known or predicted to occur within the Oak Savanna Subsection. Today, agriculture dominates both of these subsections.

Highlights of the Rochester Plateau Subsection

Significant portions of this subsection have been developed for agriculture, but grasslands, forests and associated streams, rivers and wetlands support a diversity of wildlife.

Wildlife present in this subsection includes a variety of reptiles, such as bull snake, western foxsnake, racer, Blanding's turtle, and wood turtle; birds, including Louisiana waterthrush and prothonotary warbler; fish, including American brook lamprey and suckermouth minnow; and mussels, such as ellipse mussel.

Areas important for SGCN in this subsection include the Richard J. Dorer Memorial Hardwood State Forest, Oronoco Prairie Scientific and Natural Area (SNA), and Rock Dell and Keller State Wildlife Management Areas.

Highlights of the Oak Savanna Subsection

Oak savanna is one of Minnesota's rarest wildlife habitats. The scattered trees in a grassy landscape are home to Swainson's hawks, red-headed woodpeckers, regal fritillaries, bobolinks, sandhill cranes, wood turtles, Blanding's turtles, trumpeter swans, northern harriers, dickcissels, Ozark minnows, and redfin shiners.

Public lands important for SGCN in this subsection include Rice Lake and Nerstrand-Big Woods State Parks; Iron Horse, Hythecker Prairie and Cannon River SNAs; State Wildlife Management Areas (WMAs) and Federal Waterfowl Production Areas (WPAs).

Natural Heritage Information System (NHIS)

The DNR's Natural Heritage Information System provides information on Minnesota's rare plants, animals, native plant communities, and other natural features. This database is continually updated as new information becomes available and it the most complete source of data on Minnesota's rare, endangered, threatened or otherwise significant species, native plant communities, and other natural features. The list of features found within the search corridor for the Stagecoach State Trail is provided in **Appendix A.**

Species of particular interest in the area of the trail alignment search corridor include several SGCN associated with aquatic habitats; species with limited mobility that can be reluctant to cross trails or are especially vulnerable; species with narrow or unique habitat requirements; and species that are sensitive to disturbance at critical phases in their life history. Examples include Blanding's turtles and Wood turtles. Blanding's turtles and Wood turtles are State Threatened species and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. In 1984, Blanding's turtles and Wood turtles were classified as threatened species in Minnesota. Both are known to exist within the identified search corridor for the Stagecoach State Trail. These species can be vulnerable to unauthorized collecting or collisions, habitat fragmentation and habitat alterations that may increase vulnerability to predators, block movements and/or alter critical habitats. The MN DNR has developed specific recommendations for these species included in **Appendix A.4**.

Mussels

DNR conducted a mussel survey along the Zumbro River during 2009. Data collected at eleven sites along the South Branch middle Fork Zumbro River found a total of eight mussel species. Preliminary data also indicates some sites were heavily impacted and found no sign of live mussels interspersed between other sites of high-density live specimens.

Common Name	Scientific Name	State Status		
White Heelsplitter	(L. complanata)			
Cylindrical Paper	(A. ferrussacianus)			
Creeper	(S. undulates)			
Creek Heelsplitter	(L. compressa)	*State Special Concern		
Ellipse	(V. ellipsiformis)	*State Threatened		
Pocketbook	(L. cardium)			
Fat Mucket	(L. siliquoidea)			
Elktoe	(A. marginata)	*State Threatened		

Table 5.1. Live Mussel Specimens Found in 2009 Survey of the South Branch Middle Fork Zumbro River.

Park, Trail and Open Space Resources

Additional recreational opportunities exist within or near the Stagecoach State Trail search corridor, not all of which are mentioned in this section. Although a specific alignment for the Stagecoach State Trail is yet to be determined, there are multiple opportunities to connect the long-distance trail to local parks and trails. These potential connections are identified in the planning segment details in **Section 3**. See each individual city map for the location of local parks, trails or other open spaces.

Geology and Topography

The following descriptions are from the MN DNR, Division of Ecological Services, Ecological Classification System website, <u>http://www.dnr.state.mn.us/ecs/index.html</u>.

Rochester Plateau Subsection

The west boundary consists of a series of Des Moines lobe end moraines (Bemis Moraine). The eastern boundary with The Blufflands subsection is an area of transition between a level to rolling plateau and dissected landscapes. Another gradient is the depth of wind-blown silts (loess), which grades from thinner deposits in this subsection to much thicker deposits in the Blufflands Subsection. The northern boundary coincides with the northern extent of loess deposits. There is also small outwash plain marking the northern boundary.

This unit consists of an old plateau covered by loess (windblown silt) along the eastern border and pre-Wisconsin age glacial till in the central and western parts. The western portion is a gently rolling glacial till plain that is covered by loess in places.

This subsection consists of level to gently rolling older till plains. Topography is controlled by underlying glacial till along the western edge of the subsection, where loess is several feet thick. As glacial drift

thins to the east, topography is largely bedrock controlled. Sinkholes are common in the southwestern portion of the subsection.

Depth of drift over bedrock varies from 100 to 200 feet in the west to 10 to 100 feet in the east. Bedrock exposures are common. In general, sediment thickness varies by landscape position. Large exposures of bedrock occur in the steep ravines. These exposures are primarily Ordovician dolomite, limestone, and sandstone, with Cambrian sandstone, shale, and dolomite exposed along the valley walls of the Mississippi River (Morey 1981, Sims et al. 1966). Devonian dolomite and limestone are more locally exposed along the western edge of the subsection.

Loess thickness is variable; loess deposits range from 30 feet thick on broad ridgetops, to less than a foot on valley walls. The predominant soils are Udalfs, with localized Aquents along the floodplains of major rivers (Cummins and Grigal, 1981). Cambrian siltstones, sandstones, and shales influence soil properties.

Oak Savanna Subsection

The western boundary of this subsection consists of a series of end moraines that disrupted the spread of prairie fires from the west but did not provide sufficient protection for hardwood forests to become established. The subsection is bounded on the east by land dominated by hardwood forest. This boundary coincides with an increase in loess thickness. The northern boundary separates calcareous gray Des Moines lobe glacial till from red Superior lobe glacial till.

Much of this subsection is a rolling plain of loess-mantled ridges over sandstone and carbonate bedrock and till. At the southwestern edge of the subsection are moraine ridges. They are a continuation of those present in the Big Woods subsection, but smaller. As a result, fires from the surrounding prairies to the south, west, and east burned the landscape frequently enough to maintain oak opening rather than forest (Albert, 1993). Presently, most of the subsection is farmed.

Much of the subsection consists of a loess plain over bedrock or till. Also included are Late Wisconsin end moraines, stagnation moraines, and outwash. Topography is gently rolling. The subsection contains few lakes. Stagnation moraines in the southwest are not large, but slopes are often steep.

Glacial drift is generally less than 100 feet thick within the subsection, with maximum drift thickness of about 200 feet (Olsen and Mossler, 1982). Ordovician and Devonian dolomite (some limestone, sandstone and shale) is locally exposed, especially in the dissected stream valleys at the eastern edge of the subsection (Morey, 1976, Olsen and Mossler, 1982).

This subsection is a mosaic of Mollisols and Alfisols. Alfisols correlate with savanna and forest vegetation, and Mollisols correlate with either upland prairie on relatively flat ridgetops or wetland prairies in broad depressions. Common soils include Aquolls (wet soils developed under prairie vegetation), Udolls (well drained soils developed under prairie vegetation), Udolls (well drained soils developed under prairie vegetation), Udalfs (well drained soils developed under forest vegetation), and Aqualfs (wet soils developed under forest vegetation) (Cummins and Grigal, 1981).

Climate

The climate of the area is cool, subhumid, and continental. Large variations in temperature, from summer to winter, describe this climate. Individual variations may arise across the landscape due to differences in vegetation, soil, urbanization and topography.

Precipitation in the area varies from month to month, as would be expected for this climate. The recordings from Rochester (1971- 2000) are listed in the following tables.

Month	Precipitation (inches)	Snowfall (inches)
January	0.94	11.9
February	0.76	7.8
March	1.88	8.9
April	3.01	4.3
May	3.53	0.0
June	4.00	0.0
July	4.61	0.0
August	4.33	0.0
September	3.12	0.0
October	2.20	0.9
November	2.01	7.3
December	1.02	10.0
TOTAL	31.43	51.3

Month	Average Daily Temperature, Degrees Fahrenheit
January	12.2
February	18.8
March	30.9
April	45.0
May	57.3
June	66.6
July	70.6
August	68.3
September	59.4
October	47.4
November	31.6
December	17.7

 Table 5.2. Average precipitation and temperature recordings from Rochester, Minnesota (1971-2000).

Source: USDA Soil Survey of Olmsted County, MN.

Natural Resources Recommendations

Search Corridor Recommendations:

- Collaborate with an interdisciplinary team of land and resource managers and citizens at landscapelevel and watershed-level to identify a trail alignment that takes into consideration regional landscape management goals. For instance, new development should occur primarily in environments that are already impacted by human activity, with emphasis on restoring and reestablishing native vegetation in these environments for the benefit of people and remaining natural systems.
- New development should not occur in critical habitat of endangered, threatened and special concern species (MCBS), large remaining natural areas, patches of high quality habitat.

Natural Resource Recommendations for Trail Right-of-Way (once trail corridor is determined)

• The Division of Parks and Trails Natural Communities Program will be responsible for preparing a natural resource assessment that identifies plant communities, invasive species, wildlife

occurrences, water resources and cultural resources prior to development, so natural resources can be protected during construction.

- *Re- establish native plants and plant communities that are landscape and site appropriate.*
- Restore and manage native plant communities according to ecological principles
- Control the spread of invasive species, ROW's are especially vulnerable through maintenance operations such as mowing, and the island effect from adjoining private land.
- Encourage and support adjoining landowners to become partners in managing native plant communities.
- Foster trail user awareness through information and interpretation of natural resources management practices.

Specific Natural Resource Recommendations:

Vegetation

- Use native plant species, from locally collected seed sources, consistent with the native plant communities of the area to re-vegetate areas disturbed by erosion, overuse and construction. (Native plants should also be used in windbreak plantings and in the landscaping of parking areas and waysides.)
- Restore, or if necessary, establish native woodlands or wetland plantings along the trail to minimize maintenance and the use of pesticides, control noxious weeds, and increase natural species abundance and biodiversity for enhanced user experience.

Water Resources Recommendations

- Avoid stream crossings. However, if crossings are unavoidable, the crossing will not change the cross-sectional area of the stream channel or impede fish migration and movements of aquatic and semi-aquatic wildlife. In general, bridges are preferred with minimal encroachment into the river channel or flood plain with approaches and abutments. If culverts are used the culvert width will, at a minimum, match the normal bank full width of the stream and be installed to match the natural gradient of the stream. Best management practices will be followed.
- Locate the trail away from streams, lakes and ponds, wetlands, seeps and springs whenever possible to provide adequate filter strips. Avoid locating the trail in flood plains. Wherever practical, locate the trail outside filter strips or riparian management zones (see Minnesota Forest Resources Council, Sustaining Minnesota Forest Resources: Voluntary Site-level Forest Management Guidelines for Landowners, Loggers and Resource Managers. 2005.)
- Avoid impacting wetlands. However, if impacts are unavoidable, a wetland mitigation plan will be prepared to address and identify impacted wetlands.
- Use native plant materials appropriate to the locale to re-vegetate construction sites near water resources. Seek opportunities for in-stream habitat restoration or improvements.

Fisheries Recommendations

• Identify potential locations along the trail where river access can be provided for angling and non-motorized boating (canoes and kayaks). Trail easements should include riparian lands between the trail and the river to provide potential opportunities for public access.

- Minimize trail development and maintenance impacts to water resources through the use of mulching, geo-textiles, silt screens, and seeding to establish vegetation. Appropriate erosion control measures should be taken to minimize the potential impacts on adjacent water resources.
- Limit water crossings when possible and obtain necessary permits for any crossings. Bridges should span the river bankfull dimensions and should not have structures in the water channel that would catch debris and require frequent maintenance.
- Construct small ponds and wetlands where appropriate to demonstrate runoff control and provide wildlife habitat.

Wildlife Recommendations

- Follow current DNR guidance documents so as to cause as little harm as possible to Blanding's turtles and Wood turtles prior to and during trail construction activities, as well as during normal operation of the trail.
- Provide appropriate interpretation and educational information in areas that may be near turtle nesting areas, snake hibernacula or travel corridors for frogs, toads or salamanders. Include crossing signage where appropriate to alert trail users to use caution if they see reptiles or amphibians on the trail.
- Maintain regular consultation with DNR Resource Managers, Natural Heritage Program and Research staff for current information on occurrences of sensitive or rare species or natural communities in the corridor. Many occurrences change through time, remain unknown or undocumented. For example, some species (i.e., bald eagle, sandhill crane, river otter) have only recently re-colonized this locale and several species have declined dramatically over the last several decades (i.e., eastern meadow lark, red headed woodpecker, purple martin, leopard frog, jack rabbit) and may require special management considerations.
- Avoid known sensitive nesting or breeding locations for colonial nesting species such as great blue heron and common egret and other sensitive species (i.e., bald eagle, Swainson's hawk, loggerhead shrike, river otter) that have restricted distribution or specific habitat requirements.
- Install underpasses/overpasses in upland areas to maintain travelways and habitat connectivity for wildlife species that are vulnerable or unwilling to cross developed paths (i.e., snakes, turtles, amphibians, some small mammals). Design aquatic crossings to maintain or restore connectivity of stream segments and maintain banks for travelways under the trail.
- Maintain standing living and dead snag trees and coarse woody debris on the ground. These features are critical wildlife habitat for cavity nesting species, small mammals, amphibians and reptiles. Maintain native species providing sources of soft and hard mast. Utilize native species that are important sources of food or cover for wildlife for landscaping and re-vegetation. Consider important sources of larval foods and nectar for insects in planting plans.
- Provide interpretation, educational information and demonstration areas for habitat management/landscaping and special wildlife features. Develop and provide check lists or other guides for plants and animals to engage trail users with wildlife resources.

Section 6: Cultural and Socioeconomic Resources

The area around Rochester was home to nomadic Sioux, Ojibwa, and Winnebago tribes of Native Americans. In 1851, the Sioux ceded the land to Minnesota Territory in the treaties of Traverse des Sioux and Mendota. In 1853, the treaties were concluded, opening the land for settlement.

Since the time of early European settlement, people have been finding evidence of earlier human activity in the vicinity of Rice Lake. This evidence includes stone tools and pottery fragments, which have been found in significant numbers near the lakeshore and in the agricultural fields surrounding the lake.

With the signing of the treaty of Traverse des Sioux in 1851, the Dakota Indians ceded their land in western and southern Minnesota, including the Rice Lake area, to the United States Government. The Dakota were restricted to reservation lands bordering the Minnesota River from the Little Rock River near New Ulm to the Minnesota - South Dakota Border.

The Rice Lake State Park Management Plan indicates that in 1972, an archaeological excavation was conducted in the park by staff and students from the University of Minnesota, Department of Anthropology. The major excavation site was on the east shore of the eastern arm of the lake, a few hundred yards north of the Zumbro River branch outflow. The excavation uncovered a number of stone implements and pottery fragments, as well as some fire pits. Preliminary analysis suggested that the materials represent several different time periods, possibly from as early as the Archaic period (5,000 – 1,000 B.C.) to early historic times.

Transportation History –Roads, Trails and Rails

The first center of population in Minnesota was around the mouth of the Minnesota River, where trading posts in the Upper Mississippi River Valley had long maintained posts, such as flourishing communities of St. Paul, Fort Snelling, St. Anthony, Mendota and Stillwater. Following the development of river towns by steamboat travel, settlers began to move into the interior of Minnesota on small wagon roads south of these established settlements. This area became known as the Minnesota Triangle. The Minnesota Triangle region is the area bordered by Iowa on the south, the Mississippi River on the north and east, and the Minnesota and Blue Earth rivers on the north and west.

The only road in the entire region was a rough trading trail until the Minnesota legislature petitioned U.S. Congress in 1849 for the construction of a military post road through Mendota and Wabasha to the lowa border. This road opened in 1852 and was the first surveyed road in Minnesota. In order to build more roads, Minnesota asked U.S. Congress to provide a road system as a means of defense against the warring Indian tribes (Chippewa and Sioux). The request was granted and roads were built by the war department, four of these were in the Minnesota Triangle region. In 1854, wherever there were roads in the Triangle, there were settlements. By 1857, railroads became a bigger priority than roads and the towns that prospered the most were those that attracted railroads.

Mail communication also helped drive road development. Mail service developed rapidly through the 1850s, and in 1854, seven new mail routes were created in the Triangle region. Stagecoaches were the main method used to carry mail, and therefore, they facilitated the development of many roads throughout the Minnesota Triangle region. The need for better mail and passenger service was very important in the opening of the first road west of the Mississippi River. By 1860, there were roads

running throughout the Triangle region and the stagecoach was a part of everyday life. (Larsen, 1930. "Roads and Trails in the Minnesota Triangle, 1849-60.")

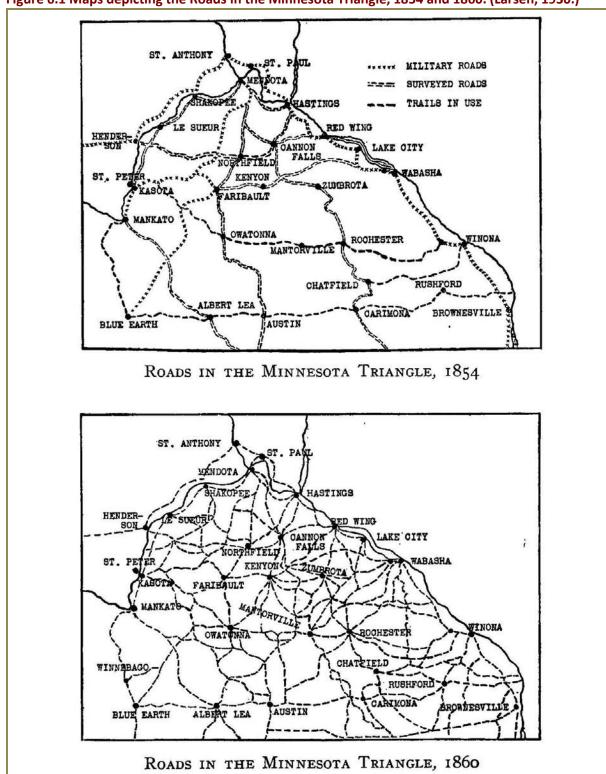


Figure 6.1 Maps depicting the Roads in the Minnesota Triangle, 1854 and 1860. (Larsen, 1930.)

One of these early mail routes was started by Orville Lord, an early settler and stagecoach operator living in Rollingstone (now known as Minnesota City). According to Stagecoach Postal Contracts (Postal Contract 14015 of 1854-1858), Lord's first run with mail and passengers was September 27, 1855, leaving Winona and heading out of the valley through Rollingstone and Minnesota City with a destination of St. Peter (Traverse des Sioux) to meet the Mendota – Big Sioux military road. By 1857, this lucrative route was running three times per week, each way. (Smith, 1884, reprinted 2004; and Hanson, 2011.)

In 1857, when the new mail contracts were open for bid, Lord lost his mail contract to "the stagecoach king," Martin O. Walker. Walker was a successful stagecoach operator, making Chicago the center of a web of stagecoach routes connecting to all the fast developing areas of the Northwest Territories by the early 1840's. (Matile,



Stagecoach photo by Sonja Miedtke.

2002.) In 1840, Walker and another stagecoach operator, John Frink, formed Frink, Walker, & Company, a successful business partnership that lasted until 1856. During their partnership, their company dominated stagecoach lines in Illinois, Michigan, Wisconsin, Iowa, Indiana and Missouri. After Frink and Walker split, Walker expanded into southern Minnesota.

Once Walker began running the contract for the Minnesota City to St. Peter line, he omitted Rollingstone/Minnesota City from the route on the premise that it was served by one of his other routes, the St. Paul – Winona – Lansing, Iowa Route. With Rollingstone/Minnesota City omitted, the route became known as the Winona – St. Peter Route. Possible layover rest stops at stagecoach home stations (main hotels or taverns, such as The Hubbell House) were located in Winona, St. Charles, Rochester, Mantorville, Claremont Township, Owatonna, Waterville and St. Peter. Taverns were located along the route as well that also served as relay stations, where stagecoach operators would change their horses. These taverns provided meals or a quick rest from the rigors of these trips. The Winona – St. Peter stage route was heavily used until the railroad came through in 1867-1870. (Hanson, 2011.)

The railroad came to Dodge County with the building of the Winona and St. Peter Railroad (now the Chicago and Northwestern) from Rochester to Kasson in 1856 (bypassing Mantorville and Wasioja), and from Kasson to Owatonna in 1866. In 1890, a branch of this railroad was constructed from Kasson to Mantorville, a track 2.9 miles in length. This branch was discontinued in 1932.

Another line, later sold to the Chicago and Great Western Railway, was built from St. Paul to Lyle, near the Iowa border, which then in 1890, started a new line from Eden to Wasioja and in 1897 also purchased the line built from Wasioja to Mantorville. In 1935, the rail lines between Eden and Mantorville were discontinued. In 1890, most of the incoming freight to Mantorville was hauled by team from Wasioja, having been delivered to Wasioja on the branch line of the Chicago and Great Western from Eden. (Smith, H. A. 1884, reprinted in 2004.)

Socioeconomic Resources

Demographics

According to the US Census Bureau and the State Demographer, the three counties involved with the Stagecoach State Trail are experiencing growth and are projected to continue growing. The cities, with the exception of Claremont, are also growing. These trends point to the need to provide open space and recreational opportunities while opportunities exist. Population growth trends coincide with growing interest in "close to home" trail opportunities, as shown in DNR trail studies.

City	1990 Census	2000 Census	2010 Census*
Rochester	70,745	85,806	106,769
Byron	2,441	3,500	4,914
Mantorville	874	1,054	1,926
Kasson	3,514	4,398	5,931
Wasioja Twp	945	963	914
Dodge Center	1,954	2,226	2,670
Claremont	530	620	548
Owatonna	19,386	22,434	25,599

Table 6.1. Population Census Numbers.

Sources: U.S. Census Bureau, 2007 Population Estimates, Census 2000, 1990 Census. *MN Department of Administration, Office of Geographic and Demographic Analysis, 2011

Financial and Health Benefits of Outdoor Recreation, Parks and Trails

Minnesotans, like the rest of the nation, enjoy the opportunities parks and trails provide for bonding with family and friends, being physically active, enjoying nature, and nourishing mental health and spiritual well-being (ARC, 2000; Kelly, 2008; Schneider, Schuweiler & Bipes, 2009). These benefits contribute to a high quality of life for Minnesota residents.

Communities that support recreational trails and respond to the needs of trail users have seen positive effects on their local economies. DNR trail studies indicate that tourists attracted to the trails also use local facilities for dining, shopping, and lodging. Although economic impact from parks and trails is a small component of Gross State Product (GSP), it is often concentrated in smaller communities where the impact is larger. Many of Minnesota's rural communities have come to rely on nature-based tourism as a significant portion of their economic health. (Dallman, et. al., 2010.)

Minnesota DNR estimates that for five state trails surveyed between 2007 and 2009, summer spending totaled nearly \$5 million. Most of that spending (95% in total) comes from the trail users who reside outside the local economy of the trail, and the spending represents "new" dollars to the local economy. Trail users who have traveled a long distance to the trail, not surprisingly, outspend local users by a factor of about 20 on a daily basis, primarily on food, travel and overnight accommodations.

Trails appear to increase property values and enhance the quality of life in the communities through which they occur. Homes close to trails have become increasingly desirable. A number of studies of existing bike trails have shown that the average value of property near the trails is similar to or slightly above the value of other properties in the area. (Della Penna, 2005.)

Trails can also provide direct economic benefits related to health care. A 2005 study of bike/pedestrian trails in Lincoln, Nebraska determined that the cost-benefit ratio of direct medical cost savings to total trail costs was 2.94, meaning that for every \$1 invested in trails led to \$294 in direct medical benefits. Even when the sensitivity analyses are included, the cost-benefit ratio was always larger than one. (Wang et al., 2005)

In 2008, the Minnesota Department of Health developed the Statewide Health Improvement Program (SHIP). The goal of SHIP is to promote healthy lifestyles and help Minnesotans live longer by preventing the leading causes of chronic disease: tobacco and obesity. With sustained funding, SHIP could move up to an additional 10% of the adult population into a normal weight category, significantly reducing costs related to health care. Additionally, community design will lead to more communities that are biking and walking friendly and more children who bike and walk to school. (Minnesota Department of Health, 2011.)

Health and Outdoor Recreation

Decreasing participation in outdoor recreation may contribute to poor health and associated high medical costs. In Minnesota, 62.8 percent of adults are either overweight or obese, and less than half meet recommended levels of physical activity.

In 2000, medical costs in Minnesota associated with obesity were \$1.3 billion and medical costs associated with physical inactivity were \$495 million.

High-quality parks and trails can help mitigate these costs by providing inexpensive, safe and easy opportunities for physical activity while also improving the health and well-being of adults and children alike.

-MN DNR, "Parks and Trails Legacy Plan, Parks and Trails of Statewide Significance, A 25-year Long-range Plan for Minnesota," 2011.

Section 7: Implementation

What happens after the Master Plan is completed?

Chapter 86A.09 of Minnesota Statutes requires that a master plan be prepared for state trails before trail development can begin – although planning, design, and land acquisition can take place before the plan is complete. Trail users and trail advocates need to recognize that the completion of a master plan is only one step in what typically is a long process of implementation.

Throughout the planning process for this trail, local trail advocates have asked for guidance as to how to implement the plan – that is, how to establish feasible alignments, contact landowners, and work with DNR regional staff on land acquisition. The process can be lengthy and complex.

The first generation of state trails in Minnesota were developed primarily on abandoned rail rights-ofway that state or local governments were able to acquire. Since that time, most of the remaining abandoned rail rights-of-way in the state have reverted to private ownership. The next generation of trails must cross a variety of public and private lands, making them much more challenging to develop than the rail-trails of the past.

DNR Parks and Trails staff work with individual landowners to acquire land or easements on a willing seller basis, keeping in mind that a series of acquisitions on adjoining properties will be needed in order to create a trail segment with a logical beginning and end. In other words, a trail segment should begin at an existing trail, park or town center that can serve as a trailhead, preferably with parking and restroom facilities, and end at some type of destination – such as a city, a park, a wildlife preserve, or a historic site.

In this process, DNR acquisition and development staff frequently work with city and county governments, conservation organizations, and local trail interest groups to assess the feasibility of a particular trail alignment. Acquisition is done on a willing seller basis. The DNR strongly discourages local governments from using other means.

Land can be acquired or otherwise set aside for trail development through a variety of methods:

- A trail may be located on non-DNR public land, such as county or city-owned land, through a cooperative agreement.
- A local government or not-for-profit organization can acquire land from a willing seller and then sell it to the DNR.
- Local interest groups and/or DNR staff may make the initial contact with landowners; then DNR staff will assess the feasibility of a particular trail alignment and complete the land acquisition.

No matter which method is used, advance coordination with DNR staff is essential in order to ensure that the selected trail alignment is feasible to develop.

The following is a typical sequence of events in trail planning and development. However, the steps will likely overlap and the process will often require several rounds of feasibility assessment and landowner contacts.

- 1. **Complete the master plan.** The plan identifies a broad search corridor for the trail, within which one or more alternative alignments are identified. The intent of the plan is to provide flexibility while identifying the most feasible alignments, rather than "locking in" a specific route.
- 2. Explore feasibility of each alignment. Assess land ownership, road right-of-way width (is there enough room for a trail within the right-of-way?), connectivity, and physical conditions such as slope, wetlands and natural and cultural resources. The alignment must allow state and federal design guidelines and rules to be met, including trail width, shoulders, curvature, accessibility, etc. Therefore, it is important for local governments and trail groups to coordinate their efforts with DNR staff.
- 3. Initial informal landowner contact. It is often preferable for landowners to be contacted by local trail supporters rather than DNR staff. Landowner concerns frequently relate to privacy, safety and liability, and there are many information resources available to address these concerns.
- 4. **Formal landowner contact; complete acquisition process.** As mentioned above and with proper coordination, DNR or other entities may take the lead on land acquisition.
- 5. **Trail engineering and design.** The design process offers a final opportunity to assess feasibility, including the need to avoid sensitive natural or cultural resources and address constraints such as wetlands or steep slopes. Trail alignments may shift during the design process.
- 6. **Construction** on one or more segments, while the processes of negotiation and design continue on others.
- Ongoing maintenance and stewardship. Trail associations often act as "eyes on the trail" to monitor conditions, notify DNR of concerns and volunteer on certain efforts. Local units of government may provide trail maintenance via a cooperative agreement.
- 8. **Orientation and Interpretation.** All trails are developed with traffic safety and directional signs. Some trails provide interpretive signs that highlight notable natural and cultural resources and landscape features. An interpretive plan may be developed to identify themes and features that will be interpreted.

Actions Local Governments Can Take to Support Trail Development:

City and county governments can play an important role in trail development through their planning and development review processes, including the following:

BASIC DESIGN STANDARDS FOR PAVED, SHARED-USE STATE TRAILS

The following standards briefly highlight key points from the DNR publication *Trail Planning, Design and Development Guidelines.* See the full document for more details on the design of many types of trails.

- Pavement width: 10 feet is typical; 12 feet an option in high-use areas, 8 feet is an option where limitations exist or lower use is expected.
- Shoulders: 2 to 5 feet, depending on conditions such as side-slopes and hazards
- Maximum grade: 5% except where accessibility exceptions apply.
- 2% maximum crossslope (the slope from one side of a trail to the other)
- Corners gently curved to meet standards rather than right angles
- 100' wide corridor width where possible to allow for buffers, storm water control and grading.

Trail Planning, Design and Development Guidelines is available through the DNR or Minnesota's Bookstore, http://www.dnr.state.mn.us/ publications/trails_waterwa ys/index.html

- Integrate the trail concept into community plans, including comprehensive and land use plans, park and open space plans, and transportation plans.
 - Through the local park and trail plan, link the state trail corridor to local and regional trails; integrate it with local parks
 - Seek opportunities to meet multiple goals through trail development i.e., to improve water quality, protect natural areas, provide educational opportunities, or provide additional transportation options.
- **Require park and trail set-asides.** Through their subdivision ordinances, cities and counties may require that developers dedicate a reasonable portion of land within a development to public use for such things as streets, utilities, drainage, and parks, trails and recreational facilities. (If the set-aside is for a state trail, coordinate with DNR staff in advance.)

Work with DNR staff to seek funding for state trail acquisition and development. State trails are typically funded by the State Legislature via bonding money or special appropriations, or through the Legislative-Citizen Commission on Minnesota Resources (LCCMR). Some federal grants are also eligible to be used in conjunction with state funding for development. Transportation enhancement project grants and other transportation funding sources may also be used for state trails. It is important for local government representatives to work closely with DNR regional staff in any pursuit of state trail funding.

The Division of Parks and Trails is currently developing a *State Park and State Trail System Plan* which will address priorities in light of current funding realities. Recommendations for acquisition and development priorities will be made in this plan. In addition, an assessment of the status of existing legislatively authorized state trails will be included. This assessment will determine whether or not some existing legislatively authorized state trails function as a trail of regional significance and thus may be better positioned for Legacy funding as such. The Stagecoach State Trail will be included in this analysis.

- Seek funding for local and regional trail connections. Local and regional trails can be funded through a variety of sources, available through DNR and other agencies, including:
 - Parks and Trails Legacy Grant Program -<u>http://www.dnr.state.mn.us/grants/recreation/pt_legacy.html</u>
 - Local Trail Connections Grant Program -<u>http://www.dnr.state.mn.us/grants/recreation/trails_local.html</u>
 - Federal Recreation Trail Grant Program (also available for state trails) -<u>http://www.dnr.state.mn.us/grants/recreation/trails_federal.html</u>
 - Regional Trail Grant Program <u>http://www.dnr.state.mn.us/grants/recreation/trails_regional.html</u>
 - Transportation Enhancement Projects awarded by Mn/DOT with Federal Highway Administration funding (also available for state trails) <u>http://www.fhwa.dot.gov/environment/te/index.htm</u>
 - Safe Routes to School: funding for local trail connections through Mn/DOT <u>http://www.dot.state.mn.us/saferoutes/index.html</u>

Section 8: Plan Modification Process

DNR Division of Parks and Trail's state trail master plans document a partnership-based planning process, and the recommended actions resulting from that process. These comprehensive plans recognize that all aspects of trail management are interrelated, and that all recommendations should also be interrelated.

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

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

To maintain consistency between plans and processes, all revisions and amendments will be coordinated through the DNR Division of Parks and Trails Strategic Management Section. Requests for planning assistance should be directed to the DNR Division of Parks and Trails Strategic Program 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 mission, vision, goals, specific management objectives, or proposed development plans outlined in the plan;
- Is controversial between elected officials and boards, user groups, the public, adjacent landowners, other DNR divisions or state agencies; or
- Directly affects other state agencies (i.e., Minnesota Historical Society).

Plan Amendment Process

The plan amendment process has a series of steps.

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

- 2. If the proposed change involves other DNR Divisions, the 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 Regional Interdisciplinary Review Service (RIRS).
- 3. If the proposed change issue involves other state agencies, the issue should be resolved by staff and approved by the DNR Division of Parks and Trails Management Team - with input from the public - and reviewed by RIRS.
- 4. If the proposed change is potentially controversial among elected boards, user groups, adjacent landowners or the public, an open house will be held that is advertised in the local and regional area.
- 5. All plan amendments should be coordinated, documented, and distributed by the DNR Division of Parks and Trails planning staff.

Plan Revisions

If a plan change is recommended that does not meet the amendment criteria above, and generally follows the intent of the Stagecoach State Trail Master Plan (through mission, vision, goals, and objectives), the Department has the discretion to modify the plan without a major planning process.

References

American Recreation Coalition (ARC), (2000). *Outdoor Recreation in America 2000: Addressing Key Societal Concerns.* Washington D.C.: Roper Starch.

Coffin, B. (1988). "The Natural Vegetation of Minnesota at the Time of the Public Land Survey 1847-1907" (map). Biological Report No. 1. St. Paul: Minnesota Natural Heritage Program.

Cunfer, G. & D. Guse. (2001). Ditches. A.J. Amato, J. Timmerman, and J. A. Amato, (Eds.). *In Draining the Great Oasis: An Environmental History of Murray County, Minnesota (pp 143-158)*. Marshall, MN: Crossings Press.

Dallman, A., Date, A., Kelly, T., Nickerson, R., & Vlaming, J. (2010). Why parks and trails are important. The foundation for preserving a Minnesota legacy. Minnesota Department of Natural Resources.

Della Penna, Craig. (2005). *Home Sales Near Two Massachusetts Rail-Trails*. AmericanTrails.org. Retrieved in March 2010 from <u>http://www.americantrails.org/resources/adjacent/dellapennasales.html</u>.

Hanson, Russ. (2011). [Topic of study: Historic roads, postal contracts, stagecoach lines and early transportation corridors in Minnesota.] Unpublished raw data.

Kelly, Tim. (2000). *Trail Use: Summary of Summer Trail Use and User Surveys Conducted in 1996, 1997 and 1998.* Minnesota Department of Natural Resources, Office of Management and Budget Services.

Kelly, Tim. (2010). *Status of Summer Trail Use (2007-09) on Five Paved State bicycle Trails and Trends Since the 1990s.* Minnesota Department of Natural Resources, Office of Management and Budget Services.

Kennedy, L. & Westneberg, K. (2008). Ghost Towns. *Minnesota Conservation Volunteer*, September – October 2008.

Larsen, Arthur J. (1930). Roads and Trails in the Minnesota Triangle. Minnesota History, 11(4). 387-411.

Marschner, F.J. 1974. *The original vegetation of Minnesota, compiled from U.S. General Land Office Survey notes* [map, scale 1:500,000]. U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station, St. Paul. (redraft of the 1930 original).

Matile, Roger. (2002). *John Fink and Martin Walker: Stagecoach Kings of the Old Northwest.* Journal of the Illinois State Historical Society, Vol. 95, No. 2 (Summer, 2002), pages 119-131. Illinois State Historical Society.

Minnesota Department of Health. 2011. *SHIP: The Statewide Health Improvement Program*. Retrieved on March 29, 2011 from <u>http://www.health.state.mn.us/healthreform/ship/about/SHIPUpdatedFactSheet March2011.pdf</u>

Minnesota Department of Natural Resources . (2006). *Tomorrow's Habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife, State Wildlife Action Plan.* Minnesota Department of Natural Resources, Division of Ecological Resources.

Minnesota Department of Natural Resources. (2011). *Parks and Trails Legacy Plan, Parks and Trails of State and Regional Significance, A 25-year long-range plan for Minnesota*. Minnesota Department of Natural Resources.

Minnesota Department of Natural Resources, Division of Trails and Waterways. (2007). *Trail Planning, Design, and Development Guidelines*. Minnesota Department of Natural Resources, Division of Trails and Waterways.

Minnesota Department of Natural Resources, Division of Ecological Services. (2010). Ecological Classification System. Retrieved from <u>http://www.dnr.state.mn.us/ecs/index.html</u>

Minnesota Department of Natural Resources, Division of Trails and Waterways. (2010). *Canoe and Boating Routes*. Retrieved from <u>http://www.dnr.state.mn.us/canoeing/routes.html</u>

Minnesota Department of Natural Resources, Division of Waters (2010). *Wild and Scenic Rivers Program*. Retrieved from <u>http://www.dnr.state.mn.us/waters/watermgmt_section/wild_scenic/index.html</u>

Minnesota State Demographic Center and the Metropolitan Council (2010). *Annual estimates of city and township population, households and persons per household, 2000-2009*. Minnesota Department of Administration, Geographic and Demographic Analysis Division.

National Park Service. (2011). *National Register of Historic Places*. Retrived from <u>http://www.cr.nps.gov/nr/index.htm</u>

Olmsted County. Retrieved from <u>http://www.co.olmsted.mn.us/Pages/default.aspx</u>

Olmsted County. *Oxbow Park & Zolman Zoo*. Retrieved from <u>http://www.co.olmsted.mn.us/pw/parks/oxbowpark/Pages/default.aspx</u>

Oregon Department of Transportation, Parks and Recreation Divison (1988). A Feasibility Study for Proposed Linear Park.

Schneider, I.E., Schuweiler, A. & Bipes, T. (2009). *Profile of 2008 Recreation Trail Users*. University of Minnesota, Department of Forest Resources.

Smith, H. A. (1884). History of Dodge County. Reprinted, 2004.

United States Census Bureau. Retrieved from http://www.census.gov on April 4, 2008 and May 20, 2009.

Upham, Warren. (2001). *Minnesota place names: a geographical encyclopedia* (3rd ed.). Minnesota Historical Society Press.

University of Minnesota, Institute on the Environment. "Minnesota Statewide Conservation and Preservation Plan." June 30, 2008, Revised, November 2008.

Appendix

Contents

Appendix A.1: Plant Species - Special Concern, Threatened, or Endangered	2
Appendix A.2: Animals – Special Concern, Threatened, or Endangered Species.	.3
Appendix A.3: Ecological Units – Natural Communities identified in the Natural Heritage System Database.	4
Appendix A.4: DNR Fact Sheets- Blanding's Turtle; Wood Turtle; Erosion Control and Plastic Mesh Netting.	5
Blanding's Turtle Fact Sheet	6
Wood Turtle Fact Sheet	.9
Wood Turtle Life History Information	10
Erosion Control and Plastic Mesh Netting Fact Sheet	11
Appendix B: Structures and Sites on the National Register of Historic Places	13
Appendix C: Stagecoach State Trail Summary of Open House Meetings, Comments	17

Appendix A.1: Plant Species - Special Concern, Threatened, or Endangered

A search of the Minnesota Natural Heritage Information System Database in 2009 indicated the endangered, threatened, or special concern botanical species that have been documented within one mile of the current search corridor (see Figure 3.1, page 12) for the Stagecoach State Trail.

County	Common Name	Latin Name	MN Legal
			Status
Dodge	Golden-seal	Hydrastis canadensis	END
	Tubercled Rein-orchid	Platanthera flava var. herbiola	END
	Jointed Sedge	Carex conjuncta	THR
	Prairie Bush Clover	Lespedeza leptostachya	THR
	Valerian	Valeriana edulis ssp. ciliata	THR
	Rattlesnake-master	Eryngium yuccifolium	SPC
	Cowbane	Oxypolis rigidior	NON
Dodge, Steele	Wood's Sedge	Carex woodii	SPC
Olmsted	Golden-seal	Hydrastis canadensis	END
	Handsome Sedge	Carex formosa	END
	Valerian	Valeriana edulis ssp. ciliata	THR
	American Ginseng	Panax quinquefolius	SPC
	Goldie's Fern	Dryopteris goldiana	SPC
	Moschatel	Adoxa moschatellina	SPC
	Squirrel-corn	Dicentra canadensis	SPC
	Twinleaf	Jeffersonia diphylla	SPC
	Wood's Sedge	Carex woodii	SPC
Steele	Cowbane	Oxypolis rigidior	NON
	Plains Wild Indigo	Baptisia bracteata var. leucophaea	SPC
	Rattlesnake-master	Eryngium yuccifolium	SPC
	Small White Lady's-slipper	Cypripedium candidum	SPC
	Tuberous Indian-plantain	Arnoglossum plantagineum	THR
	Valerian	Valeriana edulis ssp. ciliata	THR

SPC – Special Concern; THR – Threatened; END – Endangered; NON – a species with no legal status, but about which the Natural Heritage and Nongame Research Program is gathering data for possible future listing.

Appendix A.2: Animals – Special Concern, Threatened, or Endangered Species.

A search of the Minnesota Natural Heritage Information System Database in 2009 indicated the endangered, threatened, or special concern zoological species that have been documented within one mile of the current search corridor (see Figure 3.1, page 12) for the Stagecoach State Trail.

County	Common Name	Latin Name	MN Legal Status
Dodge	Black Redhorse	Moxostoma duquesnei	NON
	Upland Sandpiper	Bartramia longicauda	NON
	Creek Heelsplitter	Lasmigona compressa	SPC
	Fluted-shell	Lasmigona costata	SPC
	Ozark Minnow	Notropis nubilus	SPC
	Blanding's Turtle	Emydoidea blandingii	THR
	Ellipse	Venustaconcha ellipsiformis	THR
	Loggerhead Shrike	Lanius ludovicianus	THR
	Wood Turtle	Clemmys insculpta	THR
	Mussel Sampling Site	Freshwater Mussel Concentration Area	(blank)
	Timber Rattlesnake	Crotalus horridus	THR
Dodge, Olmsted	Loggerhead Shrike	Lanius ludovicianus	THR
	Wood Turtle	Clemmys insculpta	THR
	Mussel Sampling Site	Freshwater Mussel Concentration Area	(blank)
Olmsted	Black Redhorse	Moxostoma duquesnei	NON
	Bald Eagle	Haliaeetus leucocephalus	SPC
	Creek Heelsplitter	Lasmigona compressa	SPC
	Fluted-shell	Lasmigona costata	SPC
	Ozark Minnow	Notropis nubilus	SPC
	Ratsnake	Elaphe obsoleta	SPC
	Blanding's Turtle	Emydoidea blandingii	THR
	Elktoe	Alasmidonta marginata	THR
	Ellipse	Venustaconcha ellipsiformis	THR
	Loggerhead Shrike	Lanius ludovicianus	THR
	Mucket	Actinonaias ligamentina	THR
	Timber Rattlesnake	Crotalus horridus	THR
	Wood Turtle	Clemmys insculpta	THR
	Mussel Sampling Site	Freshwater Mussel Concentration Area	(blank)
Steele	Bullfrog	Rana catesbeiana	NON
	Sandhill Crane	Grus canadensis	NON
	Black Sandshell	Ligumia recta	SPC
	Creek Heelsplitter	Lasmigona compressa	SPC
	Fluted-shell	Lasmigona costata	SPC
	Short-eared Owl	Asio flammeus	SPC
	Spike	Elliptio dilatata	SPC
	Blanding's Turtle	Emydoidea blandingii	THR
	Ellipse	Venustaconcha ellipsiformis	THR
	Wood Turtle	Clemmys insculpta	THR
	Colonial Waterbird	Colonial Waterbird Nesting Area	(blank)
	Nesting Site Mussel Sampling Site	Freshwater Mussel Concentration Area	(blank)

SPC – Special Concern; THR – Threatened; END – Endangered; NON – a species with no legal status, but about which the Natural Heritage and Nongame Research Program is gathering data for possible future listing.

Appendix A.3: Ecological Units – Natural Communities identified in the Natural Heritage System Database.

A search of the Minnesota Natural Heritage Information System Database in 2009 indicated the ecological units – natural communities that have been documented within one mile of the current search corridor (see Figure 3.1, page 12) for the Stagecoach State Trail.

County	Common Name	MN Legal Status
Dodge	Calcareous Fen (Southeastern)	(blank)
	Mesic Prairie (Southern)	
Dodge, Olmsted	Red Oak - Sugar Maple - Basswood - (Bitternut	
	Hickory) Forest	
	Red Oak - White Oak Forest	
	Sedimentary Unit or Sequence (Ordovician)	
	Sugar Maple - Basswood - (Bitternut Hickory)	
	Forest	
	Sugar Maple - Basswood - Red Oak - (Blue Beech)	
	Forest	

Appendix A.4: DNR Fact Sheets- Blanding's Turtle; Wood Turtle; Erosion Control and Plastic Mesh Netting.

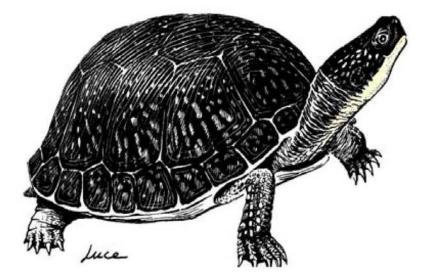
The DNR offers the following land use guidelines so that as little harm as possible comes to rare turtles.

- Workers should be informed of the presence of wood turtles in the area.
- When working near a river, silt fencing should be put in place by mid-March, to keep turtles out of construction area. These fences need to be maintained throughout the project. It is critical that silt fences are removed after the area has been re-vegetated.
- Do not leave sand piles along river, as they may be used for turtle nesting.
- Terrain should be left with as much natural contour as possible. Graded areas should be revegetated with native grasses and forbs appropriate for the site. Use of fertilizers and pesticides should be avoided.
- Sediments from erosion should be prevented from reaching wetlands and river.
- Landscaping should be left as natural as possible; trees and shrubs should not be planted in known or potential nesting sites. Likewise, herbaceous and grass mixes seeded to those sites should be shorter and sparser vegetation.
- Roads should be kept to minimal standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" curbs at a 3:1 slope are preferred. Curbs and below grade roads trap turtles on the road, increasing road kills.
- Ditches should not be mowed until after October 1st. Report sightings of wood turtles to the DNR Regional Nongame Specialist.
- Use ecologically compatible erosion control alternatives (see attached guidance).
- See attached guidance for wood turtles.
- See additional guidance for Blanding's turtles (flyers, fact sheets). <u>http://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=ARAAD0</u> <u>4010</u>
- Report sightings of Blanding's turtles to the DNR Regional Nongame Specialist.
- Best Practices for meeting DNR General Public Waters Work permit GP 2004-0001. http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_manual.html ml (Note—this is a "living document) that gets updates as new & better guidance becomes available.)

DNR Fact Sheets and Guidance Documents provided on following pages. (April, 2011)

Blanding's Turtle Fact Sheet

CAUTION



BLANDING'S TURTLES MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are a State Threatened species and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

Illustration by Don Luce, from Turtles in Minnesola, Natural History Leaflet No. 9, June 1989, James Ford Bell Museum of Natural History

SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

(see Environmental Review Fact Sheet Series for full recommendations)

- A flyer with an illustration of an adult Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest, and do not allow pets near the nest.
- Blanding's turtles do not make good pets. It is illegal to keep this threatened species in captivity.
- Silt fencing should be set up to keep turtles out of construction areas. It is <u>critical</u> that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- · Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).

Compiled by the Minnesota Department of Natural Resources Division of Ecological Resources, Updated March 2008 Endangered Species Environmental Review Coordinator, 500 Lafayette Rd., Box 25, St. Paul, MN 55155 / 651-259-5109





The MNDNR Nongame Wildlife Program (NWP) is seeking reports of Blanding's turtles in the counties of southern Minnesota.

If possible, sightings should be verified promptly by either:

1. photographs showing identifying characteristics (top & bottom of shell, jaw) AND/OR

2. a detailed written description specifying identifying characteristics and circumstances of the sighting. (incl. if turtle shell is marked in any way)

Please include:

-Name phone number &/or email address of person reporting sighting -Date of Sighting -Number of Blanding's turtles observed

-Specific Location of Sighting

e.g. GPS coordinates OR Township, Range Section to the nearest 1/4 1/4 section &/OR

-Specific directions (e.g. roads with distance and direction from nearest town or other conspicuous landmark with any other information that may be helpful for locating the site. Details about the habitat & landowner contacts also really help. Many Thanks !

Please Report Sightings as soon as possible to:

Lisa Gelvin-Innvaer, MNDNR Nongame Wildlife Program, 261 Hwy 15 South; New Ulm, MN 56073 Phone: 507-359-6033 Fax: 507-359-6018 Email: lisa.gelvin-innvaer@state.mn.us







Wood Turtle Fact Sheet





Wood Turtles MAY BE ENCOUNTERED IN THIS AREA

The unique and rare wood turtle has been found in this area. Wood turtles are a State Threatened species and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. Turtles should be moved offsite to the nearest stream edge. Information and recommendations on wood turtles can be found on the back of this notice. Additional information on turtles can be obtained from Ecological Services, Nongame Wildlife Program, Box 25, DNR Building, 500 Lafayette Rd., St. Paul, MN 55155 (651) 259-5122.

Wood Turtle Life History Information

Description: The wood turtle is a medium-sized turtle with a dark green to brown, sculpted shell. The bottom of the shell is yellow with black blotches on the edges. The skin on the soft body parts near the shell is yellow; otherwise the legs, head and tail are brown. A distinctive field mark is the generally highly "carved" look to the top of the shell. However, an older turtle's shell may be worn smooth. Adult wood turtles have an average shell length of 5 ½ to 8 inches. They are normally terrestrial from April through October

Habitat: Wood turtles are found in and along mid-sized rivers and their tributaries flowing through open to wooded areas. During the spring, female wood turtles are often found on land, basking and preparing for nesting. Male wood turtles are also found on land, but they are usually closer to the water than the females. Once the females have laid their eggs, they often remain on land for the rest of the summer, foraging on plants, insects and worms. They will forage in crop fields and disturbed areas along the rivers, making them susceptible to harm from farm machinery. Wood turtles seem to prefer a habitat that includes grass fields and wooded areas. They will also use seasonal woodland pools.

Life History: After 5-6 months underwater in semi-hibernation, individuals emerge in late March or early April, depending on the season. They can be found along the water's edge and up to 400 yards away from the river. To regulate body temperature, turtles will bask for a period of time, and then seek shade. They may bury themselves in vegetation such as reed canary grass, or hide under log piles along the river. Nesting occurs in early to mid-June, and the females generally lay their eggs in the evening, nesting in an open sandy area along the river or on a south to southwest facing sandy bank along the river. They will also nest along the sides of roads if the soil is sandy. After a development period of 58-71 days, hatchlings leave the nest and travel to water. Wood turtles are mild mannered and do not attempt to bite. Adults are particularly vulnerable to being struck by automobiles while crossing roads, or hit by farm machinery in crop fields adjacent to rivers.

Recommendations: The DNR offers the following land use guidelines so that as little harm as possible comes to these rare turtles.

- Workers should be informed of the presence of wood turtles in the area.
- When working near a river, silt fencing should be put in place by mid-March, to keep turtles out of construction area. These fences need to be maintained throughout the project. It is critical that silt fences are removed after the area has been re-vegetated.
- Do not leave sand piles along river, as they may be used for nesting.
- Terrain should be left with as much natural contour as possible. Graded areas should be revegetated with native grasses and forbs. Use of fertilizers and pesticides should be avoided.
- Erosion should be prevented from reaching wetlands and river.
- Landscaping should be left as natural as possible; trees should not be planted in known or potential nesting sites.
- Roads should be kept to minimal standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" curbs at a 3:1 slope are preferred. Curbs and below grade roads trap turtles on the road, increasing road kills.
- Ditches should not be mowed until after October 1st.
- Report sightings of wood turtles to the DNR Regional Nongame Specialist.

Erosion Control and Plastic Mesh Netting Fact Sheet



DNR FACT SHEET: EROSION CONTROL AND PLASTIC MESH NETTING



The Problem:

- Plastic mesh netting can result in entanglement and death of various animals, particularly snakes. Turtles, frogs, and ducklings have also been documented entangled in the netting.
- Plastic mesh netting is incorporated into some types of erosion control blankets used to stabilize and revegetate steep slopes.
- Plastic netting resists degradation and persists long after organic ingredients of the blankets decompose.



- over -

Suggested Alternatives:

- Use fully biodegradable material, i.e. all jute or fabric that degrades at the same time http://www.rolanka.com/index.asp?pg=biodocf30
- North American Green biodegradable blanket (e.g., SC-150BN)
- Futerra is a very light-weight fabric without netting, good in some instances but doesn't always last through one season: http://www.profileproducts.com/turf_establish/category/item/60
- North Carolina Ecosystem Enhancement Program recommends a coir fiber matting.



Selected References:

- Barton, C. and K. Kinkead. 2005. Do erosion control and snakes mesh? Journal of Soil and Water Conservation 60(2):33-35.
- Low, J. 2005. Synthetic netting nabs serpents. Journal of Kansas Herpetology (13):9.
- Stuart, J.N., M.L. Watson, T.L. Brown, and C. Eustice. 2001. Plastic netting: an entanglement hazard to snakes and other wildlife. Herpetological Review 32(3):162-164.
- Walley, H.D., R.B. King, J.M. Ray, and J. Robinson. 2005a. Erosion mesh netting: a major threat hazard to snakes. Bulletin of the Maryland Herpetological Society 41(1):36-38.
- Walley, H.D., R.B. King, J.M. Ray, and J. Robinson. 2005b. What should be done about erosion mesh netting and its destruction of herpetofauna? Journal of Kansas Herpetology (16):26-28.

Contributors:

John Hiebert, MN DNR Heather Baird, MN DNR Bill Bartodziej, Ramsey-Washington Metro Watershed District Shannon Deaton, NC Habitat Conservation Program Lindy Ekola, MN DNR Mike Mueller, MN DNR Carol Hall, MN DNR

Appendix B: Structures and Sites on the National Register of Historic Places

The following structures and sites on the National Register of Historic Places are located within or near the Stagecoach State Trail search corridor. These resources need to be considered in the location, design and interpretation of the trail.

Olmsted County

None of these properties are within or near the Stagecoach State Trail search corridor.

City of Rochester (147 records) **Mayowood Historic District (15 properties on National Register)** Estate of Dr. Charles H. Mayo, cofounder of Mayo Clinic, and son Charles W. Mayo: main house (1910–11) with lodge, farm, and greenhouse complexes (1908–20s). **Pill Hill Residential Historic District** (Number of National Register contributing properties: 99) Pill Hill Historic District is not located near the Stagecoach State Trail search corridor.

Dodge County

Mantorville Historic District - 25 records

(Number of National Register contributing properties: 25)

- Property: 1st State Bank of Mantorville Address: 509 Main St. N National Register Contribution: Y Date: 1895
- Property: Beaver House Address: 620 Clay St. National Register Contribution: Y Date: N/AProperty: Blanch House Address: 121 5th St. W. National Register Contribution: Y Date: 1880
- Property: Bourdons House
 Address: 615 Main St. N
 National Register Contribution: Y
 Date: 1870
- Froperty: Bridge Park
 Address:
 National Register Contribution: Y
 Date: N/A
- Property: Business Block
 Address:
 National Register Contribution: Y
 Date: 1870
- Property: Cordenio Severance House Address: 401 Clay St.
 National Register Contribution: Y Date: N/A

- Property: Dodge County Courthouse Address: 22 6th St. E National Register Contribution: Y Date: 1871
- 9. Property: Edmund Beatty House
 Address: xxx Main St.
 National Register Contribution: Y
 Date: 1867
- Property: Greek Revival Residence
 Address: 6th St. & Clay St.
 National Register Contribution: Y
 Date: 1870
- 11. Property: Heinze House Address: 3 5th St. W National Register Contribution: Y Date: N/A
- 12. Property: Hogle House Address: Clay St. National Register Contribution: Y Date: N/A
- 13. Property: Hubbell House
 Address: 502 Main St. N
 National Register Contribution: Y
 Date: 1857
- Property: Mantorville Opera House
 Address: 5 5th St. W
 National Register Contribution: Y
 Date: 1918

- 15. Property: McKean House
 Address: 520 Main St. N
 National Register Contribution: Y
 Date: 1880
- 16. Property: Ol' 57 Café
 Address: Main St./Hwy 57
 National Register Contribution: N
 Date: 1950
- 17. Property: Pioneer Log/Stone House Address: National Register Contribution: Y Date: 1850
- 18. Property: Post Office
 Address:
 National Register Contribution: Y
 Date: 1896
- 19. Property: Puff Bakery
 Address: 609 St. Germain
 National Register Contribution: Y
 Date: 1886
- 20. Property: Restoration House Address: 540 Main St. N

National Register Contribution: Y **Date:** 1856

- Property: Saint John's Episcopal Church Address: 615 Main St. N National Register Contribution: Y Date: 1869
- Property: Saint Margaret's Catholic Church Address: 601 Clay St.
 National Register Contribution: Y
 Date:
- 23. Property: Spilman's Tonsorial Parlor Address: 1 5th St. W National Register Contribution: Y Date: 1870
- Property: Suzy's Shoppe and Gallery Address: National Register Contribution: Y
 Date: 1856
- 25. Property: Teunis Slingerland House
 Address: 501 Clay St.
 National Register Contribution: Y
 Date: 1895

Mantorville and Red Wing Stage Road: Mantorville Section

Road built in 1855 to facilitate trade and mail service between towns settled after 1853 treaty ratification. **County:** Dodge **Address:** off 5th St. **City or Township:** Mantorville **Listing Date:** August 30, 1991 **Significance Level:** State **Criteria:** A (see <u>criteria</u>) *Date:* 1855



Photo of Mantorville and Red Wing Stage Road: Mantorville Section, Dodge County. Minnesota Historical Society.

Wasioja Historic District – 6 records

(Number of National Register contributing properties: 6)

- Property: Civil War Recruiting Station (Wasioja Bank Bldg.) Address: National Register Contribution: Y Date: 1855
- Property: Limestone Kiln Address: National Register Contribution: Y Date: 1858
- 3. Property: The Andrew Doig House Address: National Register Contribution: Y Date: 1858

Kasson

- Eureka Hotel Brick hotel built in 1894 alongside railroad tracks.
 County: Dodge Address: 101 3rd Ave. S.W.
 City or Township: Kasson
 Criteria: A Date: 1894
- Kasson Municipal Building Multipurpose municipal building in Prairie School style designed in 1917 by Purcell and Elmslie.
 County: Dodge Address: 12 W. Main City or Township: Kasson Criteria: A, C Date: 1917
- **3. Kasson Public School** Classical Revival and Craftsman-Style brick and terra-cotta school designed by Nels Jacobson and built in 1918; provided K-12 instruction and sponsored community events, activities and social services.

- Property: Wasioja Church (Wasioja Baptist Church)
 Address:
 - National Register Contribution: Y Date: 1858
- 5. Property: Wasioja School House (Wasioja Elementary School)
 Address:
 National Register Contribution: Y
 Date: 1858
- Property: Wasioja Seminary Ruins Address: National Register Contribution: Y Date: 1860

County: Dodge Address: 101 3rd Ave. NW City or Township: Kasson Criteria: A Date: 1918

- Kasson Water Tower Steel tank atop ornamental limestone tower, built in 1895 by local contractor. County: Dodge Address: 4th Ave. N.W. and 2nd St. N.W. City or Township: Kasson Criteria: C Date: 1895
- Leuthold, Jacob, Jr., House
 Frame residence designed in 1905 by Kees
 and Colburn for founder of early clothingstore chain.
 County: Dodge
 Address: 108 2nd Ave. N.W.
 City or Township: Kasson
 Criteria: B, C
 Date: 1905

Most of the registered properties or sites are located within the city limits of Owatonna. It is not likely that the Stagecoach State Trail will be located near one of these properties. However, if through careful

Steele County

Owatonna – (50 records)

consideration it is determined to locate the trail near any of these properties, appropriate design and interpretation will also be applied.

Pillsbury Academy Campus Historic District

(Number of National Register contributing properties: 5)

- 1. Property: Academy Building Address: 315 Grove St. S. National Register Contribution: Y Date: 1889
- 2. Property: Heating Plant Address: 315 Grove St. S. National Register Contribution: Y Date: 1893
- 3. Property: Jefts Hall Address: 315 Grove St. S.

National Register Contribution: Y Date: 1910

- 4. Property: Lindsay Hall Address: 315 Grove St. S. National Register Contribution: Y Date: 1913
- 5. Property: Music Hall/Conservatory Address: 315 Grove St. S. National Register Contribution: Y Date: 1892

Kaplan Apartments

Polychrome brick apartment house built in 1912 for Godfrey J. Kaplan, founder of Owatonna Tool Company. County: Steele Address: 115 W. Rose St. City or Township: Owatonna Listing Date: July 03, 1986 Date Removed: September 20, 2007 Significance Level: Local Criteria: A, B Date: 1912

See the National Register of Historic Places website for further information. Above data acquired April 18-21, 2011. <u>http://nrhp.mnhs.org/NRSearch.cfm</u>

Appendix C: Stagecoach State Trail Summary of Open House Meetings, Comments

Initiating the preparation of the master plan, open house meetings were held in February 2010, in Byron, Owatonna, and Mantorville. The open house meetings were set up as an informal way to share current information about the planning process and how to be involved, meet with interested citizens, invite public input regarding potential alignment locations, and solicit ideas for connections and desired uses of the future trail. All three open houses were well attended, with a total attendance estimate of 175 people. (Approximately 50 in Byron, 75 in Owatonna, and 50 in Mantorville, however, we are aware that some individuals did not sign in.)

Large color maps identifying a proposed search corridor were available for review and comment. Other posters were displayed that outlined the planning process, a vision and goals for this trail, and proposed questions about the vision for the trail, interested trail uses, ideas for alignment locations and concerns anyone might have at that time. These posters exhibited questions presented in a questionnaire that was available at the open house meetings as well as on the Stagecoach State Trail Planning webpage. The questionnaire was used to gather comments and ideas from citizens interested in this trail and to help guide the planning efforts and drafting the master plan.

Questions and concerns were addressed regarding issues with trails on private property, such as property values, liability, trespass, crime, trail maintenance, impacts to agricultural lands, wildlife management, hunting, and safety. Other topics included protection of wildlife and rare or endangered species, whether the trail would bring economic development benefits to the local communities and timing of its development.

The Stagecoach State Trail Draft Master Plan public review and comment period was held from August 1 through September 2, 2011. During this public review period, three open house meetings were held in three different communities within the search corridor of the trail – Byron (August 18), Mantorville (August 16) and Owatonna (August 22). The combined attendance of all three open house meetings is estimated to be over 120 people.

Large color maps of the proposed search corridor, along with the list of criteria and trail alignment options were displayed and available as handouts. Copies of the Draft Master Plan were also available at the open house meetings, as well as posted on the Stagecoach State Trail Planning webpage. Additional handouts and general trail and planning information were available at the meetings.

Verbal comments ranged from strong support to strong opposition, with generally supportive opinions being the majority of those attending the meetings. Much of the opposition to the trail came from land owners who do not want the trail located on their property. DNR staff talked with land owners and other interested citizens to address questions and concerns that were raised, such as the use of eminent domain to secure alignments, potential impacts to environment and wildlife, and issues such as trespass, privacy, crime, safety and liability. Some land owners indicated that they support the trail as long as it was not located on their property, while a few land owners indicated their interest in considering the possibility of the trail using a portion of their property. Many attendees also inquired about the timeline for development, which is still undetermined.

The few written comments were received during the review and comment period for the Draft Master Plan, most of which support or confirm goals and recommendations in the plan. No new issues or concerns were introduced that the DNR was not already aware of and/or addressed in the master plan. However, one commenter was able to provide additional information and history regarding original stagecoach routes in southern Minnesota and a brief summary has been incorporated into the plan. As the planning for this trail continues, more focus on this history may inform route alignment preferences and help in the development of appropriate interpretive and educational displays along the developed trail.

DNR will continue to meet with the local trail organizations and communities throughout the acquisition and development phases for this trail.

Written responses to the questionnaire provided in 2010 are summarized below:

Planner Notes:

TOTAL Number of Questionnaires or letters received: 43

Comments received in writing also accurately reflect many of the conversations DNR staff had with open house attendees. This is a comprehensive summary of all written comments received from the open house period in February, 2010. Specific responses to each comment are <u>not</u> provided in this document. All comments will be considered as we move forward with the planning and writing of the master plan. Thank you for your time and interest.

1. Trail Vision (Draft)

The local trail organizations have assisted in drafting the following vision statement:

"The Stagecoach State Trail will provide a connection to other state, county, township and city trails and parks, showcasing local and national historic sites and the rich cultural and natural resources of the area. Traveling a portion of a historic stagecoach route as close as possible, this multiple-use trail will highlight the area's scenic, rolling hills of the Zumbro River Valley while promoting and providing good health, recreation and economic benefits to several communities."

Do you agree with this statement?

21 Responses (49% of commenters answered this)

- YES Agree
 - This has been a dream of mine!
 - I and several people would be serious users of this trail system
 - Great vision!
 - Clear and succinct

MAYBE- not exactly

- NO It's not following original stagecoach route close enough
 - Should be located in road right-of-way
 - Don't want trail on my property

What additions, changes, or deletions would you suggest?

6 Responses (14% of commenters answered this)

Suggestions:

 Insert "respecting" before natural resources in line 3; at end add: "and preserving some of the last remaining habitats in Steele County."

- I would like it to follow the original "Stagecoach Trail" as close as possible and the historic ghost towns staying north of Mantorville and Dodge Center.
- I wish there was something in the vision statement that says the trail will improve public safety along some existing public transportation corridors.
- Make sure it connects to cities along Hwy 14 via Kasson, Byron, etc.
- Not multi-use, only walking and biking
- Connecting to as many towns as possible along the way
- None

What do you think will be unique about this trail? Why would people come to ride this trail?

16 Responses (37% of commenters answered this)

BEAUTY - SCENERY

- It's a beautiful area with some unique features
- Scenic, it is nice to enjoy the country and hospitalities of the small towns that it will connect.
- Beautiful scenery along Zumbro River
- Farmland

CONNECTIONS

- Connecting two larger, physically active communities [assuming commenter is referring to Rochester and Owatonna]
- Connects Oxbow Park to Douglas Trail, also west to Owatonna (Rice Lake) will allow Byron, Dodge and Steele Counties access and better health exercise
- Small towns and country
- The connection possibilities to other trails Douglas

HISTORY

- Historic areas
- Mantorville
- Be sure to capitalize on the stagecoach /old west theme.
- As the name suggests, tie it to the history the stagecoaches that connected to Mantorville. That history is already present with the Hubble House restaurant and could be built upon. Mantorville could grow to be similar to Lanesboro with its history, arts, and eateries to visitors and revenue from other parts of the state.

LOCATION

• Location out of metro area, but not too far

USE-BASED

- It is fun and safer than riding the country roads
- Availability exercise
- Family togetherness
- If there was a section to drive horses, that would be our attraction for sure.
- New area in a previously unsafe riding area home-schooled children can use it for the history lesson and physical education.

NEGATIVE/OTHER

- Nothing, only the locals will use it
- I'm not sure
- I am against this trail, it takes up too much agricultural land and also the cost.

2. Trail Connections

The Stagecoach State Trail is part of the legislatively authorized State Trail System and will connect to the existing Douglas State Trail and Rice Lake State Park.

Do you have any ideas for other connections to the Stagecoach State Trail? (i.e. . places of interest, parks, local trails, public lands, etc.)

21 Responses (49% of commenters answered this)

COMMUNITIES / CITIES

• Connect to Owatonna town trails – Rose Street or Mineral Springs

• I have enjoyed a number of trails that were close to where I lived (Sakatah and Douglas). I now live in Claremont and would like to see the trail come in or close to town.

HISTORIC SITES

- Wasioja Civil War Recruiting Site
- Mantorville, Historic District
- Ghost towns
- Connection to historic "Post Town"
- LOCAL TRAILS / PARKS / PUBLIC LANDS
 - Oxbow Park,
 - o It would be nice to have close access to the Oxbow Park hiking trails (no bikes)
 - best is to follow road through park (flat)
 - Oxbow Park to existing trail along County Rd 5, by Byron HS
 - Oxbow Park, Douglas trail near New Haven Bridge. A parking area there would allow users to go on either or both trails. A lot of people park along the roads there now
 - o At a minimum connect to edge with trailhead for bike and car parking to hike in from there
 - I would LOVE to see it go from Douglas Trailhead by IBM to/through /near Oxbow Park where the county roads aren't safe for young bikers. (We don't get there now)
 - Rice Lake State Park
 - Put more trails in the state parks itself
 - Owatonna city trail system
 - Wildflower State Trail (future)
 - All the WMAs
 - Would like to see all the trails joined
 - Please connect to as many schools, local city trails and parks as possible
 - Follow along Zumbro River
 - Public lands that are underutilized or might have outlived their original purpose should be re-purposed, brought back to life for other uses. The brush dump in Mantorville for example, is approximately a 6-acre parcel on the south side of the Zumbro River bank, it is along Hwy 57 and right between the existing Sunrise Trail and the Zumbro River. This site could be improved and converted to a wayside trail rest stop and overlook of the Zumbro River.

ROAD Right-of-Way (ROW)

• Keep the trail in the road ROW, not in wooded areas

3. Trail Alignment

Do you have any recommendations for location of the trail alignment?

23 Responses (53% of commenters answered this)

EXISTING TRAILS / PARKS

- Douglas Trail
 - Connection to Douglas Trail should be between Douglas parking lot and Rochester trailhead. Closer to Rochester is better.
 - Douglas Trail to Mantorville Dodge Center, etc. Small town will benefit and give users rest spots/refueling
 - I would like to see it connect very near the Douglas Trailhead in Rochester (near IBM). We live in Rochester and use the Douglas Trail. Being able to head westward would be an appealing option.
- Oxbow Park
 - I'd like it to pass near to or through Oxbow Park
 - Keep the trail south of Oxbow Park, so the people of Byron benefit and are able to use it.
- Owatonna to Rice Lake State Park follow Havanna Rd east, utilize minimum maintenance road on route to state park.

SCENIC ROUTES

- The more scenic the better along the river, etc. The trail does not need to be level and should not be paved or at least have a dual treadway.
- A natural routing from NW Rochester to Oxbow park through river valley
- Follow river corridors

I would like to see it follow the river as much as it can since that will typically be more scenic.

- COMMUNTIES / LOCAL BUSINESSES
 - Connecting to other parks and small communities

- Connect to local towns for economic boost Prefer connection from Byron, thru Oxbow County Park, to Douglas Trail. We could use existing trail from Byron H.S.
- Close to Byron
- o Mantorville
- o Owatonna
- o Wasioja
- Eden (north Dodge Center, west of Mantorville)
- Havanna (east of Owatonna)
- Historic Districts, Sites
- Improve the public transportation corridors
- Take advantage of existing or planned/proposed local trails
- RAIL CORRIDOR
 - Follow rail road ROWs
- ROADS / HWY 14
 - As close to Hwy 14 as feasible
 - Route along old 14 and railroad tracks
 - Would like to see improved safety along 5th Street East it's the only public transportation corridor available to people living east of Mantorville
 - Along the proposed Owatonna beltline
 - Rural land owners don't want this in their backyards, safer along a road
 - Follow along 75th St to Douglas

GENERAL

- Keep it out of wooded areas
- Not on agricultural land
 - Do not split up farm land by putting trail through the fields
- Why connect all trails?
- Some place with good parking safe if you want to leave a vehicle over night for a multi-day trip
- Don't steamroll the trail through the valley

What are the significant resources, amenities, and cultural features that should be connected by the trail? (i.e. other trails, parks, schools, campgrounds, public lands)

14 Responses (33% of commenters answered this)

- CAMPING
 - Primitive camping sites
- CANOE LAUNCHES
- DRINKING WATER
- GARBAGE CANS
- HISTORIC DISTRICTS, SITES
- LOCAL COMMUNITIES / BUSINESSES
- NATRAL RESOURCES
- OTHER TRAILS / PARKS (connections)
- PARKING LOTS
- PICNIC TABLES
- RESTROOMS
- SCHOOLS
- WMAs

Do you have any ideas for locations of parking lots, picnic areas, benches, overlooks, rest areas, and signs about the history or resources of the area?

13 Responses (30% of commenters answered this)

LOCATIONS

- Parking lot at the County 105 and County 4, south of Oxbow Park
- Oxbow Park
- No parking lots unless in existing communities or parks
- At the edge of towns
- Places to park cars along route
- Connect with any historical spots

- Wasioja Seminary
- Rice Lake Church
- In or near all towns and also near any overlooks

AMENTITIES

- Parking lots large enough for horse trailers
- Benches, an overlook, rest stop area could be placed on the site that is currently being used as the Mantorville brush dump
- Toilets, fresh water, and a few picnic tables near Oxbow Park and in Mantorville
- Signs about local history and points of interest are always good

4. Trail Uses

Bicycling, hiking/walking, dog walking, running/jogging, in-line skating/skate skiing, horseback riding and driving, snowmobiling, education and interpretation are envisioned as uses of this trail. It is also recognized that all uses may not be able to be accommodated for the entire length of the trail. Additional uses allowed or accessed by the trail may include activities such as canoe launching, fishing, nature observations, and hunting (in accordance with state rules and local ordinances).

How do you plan to use the trail?

27 Responses (63% of commenters answered this)

- Bicycling
 - Comfortable doing 20-50 miles per day on bikes
 - Enjoy camping, restaurants and other businesses along the way
 - Bike, but I may be too old by the time it gets built
- Camping
- Day trips to parks or towns
- Dog walking
- Horse/Equestrian uses
 - Allow horses, separate bike/walking and horse trails (like Hay Creek)
- In-line skating
- Multiple uses
 - Bicycle/camp
- Rollerski
- Running
- Skiing/XC Ski
- Snowshoe
- Snowmobile
- Walking/Hiking
- I don't
- No use I question the need for it.

Would you remove any of these uses from the list? Which one(s)

23 Responses (53% of commenters answered this)

Remove All, if it came through my property.

- Canoe launching
- Education/interpretation
- Fishing

•

- Horses/equestrian uses
 - Horses unless there is a separate path for them
 - Stagecoaches, wagons or carts
- Hunting
- Motorized vehicles
 - All motorized uses
 - o ATVs
 - o Snowmobiles

- Nature observation
 - Pets they litter the trail and owners don't pick up waste
 - Keep dogs to edge please or clean up!

Should any other uses be accommodated?

11 Responses (26% of commenters answered this)

- Access to the river
 - o Canoeing
 - Fishing
 - Swimming
- Allow hunting
- ATVs
- No
- Perhaps sections available for horse driving
- Segways
- Snowshoe
- Swimming
- Wheelchairs
- XC Skiing
 - Snowmobilers and skiers need to respect each other's trails and tracks. Very hard to ski on snowmobile tracks, skiers enjoy quiet and solitude of the woods, not so much with snowmobiles

5. Trail Surfaces - natural, crushed aggregate (stone), asphalt.

Which trail surface or combination of trail surfaces would you like to see for the Stagecoach State Trail?

26 Responses (60% of commenters answered this)

PAVED SURFACE

- Asphalt (blacktop) best for bikes, inline skating, strollers, walking, etc.
- Smooth surface
- I'd only ride it if it were paved
- concrete cheaper in long term and smoother than asphalt
- Crushed aggregate for biking is not appealing
- CRUSHED AGGREGATE
 - crushed stone/aggregate
 - crushed aggregate for a while, but eventually pave it

NATURAL

• natural surface for horses, snowmobiles

OTHER/GENERAL COMMENTS

- The cheapest surface to save cost
- Young bikers tired fast on crushed rock, so it's not as good for families
- We've ridden trails all over WI and MN. There is a definite difference between the amount of people using asphalt trails and gravel trails. These trails need to be asphalt. Families with children are deterred by gravel trails because of safety concerns.

6. Neighbor's Concerns

What are your questions, issues, or concerns about being a neighbor to the trail? 19 Responses (44% of commenters answered this)

AGRICULTURAL LANDS

- Interruption to the farm land
- Should not be on agricultural land
- People would complain about farming activities (smells, machinery noise, etc)

CRIME/VANDALISM

- How will the trail be policed to prevent vandalism and littering?
- Crime
- People leaving meth labs

DOGS/PETS

Dogs on the trail

EMINENT DOMAIN

Use of eminent domain to develop trail

ENVIRONMENTAL/RESOURCE IMPACTS

- No wildlife will be around
- Putting a trail down property boundaries would destroy what is intended to be preserved
- Damage to wetlands and woodlands
- Damage to the wood turtle habitat
- Preservation of artifacts, archaeology

HUNTERS

- Poor hunting opportunities
- Please keep in mind that hunting is not done just as sport, it's a source of food for our families

LITTER

Trash, litter

PROPERTY VALUE / PRIVACY

- Decreased property value
- Added costs of trail maintenance
- Lack of privacy with people constantly using the trail
- Hope trail users respect privacy of nearby landowners
- Please don't force the trail through neighborhoods where parallel alternative routes exist nearby. Home owners have already "staked their claim" in residential neighborhoods along the river and invested millions of dollars in their existing homes that provide them with privacy and tranquil beauty. A trail does not provide either privacy or natural beauty to those taxpaying citizens.
- Please be considerate and respectful of what others have invested in, paid for, pay taxes on, and developed.

SAFETY

- Loitering
- The Byron Sportsmen and Conservation Club has a significant safety concern that the trail DOES NOT come in close proximity to our club property and shooting ranges for rifle, pistol, shotgun and archery. Club property is located west of 275th Ave, crosses the middle fork of Zumbro River.

TRESPASS

- Trespassing on private property
- What will a secluded trail bring? Trespassing by berry pickers and rec vehicles already occurs without the trail.

MISC.

- landowner liability
- rude behavior
- use of motor vehicles on trail
- concerns about car traffic being heavier
- None hope it goes right by my home
- Can I sell refreshments to the users?
- Noise
- Keep 100' to 150' from many residences
- Screen where needed with bushes
- Those deciding on the route should walk it and become familiar with what they are dealing with.
- I know Oxbow park staff have concerns but can they look at it differently create interest area like more canoeing, teens interact somehow in the zoo for a positive

7. Trail Management

Do you have any questions, comments, or concerns about trail maintenance?

13 Responses (30% of commenters answered this)

MAINTENANCE

- Local trails need repair, are abused by snowmobiles, ATVs and OHMs.
- The local trails in Kasson-Mantorville are not well kept, so why get more?
- How much will it cost to maintain the trails that are in the flood zone?
- It's like buying a cow the cost of the cow is cheap compared to the years of maintenance. No one will ever be happy with maintenance.

- Does the trail get maintained by the state or is it county by county?
- Whoever does the Root River, Douglas and Cannon Valley Trail are doing a great job!
- I expect it to be similar to the Douglas and Root River Trails
- I hope snowmobiles don't tear it up
- Would they be groomed for cross-country skiing in the winter?

ENFORCEMENT

• I would like to know what enforcement will consist of.

VOLUNTEER

- Horse trail passes may generate funds and horse people volunteer for trail maintenance at Zumbro Bottoms
- The use of volunteers could help control costs.
- Find some volunteers
- Use the folks in jails

INTERPRETATION

- Historical markers
- Animal and plant markers

Do you have any questions, comments, or concerns about enforcement? (typically, state, local and county law enforcement work together to ensure the safety of trail users/visitors/neighbors)

8 Responses (19% of commenters answered this)

JURISDICTION / WHO?

- local police can't control it, not a priority to them
- Hopefully it will bring more law enforcement to our area of the county
- I would assume county sheriff will charge someone (taxpayers) to enforce

COST

Money is too tight, can't afford to enforce

MISC.

- Lots of concerns
- Good signage is important to inform users of the rules (signage at several points along the trail)
- Security of parking lots

Do you have any questions, comments, or concerns about natural resource management?

11 Responses (26% of commenters answered this)

ENVIRONMENTAL IMPACTS

- No, people poach now. If this was open to hunting, it would be worse than ever. The trail is planned too far from the road.
- Avoid wetlands
- Natural or crushed aggregate surfaces are much more natural than asphalt and runoff from impervious asphalt
- I want to be assured that environmental impact will be minimal as far as the river and wildlife.
- Natural Resource management, please consider protecting the 50-foot buffer required by streams and
 rivers. See http://files.dor.atots.mp.up/upters/uptersmart.acdia/abaraland/bufferfact.fur.adf
- rivers. See http://files.dnr.state.mn.us/waters/watermgmt_section/shoreland/bufferfact_fw.pdf VEGETATION
 - It would be a good opportunity to plant prairie all along the trail
 - Plant lots of wild flowers and blooming trees
 - I would rather see trees planted and few removed
 - Losing more agricultural land

MISC.

- Monitor in fall so duck hunters, etc stay off
- Difficult to monitor if off-road
- Don't want snowmobiles to tear up surface
- Doing a great job at getting trails going and info out about them!

8. Information and Education

Three types of information are developed along trails to provide trail users with a safe and enjoyable experience. They are:

Trail user orientation (maps, "you are here" signs)

- Identification of services
- Trail rules and regulations and trail courtesies
- Interpretation of cultural and natural resources (if not already provided)

Are there any informational or educational messages that you recommend be included in the development of trail information and education signs, brochures, and trail website? 11 Responses (26% of commenters answered this)

INTERPRETIVE SIGNAGE/INFO

- Mileage markers along the trail (occasional mile markers)
- Maps should include: water availability, bathrooms, distance
- Information about other state trail maps
- Trail user orientation maps should show location of amenities
- Directions on how to find the trailhead from all roads leading into towns we've had trouble finding some sometimes
- Display the total cost of this project so people will enjoy it
- Historical information would be interesting and important
- Focus on health benefits of exercise vs. riding a motorcycle or snowmobile
- Warning signs in the area in close proximity to the Byron Sportsmen and Conservation Club
- Add some flowers and blooming trees

TRAIL USER ETIQUETTE

• Trail courtesies/etiquette cannot be over communicated

9. Do you have any additional comments or questions?

17 Responses (40% of commenters answered this)

COST/ECONOMY

- Can we afford this in today's economy? My taxes are already too high.
- This is a bright spot in hard times. It brings communities together for an exciting, positive project to work on together.
- This state is in the red now how can it support this when some state parks are closing?
- How can the state have fund for this?
- Where will the money come from for upkeep?
- Several state parks have already closed (? not in MN)

PROCESS

- Consider motorized recreation for this trail.
- Be honest and open with the public your statement about trail use is transparent. "This trail committee wants a 100' ROW for four separate trails; walking and biking, horses, carts and wagons, and ATVs."
- "In talking to one of the trail committee members Thursday night, he stated that they have the trail defined and all landowners committed to sign over their land to the committee, with the exception of two land owners. If they are truly that close, then why spend the money on these open houses, Or was this just another lie or deceitful statement by the committee and/or DNR?"
- Speed up the process!
- Will eminent domain be used to purchase lands???
- Are people that were involved with developing other trails involved or have they been contacted for ideas?
- It's important for communities to realize what a boost this could be to their economy Lanesboro trail for instance. Also important for non-trail users to realize that people who use the trails for the most part are family-oriented, non littering, etc.
- I hope this can happen soon.
- ENVIRONMENTAL IMPACTS
 - Do as little damage as possible to the woodlands!

SAFETY/CRIME

- Remote trails are not safe. Keep it out of wooded areas.
- Keep it close to the road for ambulance access
- Many reports of rapes, assaults, murders on/along trails
- If this will keep bike and joggers off the road, I'm for it a little bit!

MISC.

- Should provide both health and economic benefits to those that live near it. When the economy dips, people often turn to local options for less expensive recreational activities. I would think investment in this trail would provide a good return.
- Consider places to park vehicles to access trails
- I cannot wait until it is completed! It will be used by our family weekly and our club more than once per week
 I cannot wait until it is completed!
- If only portions of the trail were going to have horse trails, it would be important that it be the sections from the Douglas Trail to Mantorville or Wasioja because of the connection to Douglas where there is a horse trail and more horses in the area. (I'm in favor of horses all the way, but that could be a compromise)
- Would love to see this trail happen <u>soon.</u> Especially have it go to Oxbow Park and other camping places/parks west.
- There have been reference made to the trail following the historic pony Express route the Pony Express did not operate in MN. It originates in St. Joseph, MO and went west. [reference made in Owatonna Press article not from DNR]
 - Please do not advertise this as connected with the "pony express"...that was more than 500 miles from Owatonna.
- Thanks for all your hard work on this project.
- 10. If you wish to be included on the Stagecoach State Trail contact list for future updates, please provide your contact information.

(This will not be used or shared for any other purposes.) Please print.

26 Responses (60% of commenters answered this)

<end questionnaire>