

Afton State Park Management Plan Amendment

**Campground Expansion, Trail Revisions, Parking
Management**



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

December 2011



Division of Parks and Trails Approval of Management Plan Amendment for Afton State Park

The Division of Parks and Trails develops plan amendments to update management plans to reflect the current development and operational proposals for a state park or state recreation area. The plan amendment process assists in formulating, evaluating and documenting these proposals.

This amendment to the 1979 Afton State Park management plan addresses several new uses and changes in visitor facilities. It recognizes the addition of camper cabins to the group camping area and plans for related sanitary facilities and potential addition of a third group camp. It addresses the route of the proposed Saint Croix Valley Regional Trail through the park and related changes in the location of horseback trails, balancing the needs of various trail users. It also addresses the issue of parking and access management at the park's northern boundary, and recognizes recent changes to the park's statutory boundary.

The amendment received input and comment both within the Department of Natural Resources and from the public. It went through a public review period, including an open house held at the park, and was approved by the Central Region and Division of Parks and Trails management.

A handwritten signature in black ink, appearing to read 'Courtland Nelson', written over a horizontal line.

Courtland Nelson, Director
Division of Parks and Trails

A handwritten date '21 Dec 11' in black ink, written over a horizontal line.

Date



Afton State Park Management Plan Amendment



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

This management plan amendment has been prepared as required by 2010 Minnesota Laws Chapter 86A.09, Subdivision 1.

For more information on this management plan amendment, please contact any of the following project participants from the Division of Parks and Trails:

Gene Groebner, Park Manager
Kristin Backlund, Assistant Manager

Afton State Park
6959 Peller Avenue S.
Hastings, MN 55033
(651) 436-5391

Joel Stedman, Regional Manager

DNR Parks and Trails, Central Region
1200 Warner Road
St. Paul, MN 55106
(651) 772-7977

Courtland Nelson, Director
Stan Linnell, Planning Manager
Jade Templin, AICP, Principal Planner
Suzanne Rhees, AICP, Principal Planner

Division of Parks and Trails
500 Lafayette Road
St. Paul, MN 55155-4039
(651) 287-5644

We would like to thank all who participated in this planning process.

Copyright 2011 State of Minnesota, Department of Natural Resources

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

TABLE OF CONTENTS

	<u>Page</u>
Purpose	1
Background and Direction from Previous Plans	1
Afton State Park Management Plan	3
Interpretive Plan	4
Natural and Cultural Resource Management Plan	4
St. Croix Valley Regional Trail Master Plan	4
Planning Issues and Proposed Changes	5
St. Croix Valley Regional Trail Connection Options	5
Proposed Changes in Trail Network	8
Camping Facilities	11
Additional Group Camping Facilities	12
Parking and Access at 50th Street	14
Boundary Changes	15
Natural Resource Impacts	15
Important Natural Resources	15
Impacts of Proposed Projects	16
Cultural Resource Impacts	19
Important Cultural Resources	19
Impacts of Proposed Projects	20
Recreation and Visitor Use Impacts	20
Operational Impacts	21
Management Plan Text Revisions	21
Public Review	21
References	22

LIST OF FIGURES

	<u>Page</u>
Figure 1 – Park Facilities	2
Figure 2 – Existing Trails	6
Figure 3 – Trail Options and Constraints	9
Figure 4 – Proposed Changes to Trail System and Facilities	10
Figure 5 – Proposed Changes to Camping Area	13
Figure 6 – Existing Land Cover	17
Figure 7 – Desired Future Conditions (Land Cover)	18

PURPOSE

The purpose of this management plan amendment is to address four issues that could result in changes in park facilities, programming, access, resource management and boundaries. The amendment is intended to:

- Recognize a new use – camper cabins – and to plan for related sanitary facilities and potential expansion of group camping facilities;
- Plan for the extension of the Saint Croix Valley Regional Trail to or through the state park, and to address related changes in the location and use of park trails, balancing the needs of various trail users;
- Address the problem of on-street parking at the park's northern boundary and the larger issue of managing access to the northern half of the park without overtaxing park maintenance and enforcement capabilities; and
- Revise park's statutory boundary to recognize changes in land use and development of previously planned areas.

Management plans are required for state park units. *Minnesota Statutes*, section 86A.09, subd. 4 requires that the construction of facilities and other development conform to the management plan. This amendment will bring the management plan into accordance with current programming and development proposals for the park.

BACKGROUND AND DIRECTION FROM PREVIOUS PLANS

Afton State Park was established in order to preserve valuable public recreational land on the St. Croix River. The state purchased the property in 1968 and it became a state park in 1969. Today the park totals 1,702 acres. The park landscape is rolling glacial moraine and bluff land. Early land survey notes show a combination of oak openings and woodlands. The forests combine upland hardwoods with some pine plantations. Remnant prairies exist within the park, and prairie, oak savanna and mesic hardwood forest communities are being restored. The park is situated in an area of early European farming settlements. The park's goal is to protect, restore and interpret these resources for park users today and for future generations.

The park offers abundant recreational opportunities. Because of its location within half an hour of the Twin Cities, the Park's backpack campground, group campgrounds, and camper cabins fill up quickly, as does the walk-in beach and picnic areas on warm summer days. There are 20 miles of trails that are used for hiking, snowshoeing, and cross-country skiing. Winter use is some of the busiest in the State Park System.

Previous plans for the park established policies relating to each of the issues addressed in this amendment: camping, trail and road access, and park boundaries.

Afton State Park Management Plan

The Afton State Park Management Plan was adopted in 1979. The primary goals for the park expressed in the plan were:

- “To restore and maintain the natural resources of the park, thus preserving an accurate representation of the St. Croix River Valley in presettlement condition.
- To make the park’s natural resources available for public enjoyment, education, and use, primarily through low-density, passive recreation which allows opportunities for a reasonable number of people to experience the natural environment in as unaltered a condition as possible.”

The management plan called for minimizing road access to the park while maximizing trail access. The park was “zoned” for various levels of activity based on the sensitivity of existing natural and cultural resources and the suitability of certain areas for specific uses. Some key features of the plan include:

Camping: Campgrounds were planned for hike-in camping, group camping, and boat-in camping. Campgrounds were intended to be primitive, with no electric service, hand-pumped water and self-contained toilets. “Trail camping” and “riverside camping” areas with boat-in access were planned at the park’s northeast corner near the St. Croix River. A boat/canoe-in campground with vault toilets and hand-pumped water is located in this area.

The group campgrounds in the southeast corner of the park were originally planned as “hike-in” campgrounds; road access and internal parking were added later. An electrically-pumped well was also added at Group Camp 1. Four camper cabins were added adjacent to Group Camp 1 in 2010.

According to the management plan, “development of car campsites was dismissed as being overly space-consumptive, inconsistent with a natural experience in this small metro-area park, and requiring a potentially-damaging network of internal roads. This type of facility is provided at other locations in the region.” Instead, backpack camping was developed in the blufftop area north of the Trout Brook ravine.

Access: An agreement was made with Town of Afton (now the City of Afton) not to develop vehicular access in the northern portion of the park. Instead, a single entrance road was designed to descend into the ravine from County State-Aid Highway (CSAH) 21 following existing contours. Directional signs to the park were placed to bring visitors from the north and west, rather than on CSAH 21 through Afton’s town center.

Trails: An extensive network of trails was planned for the park, consisting of a 3-mile multi-purpose park entrance loop trail, short trails to and through the swimming beach area, and east and west loop trails for hiking and skiing in the northern part of the park. Subsequent trail development has created many more trails, including an extensive horse trail system and a separate paved bicycle/hiking trail that runs from the park entrance to the bridge



Camper cabins have become popular with park visitors



over Trout Brook (see Figure 2, Existing Trail System). The Milwaukee Road Railroad, still in operation when the plan was developed, has been integrated into the trail system as the North River Trail (bicycle/hiking) and the South River Trail (hiking).

Interpretive Plan

This plan, currently in final draft form identifies an interpretive theme for the park as “A Wilderness Experience Close to Home.”

“The park provides visitors, often coming from the nearby metropolitan areas, an opportunity to experience nature-based recreation with a ‘wilderness’ feel. Minimal development along with walk-in rustic camping, picnicking and a natural beach along Lake St. Croix offer scenic, and at times, challenging recreation close to home.”

The plan highlights ongoing native plant community restoration activities, focusing on restoration of hardwood forest communities, oak savanna, and remnant tall grass prairies. It notes that the Park must compete with other state and regional parks and recreation facilities. Most have interpretive programming, which Afton State Park does not currently provide. The Park has offered interpretive programming intermittently since it was opened but does not at present. The plan recommends increasing interpretive programming, improving facilities at the visitor center, and adding outdoor exhibits, signs and interpretive trails.

Unit Plan for Natural and Cultural Resource Management, 2010-2016 (Draft)

This draft plan is intended to provide direction for management of the natural and cultural resources at Afton for this 6-year period. Because it provides sensitive information about rare species and important cultural resources, it is an internal document for DNR staff use only. Its recommendations include:

- Maintain or improve the quality of the native plant communities within the park while continuing to control invasive plants.
- Preserve and perpetuate populations of the rare vertebrate and invertebrate species found within the park.
- Locate trails and other development so as not to impact cultural resources.

Resource information gathered as part of the resource plan was considered in assessing the feasibility of the improvements proposed in this amendment.

St. Croix Valley Regional Trail Master Plan, 2005

This plan, prepared for Washington County Parks by Brauer & Associates, envisions a trail that would connect downtown Afton with Afton State Park, St. Croix Bluffs Regional Park, Carpenter Nature Center, Point Douglas Park, and Prescott, Wisconsin. The plan discusses the history of trail planning in and around Afton State Park:

“The history of planning for a trail in the study area goes back several decades to the 1970s, when the MNDNR considered the prospect of

following the old rail grade along the St. Croix River. That proposal was ultimately not adopted due to local opposition and land ownership issues.

Today, much of the old rail grade is privately owned. In more contemporary times, a study area for the regional trail was established in 1996 as part of Washington County's *Linear Park System Master Plan*. In doing so, the desire for a regional trail was reestablished as part of a larger overall plan for the county. A key distinction in that plan was allowing greater flexibility as to the trail's ultimate location within the study area."

The trail is intended primarily for bicyclists of varying capabilities and needs, from family-oriented groups to fitness enthusiasts and competitive cyclists who currently use St. Croix Trail (CSAH 21) as a premier training ground. The trail corridor extends from the City of Afton south to Point Douglas County Park and the proposed Point Douglas Trail at State Highway 10. The plan considers a variety of trail routes, including St. Croix Trail, local roads, portions of the railroad grade, and several alternate routes through Afton State Park.

The plan was approved by the Metropolitan Council in 2005, with the caveat that only one alignment – not branch alignments that parallel each other – would be eligible for regional funding. As of 2011, the Washington County Parks Division is implementing the regional trail plan, focusing initially on the southern end of the corridor.

PLANNING ISSUES AND PROPOSED CHANGES

Afton State Park, in close proximity to the Twin Cities, can play an important role in the DNR's ongoing efforts to stem the decline in outdoor recreation participation and connect people to the outdoors through the use of Minnesota State Parks and Trails. Programs such as I Can Camp, I Can Bird, Archery in the Parks, Art in the Parks and Outdoor Family Days focus on bringing people, particularly youth, young adults, families with children, and minority populations, into the parks for activities that will encourage them to become regular park users.

People can be attracted to parks both through programs like those mentioned above and through addition of amenities that make park visits easier, such as camper cabins. These efforts have stimulated discussions as to whether some facilities at the park should be improved to attract more of the targeted groups. Higher and more intensive use levels need to be balanced with efforts to maintain the natural and wilderness character of the Park. The ongoing challenge will be to successfully balance the park's increasing role in providing low impact recreation and maintaining its natural character.

St. Croix Valley Regional Trail connection options

Afton State Park currently includes 20 miles of hiking trail, 5 miles of horse trail and 4 miles of bike trail, including several multi-use segments. Figure 2 shows the existing trail network, including several segments that have recently been removed because they duplicated other segments and to limit trail density on steep slopes.

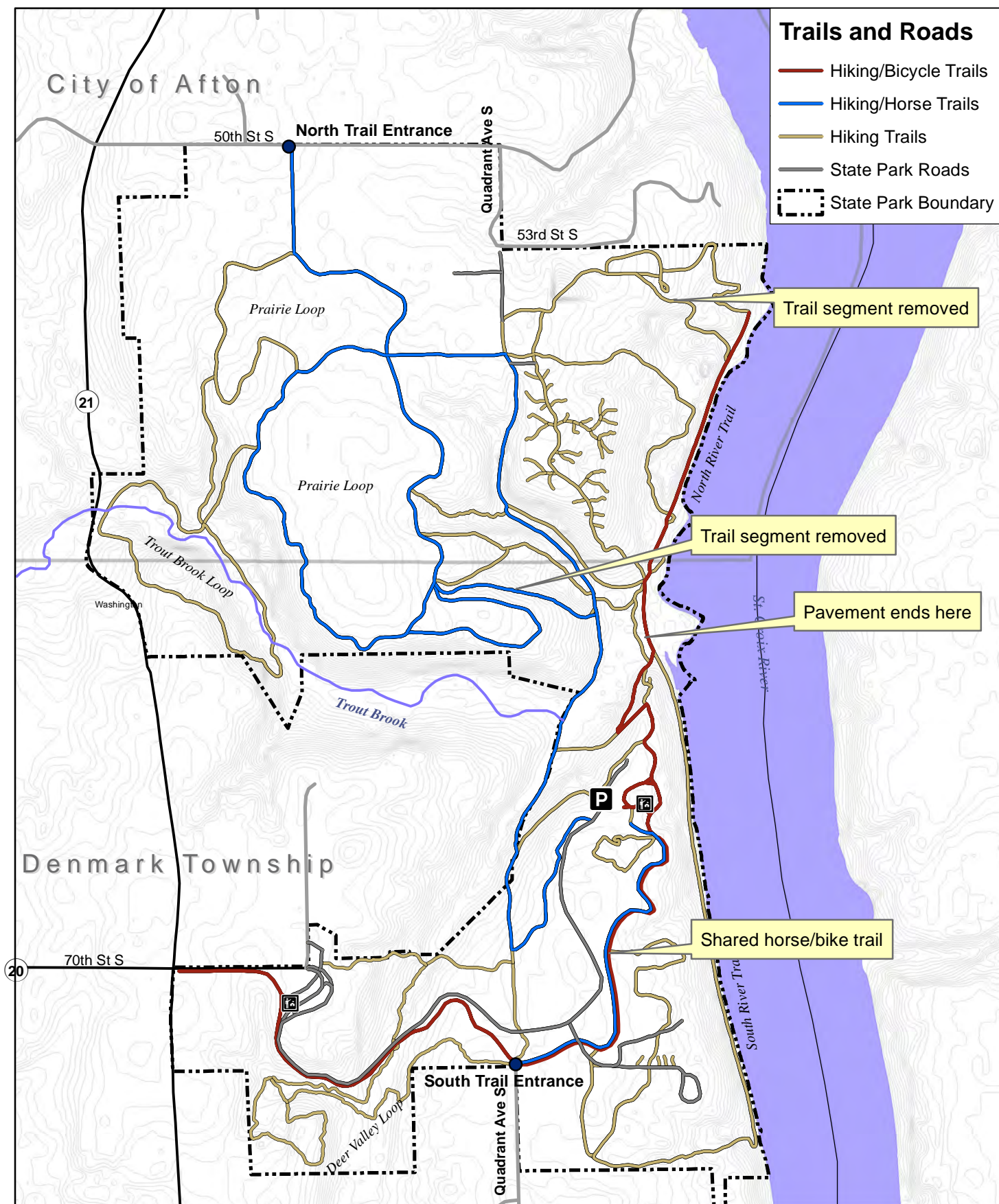


Figure 2

Afton State Park
Management Plan Amendment
Existing Trails

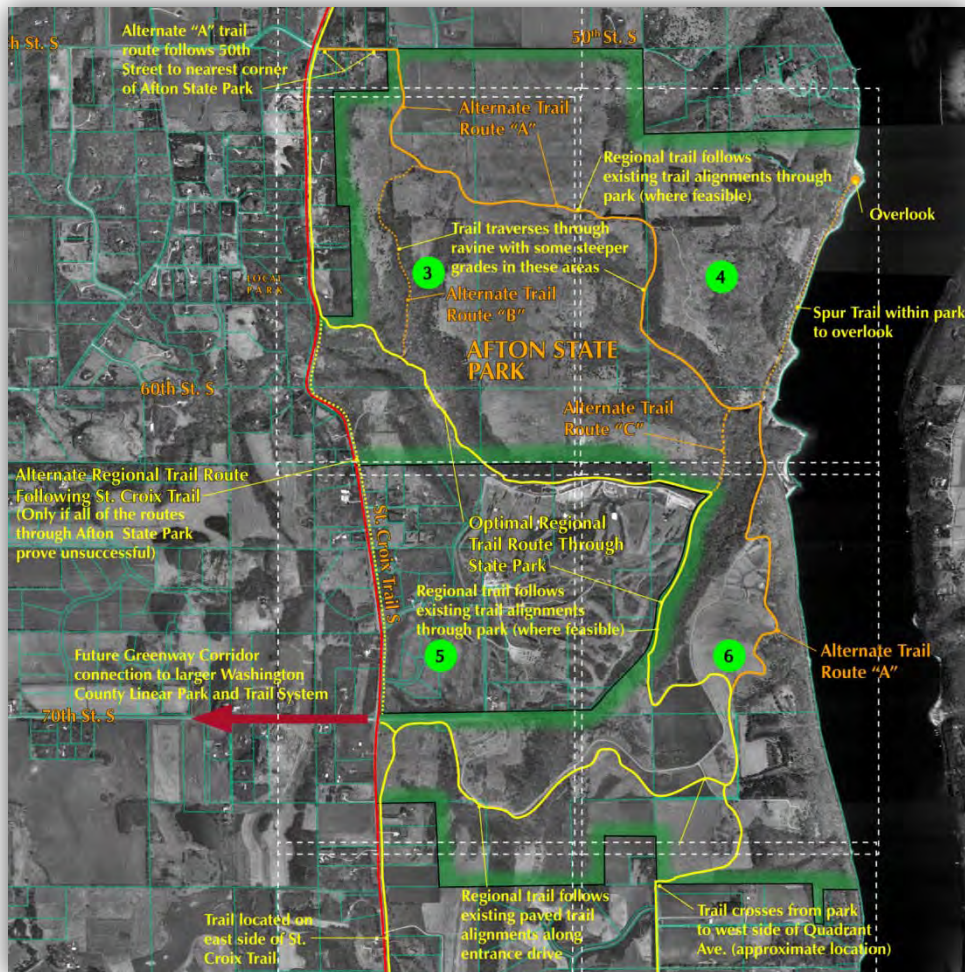


DNR Division of Parks and Trails
Strategic Management Section
August 2011

As mentioned above, the *St. Croix Valley Regional Trail Master Plan* proposes several alternate routes through Afton State Park. The plan states that

“In the context of the park master planning process, the most important factors associated with selecting a trail route include:

- Managing trail grades to as close to 5% or less to the degree possible
- Selecting a scenic route that offers high recreational value and links to other park features
- Minimizing ecological impacts and providing adequate buffering between the trail and sensitive ecological systems, such as Trout Brook”



Portion of trail map showing state park area, *St. Croix Valley Regional Trail Master Plan*, Washington County Parks, 2005.

The following trail routes are proposed in the plan:

- The “optimal route” follows St. Croix Trail (CSAH 21) to the edge of the park, then follows the ravine of Trout Brook to the boundary between the park and Afton Alps, follows this boundary south, then continues along existing trail alignments to Quadrant Avenue, planned as a branch of the regional trail.

- Alternate Route “A” and “B” enter the park from 50th Street S, then follow existing trail alignments south to join the existing paved bicycle trail, then continue south to Quadrant Avenue.
- Another alternative follows St. Croix Trail to the park entrance road, then follows the existing paved bicycle trail before turning south to Quadrant Avenue.

As part of the planning process for this plan amendment, DNR staff have assessed a number of potential routes and weighed the advantages and disadvantages of a “through-park” connection. The goal of this effort has been to provide a feasible, safe and attractive trail alignment while continuing to serve other trail users (hikers, horseback riders) and protecting resource values within the park.

The “optimal route” identified in the plan actually presents the greatest number of constraints: it follows the ravine of Trout Brook, where side slopes are very steep and sensitive natural resources are concentrated; portions of the route also fall within the boundaries of Afton Alps. Its primary advantage is that it maintains more optimal grades, but at the price of significant regrading and significant resource impacts within the ravine. This route would also require an easement or agreement with Afton Alps.

Alternate Route “A” was analyzed as part of the amendment process. As shown in Figure 3, the paved regional bicycle trail and the horse trail system would need to share several segments:

- The entrance from the park’s northern boundary;
- An east-west segment at the north end of the Prairie Loop trail;
- The north-south segment on the original Quadrant Avenue alignment.

Under this scenario, the horse trail system would also be extended to the north and west of the existing Prairie Loop horse/hiking trail.

The first two shared segments appear to have sufficient space for dual treadways that would accommodate both uses. However, the old Quadrant Avenue segment presents challenges because of its steep grades and limited width (16 feet at the narrowest point). With an average slope of 10% over a distance of about a quarter-mile, this segment would present a safety hazard if bicyclists and horses were to share the available space, even on separate treadways. Steep rocky slopes on either side would preclude widening of the trail.

Proposed Changes in Trail Network

After considering the potential routes listed above, the Division concluded that there are no acceptable routes that could traverse the park from north to south without significant impacts to park resources and potential safety hazards for park users. Therefore, the Division recommends that Afton State Park serve as a “trailhead” and destination point for the regional bicycle trail, rather than a through-route. The regional trail would remain on CSAH 21 as far as the park entrance, and then follow the existing bicycle trail into the park. This paved trail would be improved through widening, resurfacing,



Existing bicycle trail adjacent to park entrance road



Steep slopes are found along many park trails

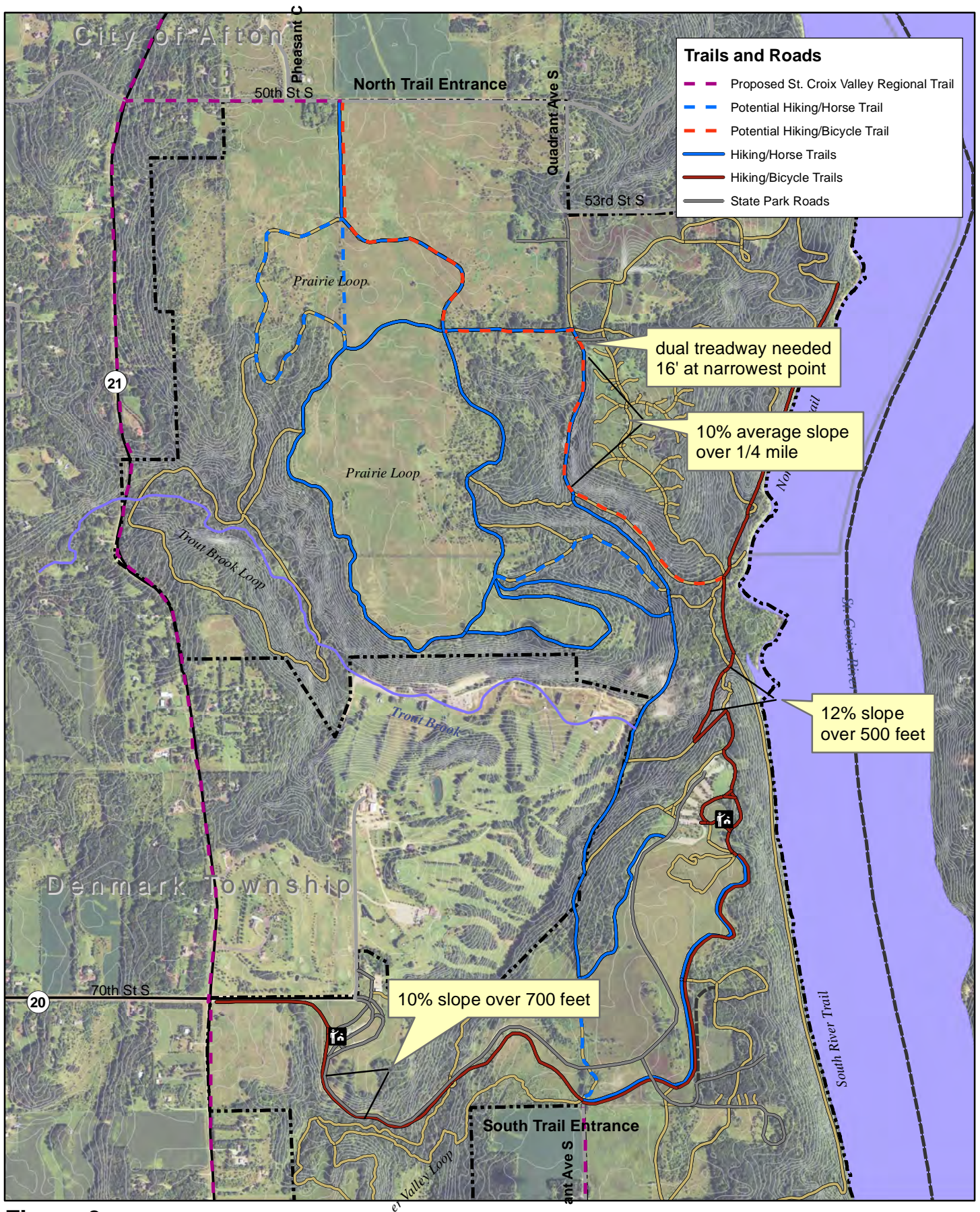


Figure 3

Afton State Park
Management Plan Amendment
Trail Options and Constraints

0 0.25 0.5 1 Miles



DNR Division of Parks and Trails
Strategic Management Section
August 2011

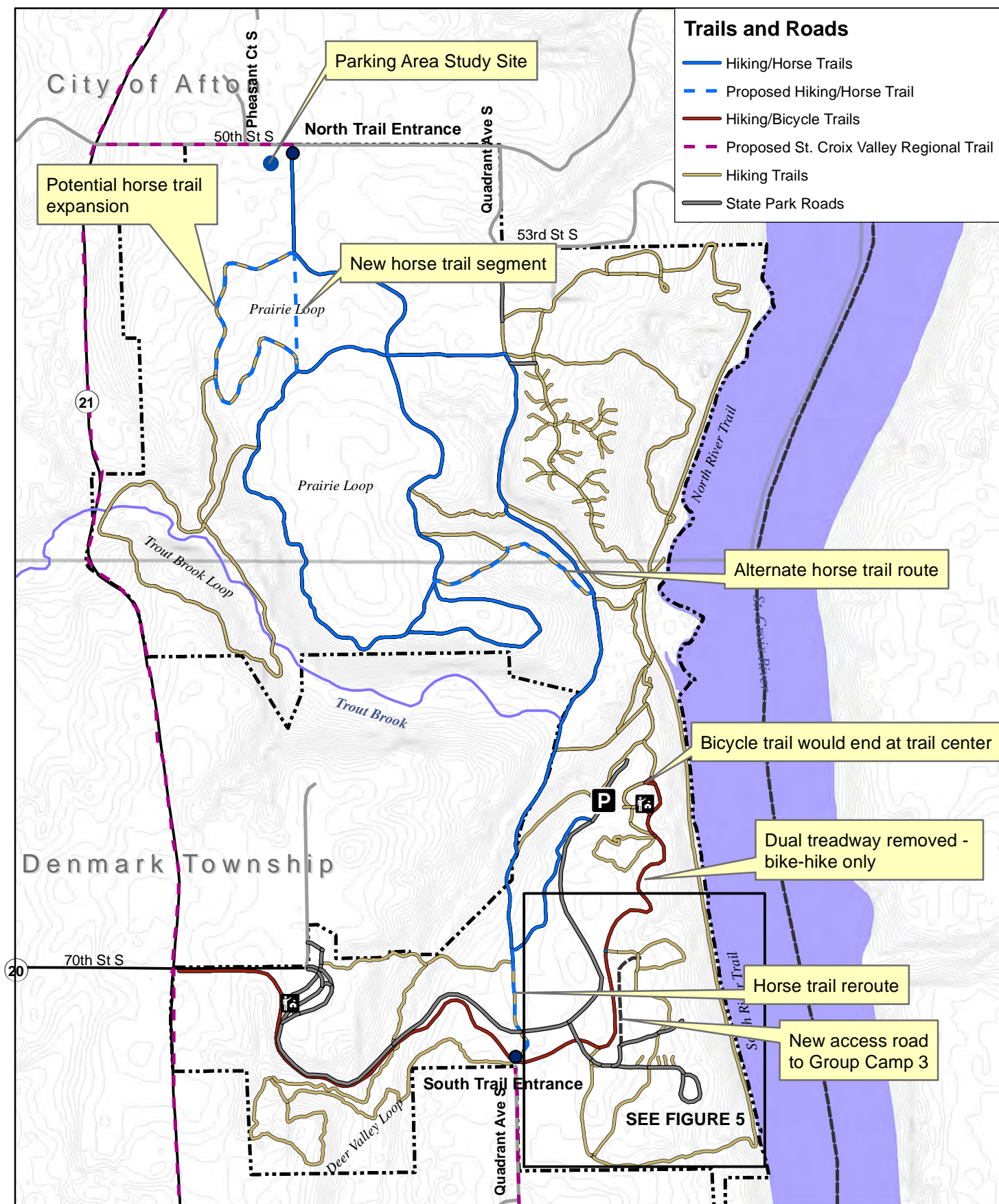


Figure 4

Afton State Park
Management Plan Amendment
Proposed Changes to Trail System and Facilities



DNR Division of Parks and Trails
Strategic Management Section
August 2011

and removal of horse use. It would provide a connection to Quadrant Avenue S. at the park's southern boundary. The trail would end at the park visitor center, where bike racks, interpretive signage, and other amenities for regional trail users would be added. Access to other park facilities and recreation opportunities would be available to trail users from this point.

Related changes in the trail network, shown in Figure 4, include:

- A new horse trail connection from the south trail entrance to the main horse trail, in order to remove horse use from the paved bicycle trail (a segment that gets very little horse use);
- A new horse trail connection from the north trail entrance to the Prairie Loop trail, with potential future extension to the northern "loop" of the Prairie Loop Trail;
- Another new horse trail connection from the main north-south horse trail to the Prairie Loop Trail, using an existing hiking trail.
- Removal of the bicycle trail designation for the paved trail segment north of the Visitor Center, because of steep grades and safety concerns. In addition, due to changes in federal accessibility standards, this trail segment is no longer considered ADA-compliant.

As a result of changes to the horse trail network, total trail mileage would be slightly reduced from the current 6.6 miles (the total mileage following the removal of one trail segment as shown in Figure 2) to 6.4 miles. However, the proposed natural-surface trail segments are likely to be more attractive to riders than the paved bicycle trail.

In conjunction with development of the regional trail, a loop trail option for bicycles should be considered in the future. Rather than requiring cyclists to retrace their route back to the park entrance, a loop of about 3¼ miles could be developed, using segments of existing hiking trails and paralleling the horse trail along the Afton Alps boundary before rejoining the entrance trail near the Quadrant Avenue S. entrance. This loop would include some changes in elevation but would avoid the very steep grades found north of the visitor center.

Camping facilities:

The park's four camper cabins are extremely popular with visitors, and have the potential to attract new park users. The addition of a sanitation building that would serve the cabins and the group camps could increase the attractiveness of both facilities to targeted groups. Modern toilets and showers would make cabins and campsites more attractive for multi-day visits.

One potential site is shown in Figure 5, in a location where an electrical connection and water are already available. The final location will depend on site conditions, including soil conditions for siting a drain-field. Addition of a sanitation building will provide additional amenities for campers and

change the classification of Group Camps 1 and 2 from “rustic” to “Class II” or semi-modern.

An appropriate size for the building will be determined, based on camper cabin and group camp capacities. New construction will follow Minnesota B3 benchmarking guidelines¹ and design innovations such as solar thermal (hot water) systems will be explored, consistent with the DNR’s overall goals of reducing energy use, modeling energy efficiency, applying renewable energy technologies and improving building systems performance (see *A Strategic Conservation Agenda, 2009-2013: Strategic Directions*).



Sanitation building with solar thermal system at St. Croix State Park

Additional group camping facilities:

The potential for a third group camp has been discussed. Demand for the two existing camps is high. A potential site is located about one-quarter mile north of Group Camp 2, as shown in Figure 5. If this site is selected, a new road segment of about one-quarter mile in length would be developed to serve the camp, while a one-quarter mile segment of the existing hiking trail that loops around the site would be removed. The new camp would be classified as “rustic” because the proposed sanitation building would be too far away to serve this site. Parks and Trails staff will conduct a resource assessment of potentially sensitive natural and cultural resources prior to a final group camp siting decision.

Development of a few additional camper cabins would also be feasible. Two additional cabins, for a total of six, could be sited near the existing cabins without impacting the privacy of the group camp. The sizing and capacity of the sanitation building will take all group camp and cabin options into account.

¹ B3 Benchmarking is a building energy management system for public buildings in Minnesota including state, local government, and public school buildings.
<http://www.mnbenchmarking.com/Default.aspx>

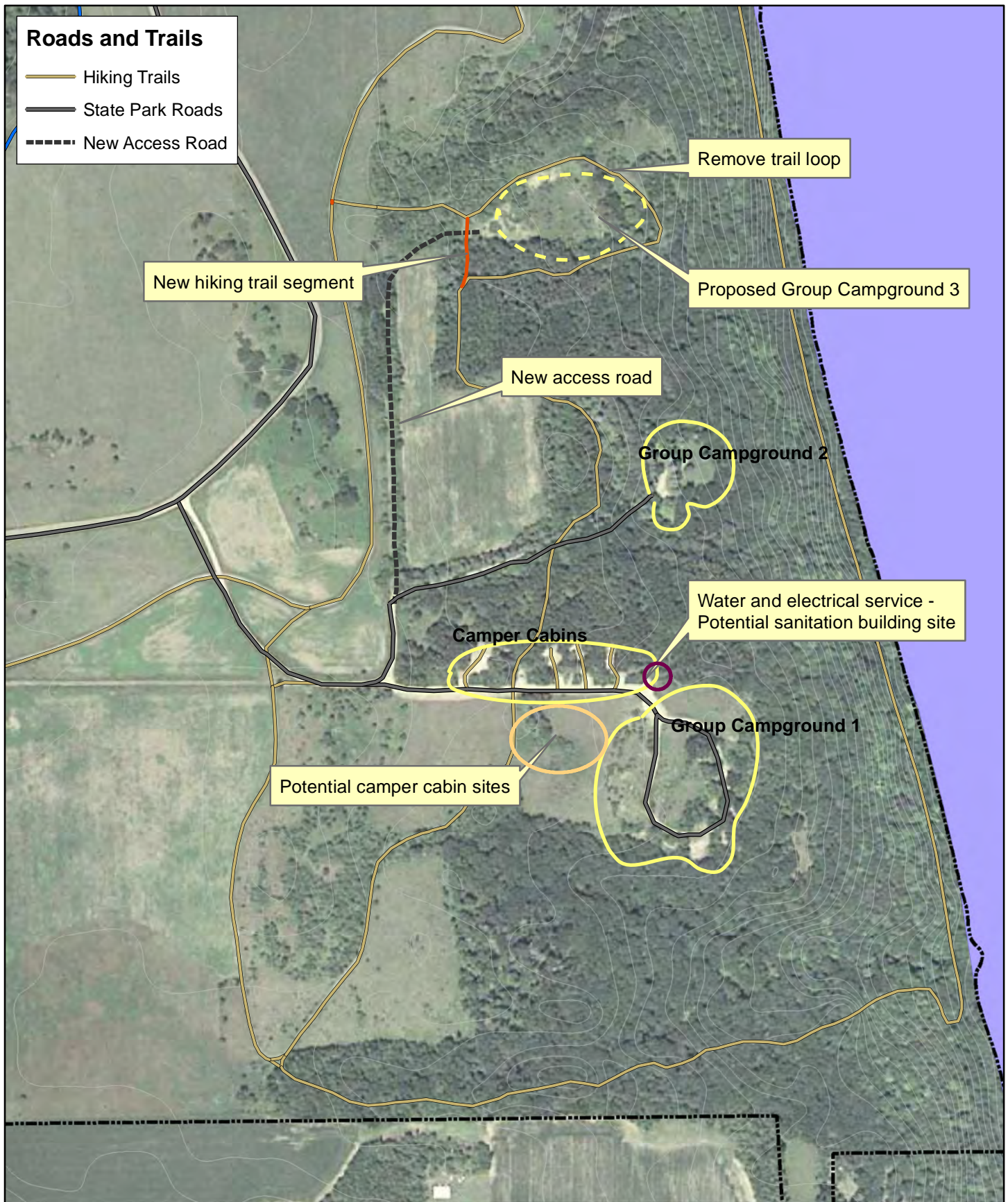


Figure 5

Afton State Park
Management Plan Amendment
Proposed Changes to Camping Area

0 250 500 1,000 1,500 Feet



DNR Division of Parks and Trails
Strategic Management Section
August 2011

This amendment does not propose drive-in camping at individual campsites. Afton State Park was envisioned, planned and developed as a park that maintains a near-wilderness character in combination with a modest level of amenities. The improvements described in this amendment provide additional amenities for visitors at some locations, while other locations and facilities such as the backpack campground retain their rustic character. Furthermore, the nearby St. Croix Bluffs Regional Park has about 70 modern campsites and is designed to accommodate that type of use.

Parking and access at 50th Street

Fiftieth Street South is the park's northern boundary, and provides access to a park entry point (the former Cooney Road) that is popular with local horse trail users, runners and cross-country skiers. A portion of the on-street parking along 50th Street South is likely related to park visitors. The on-street parking has inconvenienced neighboring residents and caused safety concerns for the City of Afton. As a city street, on-street parking is allowed on both sides of 50th Street but is prohibited along the segment to the east due to steep slopes and poor visibility.

The pros and cons of developing a small off-street parking area adjacent to this entrance were considered as part of the plan amendment process. DNR staff met with the City Parks and Recreation Committee and the Washington County Sheriff's Department, which provides public safety services and parking enforcement.

Several options were considered:

- Develop a 8-10 car parking lot, in conjunction with a City prohibition of parking along 50th Street)
- Close the north hike-in entrance
- Take no action (the City may prohibit or restrict parking along 50th Street)

Option 1: Parking lot development. The primary benefit of a parking lot would be improvements to traffic safety, assuming that on-street parking along 50th Street would be eliminated. The lot would need to be limited in size to avoid creating a popular second entrance; a maximum size of 10 spaces would be appropriate. A park entrance fee would be required, through a self-pay station. However, there are challenges that come with adding off-street parking:

- Increased demands on park staff for maintenance and monitoring.
- Challenges inherent in charging access fees at an unstaffed vehicular entrance.
- Assistance will be needed from City and/or county law enforcement in prohibiting on-street parking along 50th Street and in monitoring the parking area.
- The parking lot would not address parking issues or uses not related to park visitors.

If a parking lot is developed, it should focus on avoiding of impacts to intact natural communities and restoration sites. Parking facilities are best located

on existing disturbed areas. One such location is a wooded former farmstead site found on the west side of the park entrance. This location is about 600 feet east of Pheasant Court S., a cul-de-sac on the north side of 50th Street South. This opportunity must be balanced against the restoration of the former agricultural fields in this part of the park to upland prairie. The prairie restoration effort has created high-quality habitat for a variety of upland bird species, including the Henslow's sparrow, a state endangered species.

Option 2: Close north entrance. One alternative to creating off-street parking would be to close the north entrance entirely. This option would not address non-park related parking along 50th Street. Moreover, this action would inconvenience neighboring residents who wish to use the park, and would also preclude using this entrance for the regional trail. Pedestrians can access the park at any point, and keeping the entrance open enables access to be managed.

Option 3: No action by DNR; encourage city parking prohibition. Another alternative would be for the DNR to leave the situation as is. The City could choose to prohibit parking along one or both sides of 50th Street and to enforce this prohibition. If parking is prohibited on both sides of 50th Street, Pheasant Court may need to be posted with "resident and guest parking only" signs to prevent an increase in on-street parking.

Preferred approach: Based on consideration of current use levels at the north entrance, the importance of the restored prairie habitat in this area, and the maintenance and monitoring demands that would come with a parking lot, the Division of Parks and Trails will not pursue parking lot development in the near term. The Division recommends that if the City of Afton determines that on-street parking presents a safety hazard, the City consider signing one or both sides of 50th Street for no parking.

DNR staff will work with the City and the County Sheriff's Department to monitor the situation, and may consider development of the parking lot (Option 1) in the future, in response to changing conditions or needs.

Boundary changes

The park's statutory boundary includes several privately-owned parcels. One of these, the approximately 60 acres of land highlighted in Figure 7 on the north side of the park entrance road, has been largely developed in the past ten years for housing and private open space. It was proposed for deletion from the statutory boundary in 2010, and approved for deletion in the 2011 legislative session.

NATURAL RESOURCES IMPACTS

Important Natural Resources

Logging and subsequent farming of the area that is now Afton State Park changed the landscape from a mosaic of prairies, savannas, oak woodlands

and wetlands to one that was dominated by oak forests and cultivated fields. Today, the Park serves as an excellent example of prairie, savanna and woodland restoration in the state park system.

Figure 6 provides a generalized picture of existing land cover types, while Figure 7 shows desired future conditions – that is, the land cover that would be in place following restoration. Most of the old field areas within the park are being reconstructed as prairie, while several areas near the park’s north and south boundaries, including the group camps, are being restored as oak forest.

There are several areas of the park that are particularly important from a natural resource management perspective:

- The Lower St. Croix National Scenic Riverway forms the entire eastern border of the park. Three sub-watersheds drain into the river through the park. Trout Brook is the primary drainage with the largest watershed impact.
- Fire dependent woodlands that provide habitat to Kittentails (*Besseyia bullii*), a perennial herb that is a state threatened species.
- Native prairie remnants and planted prairies – 2 small remnant prairie communities and several prairie reconstructions – provide critical grassland habitat in the former agricultural landscape.
- Two types of native dry prairie (Southern Dry Savanna and Southern Dry Prairie) concentrated in the southwestern portion of the park, are important reservoirs of rare plants and animals.
- A high quality fire dependent woodland community (Southern Dry-Mesic Oak Forest) is located in the northwest corner of the park.
- High quality floodplain forest community is found in the center of the park along the St. Croix River, especially near the confluence of Trout Brook and the St. Croix River.
- Large, former agricultural fields, currently in herbaceous cover are being reconstructed as prairie.

Impacts of Proposed Projects

As shown in Figures 6 and 7, most changes in the trail network will occur along existing trail corridors, which are previously disturbed areas. Most existing trail corridors traverse areas of old field, now being restored as upland prairie or as oak woodland. New horse trail segments will primarily be located in the northern part of the park, where prairie reconstruction is underway.

The new horse trail segment that connects the north-south horse trail with the Prairie Loop trail is an existing hiking trail segment, but will need to be redesigned to prevent compaction, trenching and erosion of the steep slopes.

The proposed parking lot at 50th Street S. would be located on the site of a former farmstead and surrounded by areas of old field. If the proposed parking lot is developed in the future, clearance of understory invasive species such as buckthorn would be conducted as part of site preparation.



Prescribed burning has been used to reconstruct prairie within the park

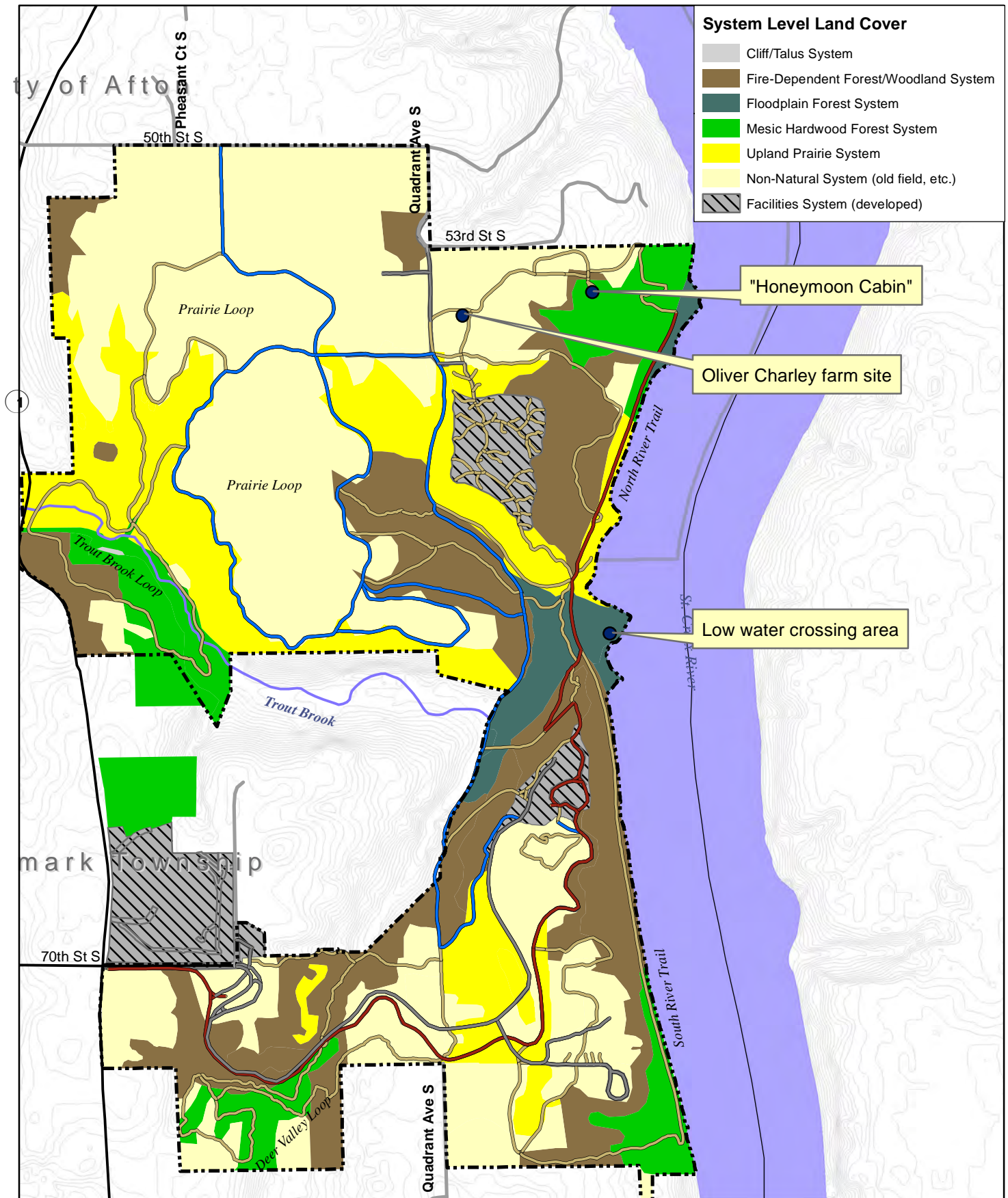


Figure 6

Afton State Park
 Management Plan Amendment
 Current Land Cover and Cultural Resource Sites of Interest

0 0.25 0.5 1 Miles



DNR Division of Parks and Trails
 Strategic Management Section
 August 2011

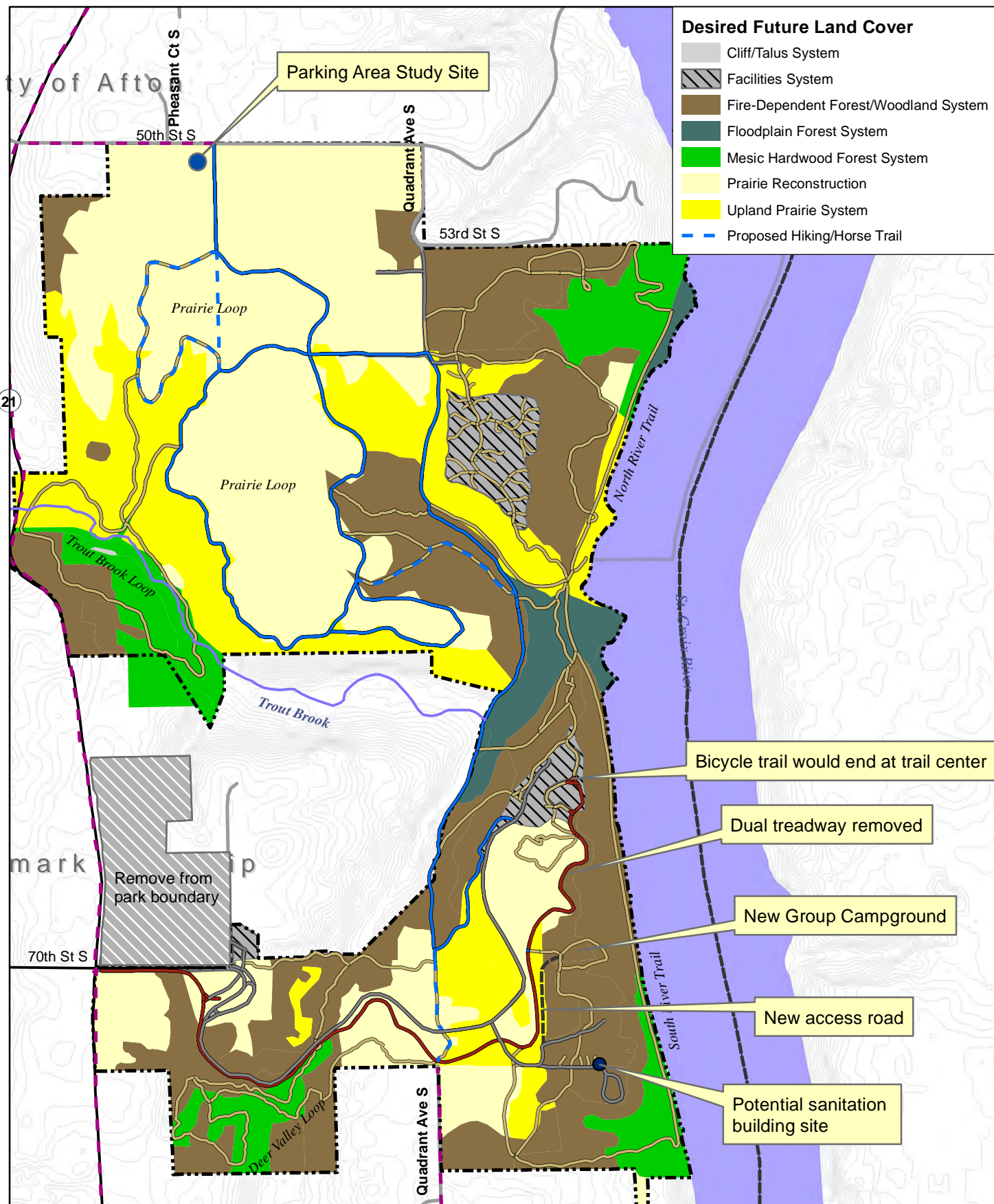


Figure 7

Afton State Park
Management Plan Amendment
Desired Future Conditions and Proposed Changes

0 0.25 0.5 1 Miles



DNR Division of Parks and Trails
Strategic Management Section
August 2011

Changes to the campground area, including addition of a third group camp, would affect areas that were part of a reforestation project in 2008, as shown in Figure 7. The areas are being restored to oak woodland. Development of the proposed new group camp area will need to minimize or avoid core reforestation areas.

Resource assessments will be conducted on all corridors and sites proposed for development or alteration to identify and address potential resource impacts prior to any development.

CULTURAL RESOURCES IMPACTS

Important Cultural Resources

Areas of the park that are of particular interest from a cultural management perspective include the following, also shown in Figure 6:

- The Charley farmstead – Oliver and Frieda Charley farmed 96 acres on the bluff-top that made up the core of Afton State Park. Charley was a conservationist who practiced strip farming and crop rotation and is known for the “bluebird trail” of nesting boxes that he started. The farmstead is located adjacent to the former Quadrant Avenue service road; interpretation of the site is underway.
- “Honeymoon Cabin” Overlook associated with the Charley farmstead is located on the blufftop in the northeast corner of the park.
- “Peanut Line” Railroad – the former railroad alignment that parallels the St. Croix River, operated until 1972 by the Chicago, Milwaukee, St. Paul and Pacific Railroad (the Milwaukee Road), known locally as the Peanut Line.
- The confluence of Trout Brook and the St. Croix River may have been used as a low water river crossing by early settlers.

There have been anecdotal accounts of other sites along the St. Croix River, including a trapper’s cabin and a railroad work camp, but none have been identified in the field.

Archaeological sites have been identified at several locations within the park. Cultural resource reconnaissance surveys were done in 1988, prior to improvements at Group Camp 1, and in 2009 prior to installation of the camper cabins and addition of several campsites to the hike-in campground. The surveys identified archaeological sites in the vicinity of both campgrounds, but none that would be affected by them. There have been reports of a historic Dakota cemetery southeast of the Group Camp 1, but a site has not been identified in the field.

Additional cultural resource surveys would be conducted prior to any construction of new facilities or trails.

The park lies within the boundaries of the Lower St. Croix National Scenic Riverway, which includes the lower 52 miles of the St. Croix River between Taylors Falls, MN/St. Croix Falls, WI and the confluence with the Mississippi River at Point Douglas MN/Prescott, WI. The riverway is managed jointly by

the National Park Service, the Minnesota DNR and the Wisconsin DNR. It is managed by a combination of state rules, easements, and local zoning ordinances. Maximum structure height, setbacks from water and bluff lines, and visibility from the river are all regulated to preserve slopes and the natural appearance of the river.²

Impacts of Proposed Projects

The proposed changes outlined in this management plan amendment would alter trail uses and add additional paved surfaces for the campground access road. Proposed development is unlikely to affect cultural resource sites; however, field surveys will be conducted prior to any development. The sanitation building would fall under riverway zoning standards. The building will be designed to comply with these standards and Washington County zoning requirements (this part of the park is within Denmark Township, which has adopted Washington County standards).

RECREATION AND VISITOR USE IMPACTS

Trail Users

Bicycle trail users would benefit from improvements to the existing bicycle trail to the Visitor Center, including an improved trail surface and the removal of horse use. They would also benefit from improved bicycle amenities such as bicycle racks and interpretive signage at the Visitor Center. At the same time, bicyclists would also no longer be able to use trail segments north of the Visitor Center. Addition of a loop trail for bicycles, a potential future project, would benefit this group.

Horse trail users would see the loss of the 1.1 mile paved trail segment at the south trail entrance, which would be replaced with a one-quarter mile grass and gravel trail. In addition, horse trail users would benefit from the addition of about 1.3 miles of trail in the northern half of the park. The result would be a slight increase in overall trail mileage and the addition of trails more suitable and enjoyable for horse use.

Hikers would experience some changes in the existing trail system, and the overall mileage of hiking trails would decrease by about one-quarter mile with development of a third group camp. Horse trails and bike trails are available for hiking, but horse trails may be less attractive to hikers if horse use is heavy.

Winter trail uses, including cross-country skiing, snowshoeing and walking, will not be affected to any appreciable degree by changes in the summer trail system.

Campers

The addition of a sanitation building would provide an attractive amenity for users of the camper cabins and Group Camps 1 and 2. These campgrounds would be classified as Semi-Modern rather than their current classification

²Lower St. Croix River: A National Wild and Scenic Treasure. Brochure, http://files.dnr.state.mn.us/publications/waters/lower_st_croix_brochure.pdf

of Primitive, causing an increase in campground fees. The proposed Group Camp 3 would be classified as primitive because of its distance from the sanitation building.

OPERATIONAL IMPACTS

Changes to campgrounds, including addition of a sanitation building and a third group camp, would add management and maintenance responsibilities for park staff.

Changes in the trail network proposed in this amendment would add some maintenance requirements for new trail segments, but would lessen the requirements for other segments; for example, removal of bicycle use along the North River Trail. The potential future development of an off-street parking lot would also add to maintenance, management, and enforcement responsibilities of park staff.

MANAGEMENT PLAN TEXT REVISIONS

The 1979 Management Plan was prepared during the early years of park development, prior to acquisition of many properties that are now part of Afton State Park. Therefore, trail and campground plans were conceptual in nature and have changed since the plan was adopted. This amendment supplements the "Recreation Management" section of that plan, including the trail and campground sketch maps in that section. The park's current boundary (including the 2011 deletion) also replaces that shown in the Management Plan.

PUBLIC REVIEW

Beginning in early 2011, DNR staff attended several meetings of the City of Afton Parks and Recreation Committee and City Council to discuss options for managing parking along 50th Street S. At its meeting on April 19, 2011, Afton's City Council approved the following motion:

The city acknowledges the Sheriff's Deputies and residents' concerns of allowing parking along 50th St. S and further encourages the DNR and Afton State Park to add a small parking lot off of 50th St. S to provide parking for state park patrons to help alleviate these safety concerns.

The draft plan was released for public review in June 2011 and an open house was held at Afton State Park on June 21st, attended by 11 people. Comments were also received by e-mail and postal mail.

The majority of comments have been supportive of the plan. Horse trail riders were generally pleased with the proposed addition of new horse trail segments. A number of comments from horse trail riders called for additional access for horses, especially to areas along the river.

A letter from the Grant Trail Rangers received July 29th praised the plan for considering the needs of horseback riders but objected to the proposed removal

of horse use from the paved trail that parallels the entrance road and recommended a dual treadway in this area.

Several comments supported improving bicycle access to and through the park. Others supported maintaining the park's near-wilderness qualities. There was some concern regarding potential loss of hiking trails in the area of the proposed Group Camp 3. Staff noted that it might be possible to retain the existing trail loop with minimal rerouting.

All comments are kept on file along with additional background information at the DNR Central Office.

REFERENCES

Minnesota Department of Natural Resources. 1979. *Afton State Park Management Plan*.

_____. 2009. Afton State Park Interpretive Plan (draft).

_____. 2007. Afton State Park Unit Plan for Natural & Cultural Resource Management.

Minnesota Department of Natural Resources, Minnesota State Park Cultural Resource Management Program. 2009. Cultural Resource Reconnaissance Survey for a Camper Cabin Project, Afton State Park, Washington County, Minnesota. Project Number SPK. 3.100.1.08.

_____. 2009. Cultural Resource Reconnaissance Survey for a Backpack Campsite Project, Afton State Park, Washington County, Minnesota. Project Number SPK. 3.100.2.08

Washington County, Parks Department. 2005. St. Croix Valley Regional Trail Master Plan. Prepared by Brauer & Associates.