



**AITKIN COUNTY COMPREHENSIVE  
RECREATION TRAIL PLAN**

**DRAFT - March 24, 2010**

## AITKIN COUNTY COMPREHENSIVE RECREATION TRAIL PLAN

Prepared by Aitkin County Land Department with oversight from the Aitkin County Park Commission

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### Acronyms

ACLD – Aitkin County Land Department

ATV – All-Terrain Vehicle

DNR – Department of Natural Resources

OHV – Off-Highway Vehicle

OHM – Off-Highway Motorcycle

ORV – Off-Road Vehicle

## Executive Summary

The goal of the comprehensive recreation trail plan is to provide a framework that will guide recreation trail management on county-managed lands in Aitkin County. The plan development process has included an evaluation of current recreation demands and the identification of opportunities to enhance recreation opportunities while balancing natural resource protections and other competing land uses. The planning process has included gathering public input to help inform the management of recreation trails in Aitkin County. The trail plan takes a ten-year view and aims to support recreation trails that are environmental sensitive, economically beneficial and community supported.

Aitkin County is a fast-growing county in the lakes and forest region of North Central Minnesota. The county's population according to the last census figures is 17,400. Recent estimates by the state demographer predict that the county's population will grow 65 percent by 2030. Aitkin County encompasses a total of 1.2 million acres, which includes 365 lakes and over 600,000 acres of public land. Aitkin County is located in the center of the State of Minnesota, containing 100 of the first 400 miles of the Mississippi River and the northern shores of Mille Lacs Lake. The county is located two hours north of the Twin Cities Metropolitan Area and 45 minutes east of Duluth. The lakes and forests of the County draw many people to the area for recreational purposes.

Over half of the land base in Aitkin County is in public ownership, including state lands such as Savanna Portage State Park and federal lands such as the Rice Lake National Wildlife Refuge. The Aitkin County Land Department is responsible for managing 222,000 acres of forestland. Aitkin County is rightfully proud of its vast expanses of forests and plentiful natural resources, and the county's commitment to the sustainable use of natural resources is exemplified in several ways. The forestland managed by the Aitkin County Land Department (ACLD) was among the first public lands in the U.S. to be certified as "well-managed" based on the international standards of the Forest Stewardship Council (FSC). The Long Lake Conservation Center (LLCC) located in Aitkin County is Minnesota's oldest environmental and conservation learning center serving thousands of school age and adult students annually.

Aitkin County offers over 100 miles of designated ATV trails for residents and summer visitors, including the North and South Soo Line trails, Rabey Line, Blind Lake Trail, and the Redtop Trail. In addition, there are over 600 miles of groomed snowmobile trails and several groomed cross-country ski trails that traverse scenic forests and lake areas. Trails are also available for cross-country skiing, horse riding, hunting access and hiking. The county offers campgrounds, trailer and carry-in water accesses, fishing piers, trail shelters and swimming beaches.

The successful development and management of recreation trails in Aitkin County relies upon many resources, the most important of which is human capital and the people and organizations that make quality recreation opportunities possible. Aitkin County is within a region of Minnesota expected to experience "very high" recreation demand as projected for 2025

A component of the plan development process was the creation of an evaluation tool for determining trail suitability. The overall objective of the trail suitability matrix is to provide a mechanism to evaluating the potential environmental impacts of a proposed trail and to determine areas where trail development may be most suitable given existing soil, wildlife habitat and other conditions.

### ***Opportunities to Enhance Trail-based Recreation***

The outcomes of the plan development process included identifying several opportunities and action steps to enhance trail-based recreation on county managed lands in Aitkin County.

#### **Public Feedback Mechanisms**

##### ***Action Step: Develop a survey tool and other public input and feedback mechanisms***

To better understand the needs and recreation trail interests of specific user groups a questionnaire/survey could be developed to gather input. The survey could be administered in person (e.g., at trailheads) or distributed via tax statements or other mechanisms. The questions could be designed for all recreation user types or modified for specific types (e.g., an addendum for motorized or non-motorized or for winter or summer trails). This input mechanism could be part of the public approval and acceptance process for planning activities and would serve as an educational opportunity and provide information about the recreational interests of Aitkin County. The questionnaire could be publically available via a link at the County website and provide an ongoing mechanism for public input and feedback.

#### **Monitoring and Enforcement Planning & Collaboration**

##### ***Action Step: Implementation of written monitoring and enforcement plans***

Monitoring and enforcement are key strategies for reducing and managing the risk of environmental and social conflicts associated with recreation trails. In conjunction with the Northwoods Regional ATV Trail System, the Aitkin County Land Department has developed a collaborative approach to monitoring and enforcement of motorized recreation trails and regulations. This approach provides a model for effectively managing recreation conflicts. Trail uses are likely to change over time, and monitoring can assist in identifying these changes and informing the closure of trails or modification of designated uses if usage rates reach specific thresholds.

#### **Public Education & Promotion of Trails**

##### ***Action Step: Develop trail system identities via maps, signs, logos, websites, etc.***

Given the existing and potential recreation trail opportunities offered in Aitkin County, there is the opportunity to develop a trail system identity that helps communicate the area's amenities to residents and visitors. The Northwoods Regional ATV Trail System helps start this process and further development of trail maps, signage, logos, websites and other communications tools can enhance public awareness of the recreation trails and supporting services and amenities in Aitkin County.

## **Tourism and Economic Development**

### ***Action Step: Explore opportunities for enhanced tourism and economic benefits of recreation***

Aitkin County may have the opportunity to draw new tourists to the area through the enhancement of existing or development of new recreation trails and services. Developing tourism opportunities could have economic benefits for communities and businesses in the county and collaborative marketing efforts could boost the county's image as a tourist destination with regional or national audiences. These efforts could be supported by investments in tourism research, marketing studies and advertising campaigns. Lower cost approaches could include the use of the internet, social marketing sites (e.g., Facebook and Twitter) and collaborations with local businesses and others to develop shared messages and to identify and communicate with target audiences. Audiences could include regional and national recreation clubs and user groups, conventions and publications. A coordinating system for managing trail events could be established to support greater use of the Aitkin County trail system by local communities. An "event coordination check-list" could be developed to manage and promote trail usage. Trails and recreation opportunities should be designed to support and link to local communities, businesses and services.

## **Trail Signs and Maps**

### ***Action Step: Update and enhance trail maps and online recreation information***

A key strategy for supporting the success of recreation trail management in Aitkin County is the development and maintenance of high quality and readily accessible trail maps and signs. This strategy can include continuing to develop maps that are available at the county website (<http://www.co.aitkin.mn.us/Departments/GIS/gismaps.html>), collaborations with the DNR to ensure that information at the DNR website is kept current and accurate ([http://www.dnr.state.mn.us/trails\\_waterways/index.html](http://www.dnr.state.mn.us/trails_waterways/index.html)), and partnerships with local clubs and user groups to develop and distribute trail maps. In addition to folded, pocket-size maps for water trails, motorized and non-motorized, summer and winter trails, maps could also be developed as posters that can be placed in local businesses or meeting places, tear-off pads that could be available at local hotels and motels, or maps could be printed as place-mats used in local restaurants and cafes. To help visitors plan trips to the area, an interactive map (e.g., a Google Map) could be developed with point location data (e.g., trailhead locations, parking lots, campgrounds). An interactive online map would allow travelers to estimate travel time and plan travel routes while also being easy to edit and update. In addition to maps, trail signage is important for communicating recreation opportunities, supporting a quality recreation experience, and ensuring trail user safety. Signs along roadways and travel routes can help direct visitors to trailhead locations and parking areas as well as local amenities and services such as gas stations, restaurants and lodging. Signs at trailheads help communicate the trail route, travel distances, difficulty level and applicable rules and regulations. Signs along the trail can include 911 markers, maps that indicate the current location, directional signs for one-way trails and other information.

## **Birding, Geocaching and Water Trails**

### ***Action Step: Explore emerging recreation trail possibilities***

Aitkin County has a strong existing system of trails, especially for recreation interests such as snowmobiling, ATV riding and cross-country skiing. There are additional opportunities for the county to enhance trail opportunities for recreation interests that can be supported by the unique assets of the county and trails that support areas of growth. There are at least three areas of trail enhancement and development that county could explore, including birding trails, trails and locations for geocaching and water recreation trails. Enhanced equestrian trails could also be considered.

## **Co-Existing Recreation**

### ***Action Step: Integrate trails system to offer maximized opportunities with minimized conflicts***

Although Aitkin County has many acres of public land and many miles of trail, land is still a finite resource and it is not possible that the county can support every desired use on every acre or on every trail. To support the efficient use of the opportunities that are available and to reduce the opportunity for trail user conflict, it is important for the county to clearly identify which uses are allowed on each trail and determine which recreation uses can co-exist on certain trails. Given the seasonality of recreation trail use (e.g., hiking in the summer and cross-country skiing in the winter), it is possible that at least some trails can continue to support multiple recreation types. Experiences in the region suggest that hiking and cross-country skiing trails can co-exist, snowmobiling and equestrian trails may be compatible in some situations, and ATV and equestrian trails may also be compatible. Activities such as geocaching may be compatible with a range of trail types, including water trails. Trail systems can be integrated so that long-distance opportunities are supported in the design.

## ***Action Steps for Specific Recreation Trail Types***

The plan development and public input process helped to identify several action steps for specific recreation types in the county.

### **Snowmobile Trails**

- Maintain existing trails with local clubs
- Collaborate with clubs and partners to ensure maps are printed accurately
- Continue to monitor and enforce ATV/OHV riding to comply with ordinance
- Review trail signs and work with clubs and partners to improve consistency
- Plan an annual (or as needed) meeting (or other form of communication) between the county, contracted loggers and snowmobile clubs to share information about planned forest management activities and to reach agreement on how to address trail use in the area during the activity
- Provide information about trail conditions at the County website and maintain electronic communications with the clubs
- Foresters to work with the Recreation Forester to contact snowmobile clubs when sales could affect snowmobile trails and should attempt to contact clubs before the sale starts

### **ATV/OHM Trails**

- Complete the Northwoods Regional ATV Trail System in a manner that is environmentally sensitive, economically beneficial and community supported
- Develop trail maps and signs in conjunction with the completion of the Northwoods Regional ATV Trail System
- Continue to implement the monitoring and enforcement plan developed for motorized recreation trails to ensure compliance with the ordinance and all other rules and regulations and to reduce conflicts with property owners.
- Develop interpretive signage along the Soo Line trails.
- Support youth safety training.
- Establish grant-in-aid recognition for ATV routes.
- Actively pursue economic promotion of trail routes with local towns.

### **Equestrian Trails**

- Explore possibilities for a designated equestrian trail that will meet the need of users groups
- Identify opportunities to collaborate with a rider group or equestrian club on trail planning, development and maintenance

### **Geocaching**

- Develop guidelines and online registry process for caches located on county-managed lands
- Identify opportunities to collaborate with local communities and geocaching interests to enhance geocaching opportunities in the county

### **Birding/Wildlife Observation**

- Explore opportunities to develop interpretive trails and other services to support birding and/or wildlife watching opportunities on county managed forestlands

### **Waterway Trails**

- Evaluate existing accesses and campsites to identify opportunities for improvement
- Investigate feasibility of outfitter and guiding services being developed in the region

### **Hiking/Hunter Walking Trails**

- Evaluate opportunities to expand existing hunter walking trail opportunities
- Continue to enforce enforcement and monitoring plan on ATV trails to ensure compliance with the county ordinance as well as applicable laws

### **Cross-County Skiing**

- Continue to maintain existing cross-country skiing opportunities
- Explore possible expansion via land exchange

### **Forest Access Roads**

- Monitor road conditions and close roads as necessary due to season or safety concerns
- Maintain road signs that indicate allowed uses
- Evaluate and maintain a balance of motorized and non-motorized designations
- Consider developing a map of forest access roads that are available for recreation

### **Parks and Recreation Areas**

- Inventory and evaluate existing campgrounds to determine current conditions and opportunities for enhancements
- Consider development of enhanced online reservation information, including photos of campsites, GPS location information, trip planning functionality (e.g., Mapquest or Google), etc.

### **Long Lake Conservation Center**

- Continue to maintain and promote recreation opportunities as compatible with environmental education mission and purpose

The county currently does not offer designated trails on county-managed lands specific to snowshoeing, skijoring, dog sledding, mountain biking, and Off-Highway Vehicles (OHVs) (e.g., 4x4s). In accordance with the County Parks and Recreation Ordinance, county forest roads are open to highway licensed vehicle use unless gated or posted closed. County lands are also not compatible with paved trail development (e.g., for biking or rollerblading). The county currently does not have plans to develop trails specific to these uses.

### **Conclusion**

The planning process and the trail suitability matrix help to identify which recreation uses best fit which areas so that conflicts can be minimized and resources protected. The county is interested in planning for new and emerging recreation opportunities including water trails that would allow for expanded kayaking and canoe trips. There is also interest in geo-caching, a relatively new and growing recreation activity. This plan takes a ten-year view on recreation trails on county-managed lands and may be updated as new information becomes available.

## **Section One: Introduction**

### ***Goals for the Comprehensive Recreation Trail Plan***

The goal of the comprehensive recreation trail plan is to provide a framework that will guide recreation trail management on county-managed lands in Aitkin County. The plan development process has included an evaluation of current recreation demands and the identification of opportunities to enhance recreation opportunities while balancing natural resource protections and other competing land uses. The planning process has included gathering public input to help inform the management of recreation trails in Aitkin County.

The County has developed the comprehensive recreation trail plan to help ensure that abundant recreation opportunities can continue to be offered in Aitkin County while addressing increasing demands, responding to emerging trail-based recreation interests and while protecting natural resources, wildlife, forests and soils. The County intends to protect the recreation trails that exist, add new trails where conditions are suitable and continue to balance recreation demands with the other benefits that county-managed lands provide.

The planning process has helped to identify which recreation uses best fit which areas so that conflicts can be minimized and resources protected. The county is also interested in planning for new and emerging recreation opportunities including water trails that would allow for expanded kayaking and canoe trips. There is also interest in geo-caching, a relatively new and growing recreation activity.

The plan takes a ten-year view on recreation trails on county-managed lands and may be updated as new information becomes available.

### ***Background and History***

#### *A Track Record of Recreation Planning and Management*

One of the first efforts in land use planning in Aitkin County was a study released in June 1941 to report on county land uses. The report noted the fact that in the region of Aitkin County there are “thousands of lakes and many beautiful streams which make certain areas a paradise for vacationists, hunters and fishermen.” The report further detailed, “past experience has shown that thousands of people from other parts of this state and other states like to come here for vacations and sports...indicat[ing] that instead of one major industry, N.E. Minnesota has three, namely: farming, timber, and recreation – all are worth promoting.”

Aitkin County was one of the first forested counties in Northern Minnesota to establish a countywide park system. Backed by the Board of Commissioners, a County Land Department and a six-member Park Commission were established in 1961 to administer the county’s park development program.

After receiving financial support from a tax levy in 1963, the Park Commission set out to prepare a Comprehensive Outdoor Recreation Plan for the county in 1966. The Plan was the first

attempt to inventory all of the recreational resources in the county. The county enacted a five-year action program, based on an Economic Development Plan and a Resource Development Plan. In 1970, an updated and more detailed version of the land development plan and recreational facilities survey replaced the 1966 original. The recreation management plan had not been revised since that time, until work on a new plan began in 2008.

### *A Growing County with a Commitment to Natural Resources*

Aitkin County is a fast-growing county in the lakes and forest region of North Central Minnesota. The county's population according to the last census figures is 17,400. Recent estimates by the state demographer predict that the county's population will grow 65 percent by 2030. The City of Aitkin, with a population of 2,000 is the county seat. Aitkin County encompasses a total of 1.2 million acres, which includes 365 lakes and over 600,000 acres of public land. Major highways in the county include US 169, and MN 120 and 65.

Aitkin County is located in the center of the State of Minnesota, containing 100 of the first 400 miles of the Mississippi River and the northern shores of Mille Lacs Lake. The county is located two hours north of the Twin Cities Metropolitan Area and 45 minutes east of Duluth. The lakes and forests of the County draw many people to the area for recreational purposes.

Over half of the land base in Aitkin County is in public ownership, including state lands such as Savanna Portage State Park and federal lands such as the Rice Lake National Wildlife Refuge. The Aitkin County Land Department is responsible for managing 222,000 acres of forestland. Aitkin County is rightfully proud of its vast expanses of forests and plentiful natural resources, and the county's commitment to the sustainable use of natural resources is exemplified in several ways. The forestland managed by the Aitkin County Land Department (ACL D) was among the first public lands in the U.S. to be certified as "well-managed" based on the international standards of the Forest Stewardship Council (FSC). The 380,000 acres of state-managed forests in the county are also certified. More than fifteen local wood and paper product companies in Aitkin County have registered to produce and market certified products, many of which utilize wood harvested from local forests. The Long Lake Conservation Center (LLCC) located in Aitkin County is Minnesota's oldest environmental and conservation learning center serving thousands of school age and adult students annually.

### *A Foundation of Recreation Trails and Activities to Build Upon*

Aitkin County offers over 100 miles of designated ATV trails for residents and summer visitors, including the North and South Soo Line trails, Rabey Line, Blind Lake Trail, and the Redtop Trail. In addition, there are over 600 miles of groomed snowmobile trails and several groomed cross-country ski trails that traverse scenic forests and lake areas. Trails are also available for cross-country skiing, horse riding, hunting access and hiking. The amenities in Aitkin County and the county-managed lands support forest-based and dispersed recreation and outdoor experiences.

In recent years, the Aitkin County Land Department has renewed efforts to plan and manage diverse trail-based recreation opportunities. In 2003, legislation passed that required the Minnesota Department of Natural Resources (DNR) to establish at least 70 miles of new OHV/OHM trail. Aitkin and Itasca Counties applied for the grant and submitted a joint proposal for a 70-Mile Trail Project. The proposal was selected as the best fit for the trail development project based upon the counties having demonstrated land availability, a high level of readiness and effective strategies for public involvement. The development of the 70-Mile Trail Project (now named the Northwoods Regional ATV Trail System) began in 2007 and has created opportunities to review the county's recreation trail resources and management plan. This review led to a desire by the County Board to develop a Comprehensive Recreation Trail Plan to reflect changes in recreation interests and resources and to be prepared for managing recreation opportunities into the future. The decision was made to complete an update of the county's recreation trail plan in 2008.

### ***Goals and Objectives***

The goal of the comprehensive recreation trail plan is to provide a framework that will guide recreation trail management on county managed lands in Aitkin County. In addition, the plan development process has included the objective of balancing natural resource protections with recreation demands and competing land uses. The trail plan aims to support recreation trails that are environmental sensitive, economically beneficial and community supported.

### **Environmental Sensitivity**

Aitkin County is interested in attracting a variety of outdoor recreation enthusiasts to the trails that are available in the county, while maintaining natural resource and wildlife habitat protections. Land use and trail management plans must be compatible with the county's Forest Stewardship Council (FSC) certification requirements.

### **Economic Benefits**

Aitkin County is interested in creating "Destination Trails" that promote the use of the trail systems and reduce off-trail activities and negative impacts. The trail system will be supported by monitoring and enforcement plans, and signs and trail markings will support high quality trail user experiences.

### **Community Support**

Aitkin County is interested in developing recreation trails that support year-round regional visitation and connectivity between major recreation destinations. The trail system will offer diverse trail opportunities for a full range of recreation types.

## ***Resources to support recreation management***

The successful development and management of recreation trails in Aitkin County relies upon many resources, the most important of which is human capital and the people and organizations that make quality recreation opportunities possible. An Ad hoc committee was formed to advise in the plan development. The committee included representatives from throughout the county and with diverse recreation interests. Public meetings were also held to gather input to the plan.

### **County land department staff expertise and partnerships**

The county land department includes a staff of highly skilled individuals with responsibilities for planning, managing and monitoring the county lands and their diverse resources and public benefits. The Department is comprised of the land commissioner, assistant land commissioner, 4 foresters, a recreation forester, forestry/park technician, inventory specialist, survey technician and crew, parks foreman, GIS specialist, survey coordinator and a deputy land commissioner. Park Ambassadors, peace officers and designated County employees may, in connection with their duties imposed by law, diligently enforce the provisions of the County Parks and Recreation Ordinance and eject from parks, persons acting in violation of the ordinance.

### **Clubs and user groups**

Aitkin County includes a number of local recreation clubs and sportsmen's groups that are important partners in managing recreational trails. Members of these clubs also serve as park and trail ambassadors to support monitoring and enforcement efforts as well as participating in youth safety and training events.

## ***Regional Characteristics***

Aitkin County is characterized by a forested landscape, intermixed with wetland and lowland habitats as well as agricultural and developed land use. Forestry and forest related industries, agriculture and tourism are the primary contributors to the county's economy.

### **Climate**

The climate of Minnesota and Aitkin County helps support diversified recreation opportunities, including winter recreation as well as summertime activities. The temperatures in the state range for -60 degrees Fahrenheit to 114 degrees Fahrenheit. The total annual precipitation in Aitkin County is 24-30 inches, including a mix of rain and snowfall.

### **Geography**

Aitkin County is located in the center of the State of Minnesota, containing nearly 100 miles of the Mississippi River and the northern shores of Mille Lacs Lake. The lakes and forests of the County draw many people to the area for recreational purposes. Aitkin County encompasses a total of 1.2 million acres, which includes 365 lakes and over 600,000 acres of public land. The Aitkin County Land Department is responsible for managing 222,000 acres of forestland.

## **Geology and Soils**

The soils of Aitkin County are influenced by glacial drifts and include a mixture of clay, silt and sand. The county has areas of dense glacial till, boulders and gravel deposits. There are also organic soils in lowland and peatland areas. The highest point in Aitkin County is Quadna Mountain, which is 1,589 feet about sea level.

## **Watershed**

Aitkin County is within the Upper Mississippi River Watershed and the county includes more than a dozen rivers and streams. The major navigable rivers that can be used for recreation are the Snake, Mississippi, Willow and Ripple Rivers.

## **Population**

Aitkin County is a fast-growing county in the lakes and forest region of North Central Minnesota. The county's population according to the last census figures is 17,400. Recent estimates by the state demographer predict that the county's population will grow 65 percent by 2030. The City of Aitkin, with a population of 2,000 is the county seat.

## **Major highway access and transportation routes**

The county is located two hours north of the Twin Cities Metropolitan Area and 45 minutes east of Duluth. Major highways in the county include US 169, and MN 210 and 65. The county has 1,647 miles of road.

## **Recreation Infrastructure**

Aitkin County offers over 100 miles of designated ATV trails for residents and summer visitors, including the North and South Soo Line trails, Rabey Line, Blind Lake Trail, and the Redtop Trail. In addition, there are over 600 miles of groomed snowmobile trails and several groomed cross-country ski trails that traverse scenic forests and lake areas. Trails are also available for cross-country skiing, horse riding, hunting access and hiking. The county offers campgrounds, trailer and carry-in water accesses, fishing piers, trail shelters and swimming beaches.

## ***Existing Trails and Recreation Facilities***

In addition to the Aitkin County forest road system of more than 200 miles and the more than 600 miles of groomed snowmobile trails, the county has a number of existing trails and recreation facilities.

### *Motorized Recreation Trails:*

Soo Line ATV Trails (North and South)

Rabey Line ATV Trail

Blind Lake ATV Trail

Red Top ATV Trail

### *Hunting/Fishing Trails:*

Hunter/Walker Trails (Non-Motorized Forest Roads) - 13 miles

Snake River Walking/Fishing Trail

Twin River Springs Walking/Fishing Trail

### *Campgrounds:*

Aitkin Campground (Aitkin)

Berglund Park Campground (Palisade)

Jacobson Campground (Jacobson)

Snake River Campground (South of McGrath)

### *Recreation Facilities:*

Jacobson Wayside Rest

Browns Lake Snowmobile/ATV Shelter

Lake Accesses (Carry-in and Trailer)

### *Hiking and Cross-Country Ski Trails:*

Long Lake Conservation Center–  
Hiking and Cross-Country Ski  
Trails

No Achen Cross-Country Ski Trail

Vispo Property Hiking and Cross-  
Country Ski Trails

Jacobson Campground Walking  
Trail

## Integrated Recreation Management

Northern Minnesota is home to a number of existing state and regional recreation trails, including those already managed by the Aitkin County Land Department. The Aitkin County Comprehensive Recreation Trail Plan incorporates the potential to link to these trails and the need to address existing land management plans and objectives.

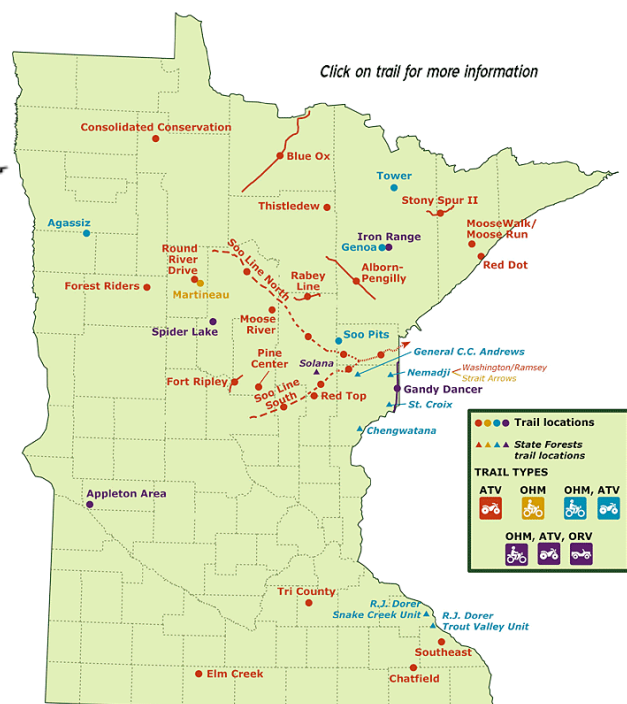
Within Aitkin County, there are state, county and federally administered lands that provide recreation opportunities, including Savanna Portage State Park and the Rice Lake National Wildlife Refuge.

Figure 1. State Trails Map



Source: <http://www.dnr.state.mn.us/maps/index.html>

Figure 2. OHV Trail Locations Map



## ***State Recreation Trails in Northern/Central Minnesota***

### **Cuyuna Lakes State Trail**

- Currently 6.1 mile paved trail
- Located in Crow Wing County, mostly within the Cuyana Country State Recreation Area
- Master plan calls for trail to be 35 miles long and run through Baxter, Brainerd, Riverton, Ironton, Crosby, Cuyuna, and Aitkin
- Currently ends near Crosby, west of Aitkin County
- Trail will connect to Paul Bunyun State Trail
- Uses: biking, hiking, in-line skating

### **Paul Bunyun State Trail**

- Currently 74.5 mile paved trail between Walker and Baxter
- Located in Cass and Crow Wing Counties (will extend north into Hubbard and Beltrami Counties)
- When finished, trail will be 110 miles long connecting Bemidji and Brainerd
- Trail section from Walker to Bemidji currently unpaved and undeveloped
- Trail connects to Heartland State Trail and will eventually connect to Cuyana Lakes State Trail
- Uses: biking, hiking, in-line skating, snowmobiling

### **Heartland State Trail**

- 49 mile trail between Park Rapids and Cass Lake – contains paved and grass sections for multi-use
- Located in Hubbard and Cass Counties
- Trail connects to Paul Bunyun Trail
- Uses: biking, hiking, in-line skating, snowmobiling, horseback riding

### **Central Lakes State Trail**

- 55 mile paved trail between Fergus Falls and Osakis
- Located in Otter Tail, Grant and Douglas Counties
- Trail does not connect to any other state trails; connects to Lake Wobegon Regional Trail on south end
- Possible link could be created between east end of trail and west end of completed Cuyana Lakes State Trail (from Osakis to Baxter)
- Uses: biking, hiking, in-line skating, snowmobiling

### **Willard Munger State Trail (Hinkley – Duluth segment)**

- 63 mile paved trail between Hinkley and Duluth
- Located in Pine, Carlton and St. Louis Counties

- Other segments of trail: Alex Laveau Memorial Trail and Boundary segment
- Trail passes Banning State Park and Moose Lake State Park, and goes through General Andrews State Forest and Jay Cooke State Park
- Possible link could be created between east end of Cuyana Lakes State Trail and Hinkley – Duluth segment
- Uses: biking, hiking, in-line skating (horseback riding and snowmobiling opportunities on other two segments of trail)

### **Taconite State Trail**

- 165 mile trail between Grand Rapids and Ely, 6 miles paved near Grand Rapids and the rest is natural surface trail
- Located in Itasca and St. Louis Counties
- Connects to Arrowhead State Trail and Mesabi Bike Trail
- Trail links three state parks: Bear Head Lake, Soudan Underground Mine, and McCarthy Beach
- Possible link between southwestern end of trail and east end of finished Cuyana State Trail (connecting Aitkin and Grand Rapids)
- Uses: biking and in-line skating on paved segment, hiking, snowmobiling, horseback riding

## ***Regional and National Trails***

### **Northwoods Regional ATV Trail System**

- at least 70 miles of natural surface trail
- Being developed in Aitkin and Itasca Counties
- Connects with Soo Line Trails and other existing routes
- Uses: ATV/OHM (primary), walking, horseback riding (secondary)

### **North Soo Line Trail**

- 148 mile natural surface trail
- Located in Carlton, Aitkin and Cass Counties
- Connects with South Soo Line Trail
- Runs through Hill River State Forest, Bowstring State Forest and Chippewa National Forest
- Possible connection to Rabey ATV Line (in Aitkin County), Blind Lake ATV Loop (in Aitkin County), Willard Munger State Trail, Cuyana Lakes State Trail and Taconite State Trail
- Uses: ATV use only

### **South Soo Line Trail**

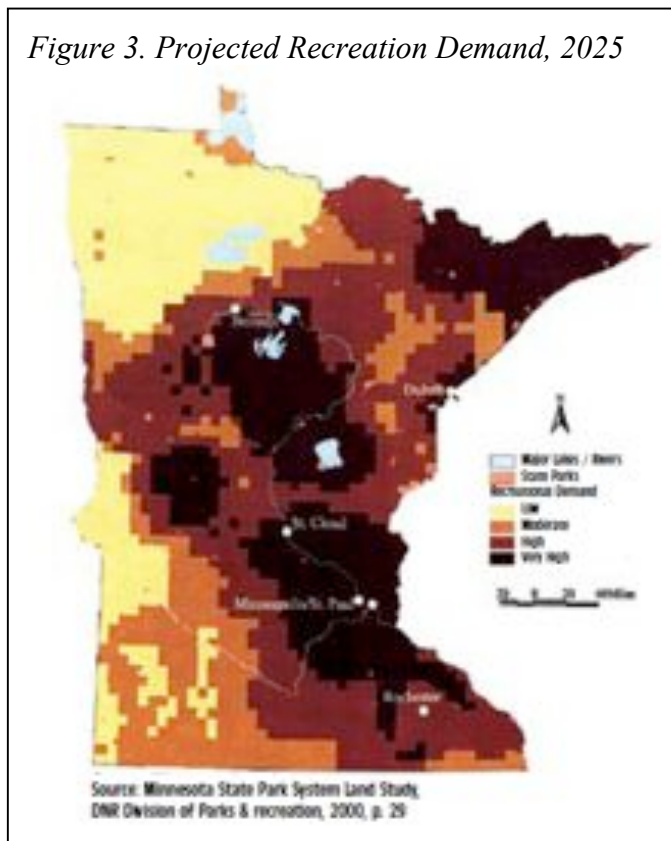
- 126 mile natural surface trail
- Located in Carlton, Pine, Aitkin, Mille Lacs and Morrison Counties in MN and Douglas County in WI
- Connects to Red Top ATV Loop (in Aitkin County) and North Soo Line Trail
- Runs through Solana State Forest and near Mille Lacs State Park and General Andrews State Forest
- Possible connection to Willard Munger State Trail and Cuyana Lakes State Trail
- Uses: ATV use only

### **North Country National Scenic Trail**

- 4,600 mile trail (not completed)
- Located in New York, Pennsylvania, Ohio, Michigan, Wisconsin, Minnesota and North Dakota
- Possible connection to Willard Munger, Taconite, Paul Bunyun, and Heartland State Trails in Minnesota
- Uses: hiking, biking, snowmobiling

## Section Two: Planning Process and Procedures

Figure 3. Projected Recreation Demand, 2025



### **Research on Recreation Trends and User Data**

Recent research related to recreation use trends demonstrates the importance of comprehensive planning for recreation trail management and development.

- Demand for trails (motorized and non-motorized) is great, but suitable land for trails is diminishing and the process of creating trail systems is becoming more complex and political
- According to MNDNR demand for recreation trails will grow as a result of population growth within the state
- MNDNR states that the rate of ATV, OHM and ORV registration has steadily increased annually

over the past fourteen years: greater number of vehicles registered equals greater demand for adequate motorized rec. trails (ATV registration has nearly doubled every five years according to ten year forecast)

- There is high demand for access to non-motorized trails, and the number one recreational activity according to MNDNR Outdoor Recreation Participation Survey is walking/hiking (54% of those surveyed stated this as their number one outdoor recreation activity)
- According to MNDNR's *Ten Year Recreation Forecast* ATV use will dramatically increase, recreation activities such as camping, walking, jogging and skiing participation will remain stable, and wildlife activity participation such as bird watching, hunting and fishing will decrease
- Aitkin County is within a region of Minnesota expected to experience "very high" recreation demand as projected for 2025 (Figure 3.)

## ***Planning Process***

### **Public Participation Methods**

An advisory committee assisted in the development of the comprehensive recreation trails plan. The committee included citizen members with diverse recreation experiences in Aitkin County as well as experience with trail development and maintenance, enforcement and monitoring and trail user safety and emergency response services. Three meetings were held with the committee (August 12, 2008; October 27, 2008; and May 14, 2009). A meeting was also held with county land department staff on October 27, 2008 and updates on the planning process were provided to the Parks Commission at various times during the project. Public meetings were held in August 2009 (August 26<sup>th</sup> at McGregor School and August 27<sup>th</sup> at Hill City School). A webpage was developed and maintained for the duration of the project as well as an electronic contact list with email address of 98 organizations and individuals identified as stakeholders to the project. News releases were distributed about the project and a response form inviting public input was distributed to the project contact list, available at meetings and available at the project website (see Appendix A). The draft plan will be posted at the project website and made available for public comment. A final public meeting will also be held before the plan is finalized. The finalized plan will include written responses to any public comments received regarding the draft plan and a summary of changes made in response to the public comments.

### ***Preliminary Investigation and Analysis***

#### ***Strengths, Weaknesses, Opportunities, Threats (S.W.O.T.)***

Through input from the advisory committee, land department staff, and private citizens, an analysis was completed to identify the perceived strengths and weaknesses of the existing trail-based recreation opportunities in Aitkin County. The investigation also identified opportunities for improvement as well as concerns or threats that need to be addressed.

#### **Strengths**

##### *Existing Trails & Users - Location, Location, Location – Partnerships and Collaboration*

Aitkin County has significant existing strengths related to trail-based recreation. The county already has an existing trail infrastructure that supports diversified motorized and non-motorized and year-round recreation opportunities. This existing trail infrastructure supports an established visitor and user base, including a developed tourism industry and local clubs and trail user groups.

Aitkin County also benefits from its many natural amenities and “northwoods” location. The forests and fields of the county offer scenic recreation opportunities and wildlife and bird observation possibilities. The lakes, rivers, parks, waysides rests, shelters and campgrounds help support diversified and memorable outdoor experiences.

The existing partnerships between the county and state and federal agencies, local businesses, community organizations, clubs and user groups and other stakeholders and citizens have helped establish a well managed recreation trail system. These collaborations have contributed to effective trail development and maintenance efforts, monitoring and enforcement partnerships, and safety and training efforts.

## **Weaknesses**

### *Increasing Demand – Potential Conflicts – Enforcement & Monitoring – Maps & Signs*

Aitkin County has been challenged recently by the potential for recreation conflicts to occur because of competing land uses and the increased demand for recreation trails. One of the most significant weaknesses the county has faced has been the lack of means to address environmental damage resulting from off-trail ATV/OHV riding. This weakness is linked to other challenges in the county's trail system, including weak connectivity between existing trails and points of interest, including connections to services, amenities and communities. There have also been challenges due a lack of understanding of user group needs and interests, including what types of trails and associated services are needed to support a quality recreation experience. Some user groups are frustrated by the restrictions on uses for specific trails while other trails are underutilized because they do not meet the needs of intended users. A basic weakness for the county has been a perceived lack of good maps and inadequate trail signage.

## **Opportunities**

### *Communication – Education & Information – Innovation - Management*

To address the challenges with the current system, while still supporting the strengths and helping to build better recreation trail opportunities in the county, there are several actions the land department can consider. Some of these opportunities are already well underway.

## **Public Feedback Mechanisms**

### *Action Step: Develop a survey tool and other public input and feedback mechanisms*

To better understand the needs and recreation trail interests of specific user groups a questionnaire/survey could be developed to gather input. The survey could be administered in person (e.g., at trailheads) and could be designed for all recreation user types or modified for specific types (e.g., an addendum for motorized or non-motorized or for winter or summer trails). This input mechanism could be part of the public approval and acceptance process for planning activities and would serve as an educational opportunity and provide information about the recreational interests of Aitkin County. The questionnaire could be publically available via a link at the County website and provide an ongoing mechanism for public input and feedback.

## Monitoring and Enforcement Planning & Collaboration

### *Action Step: Implementation of written monitoring and enforcement plans*

Monitoring and enforcement are key strategies for reducing and managing the risk of environmental and social conflicts associated with recreation trails. In conjunction with the Northwoods Regional ATV Trail System, the Aitkin County Land Department has developed a collaborative approach to monitoring and enforcement of motorized recreation trails and regulations. This approach provides a model for effectively managing recreation conflicts. Trail uses are likely to change over time, and monitoring can assist in identifying these changes and informing the closure of trails or modification of designated uses if usage rates reach specific thresholds.

## Public Education & Promotion of Trails

### *Action Step: Develop trail system identities via maps, signs, logos, websites, etc.*

Given the existing and potential recreation trail opportunities offered in Aitkin County, there is the opportunity to develop a trail system “identity” that helps communicate the area’s amenities to residents and visitors. The Northwoods Regional ATV Trail System helps start this process and further development of trail maps, signage, logos, websites and other communications tools can enhance public awareness of the recreation trails and supporting services and amenities in Aitkin County.

## Tourism and Economic Development

### *Action Step: Explore opportunities for enhanced tourism and economic benefits of recreation*

Aitkin County may have the opportunity to draw new tourists to the area through the enhancement of existing or development of new recreation trails and services. Developing tourism opportunities could have economic benefits for communities and businesses in the county and collaborative marketing efforts could boost the county’s image as a tourist destination with regional or national audiences. These efforts could be supported by investments in tourism research, marketing studies and advertising campaigns. Lower cost approaches could include the use of the internet, social marketing sites (e.g., Facebook and Twitter) and collaborations with local businesses and others to develop shared messages and to identify and communicate with target audiences. Audiences could include regional and national recreation clubs and user

**Figure 4. Trail Signs**



*Interpretive Sign with Historic Information*



*Trail Map with Business Information*



*Water Access Sign*



*Trail Rules and Regulations Sign*

groups, conventions and publications. A coordinating system for managing trail events could be established to support greater use of the Aitkin County trail system by local communities. An “event coordination check-list” could be developed to manage and promote trail usage.

## **Trail Signs and Maps**

### ***Action Step: Update and enhance trail maps and online recreation information***

A key strategy for supporting the success of recreation trail management in Aitkin County is the development and maintenance of high quality and readily accessible trail maps and signs. This strategy can include continuing to develop maps that are available at the county website (<http://www.co.aitkin.mn.us/Departments/GIS/gismaps.html> ), collaborations with the DNR to ensure that information at the DNR website is kept current and accurate ([http://www.dnr.state.mn.us/trails\\_waterways/index.html](http://www.dnr.state.mn.us/trails_waterways/index.html) ), and partnerships with local clubs and user groups to develop and distribute trail maps. In addition to folded, pocket-size maps for water trails, motorized and non-motorized, summer and winter trails, maps could also be developed as posters that can be placed in local businesses or meeting places, tear-off pads that could be available at local hotels and motels, or maps could be printed as place-mats used in local restaurants and cafes. To help visitors plan trips to the area, an interactive online map (e.g., a Google Map) could be developed with point location data (e.g., trailhead locations, parking lots, campgrounds). An interactive online map would allow travelers to estimate travel time and plan travel routes while also being easy to edit and update. In addition to maps, trail signage is important for communicating recreation opportunities, supporting a quality recreation experience, and ensuring trail user safety. Signs along roadways and travel routes can help direct visitors to trailhead locations and parking areas as well as local amenities and services such as gas stations, restaurants and lodging. Signs at trailheads can communicate the trail route, travel distances, difficulty level and applicable rules and regulations. Signs along the trail can include 911 markers, maps that indicate the current location, directional signs for one-way trails and other information.

## **Birding, Geocaching and Water Trails**

### ***Action Step: Explore emerging recreation trail possibilities***

Aitkin County has a strong existing system of trails, especially for recreation interests such as snowmobiling, ATV riding and cross-country skiing. There are additional opportunities for the county to enhance trail opportunities for recreation interests that can be supported by the unique assets of the county and trails that support areas of growth. There are at least three areas of trail enhancement and development that county could explore, including birding trails, trails and location for geocaching and water recreation trails. The enhancement of equestrian trails could also be considered.

## **Co-Existing Recreation**

### ***Action Step: Integrate trails system to offer maximized opportunities with minimized conflicts***

Although Aitkin County has many acres of public land and many miles of trail, land is still a finite resource and it is not possible for the county to support every desired use on every acre or on every trail. To support the efficient use of the opportunities that are available and to reduce the opportunity for trail user conflict, it is important for the county to clearly identify which uses are allowed on each trail and determine which recreation uses can co-exist on certain trails. Given the seasonality of recreation trail use (e.g., hiking in the summer and cross-country skiing

in the winter), it is possible that at least some trails can support multiple recreation types. Experiences in the region suggest that hiking and cross-county skiing trails can co-exist, snowmobiling and equestrian trails may be compatible in some situations, and ATV and equestrian trails may also be compatible. Activities such as geocaching may be compatible with a range of trail types, including water trails.

### ***Threats***

The primary threats to the continued and enhanced success of recreation trails in Aitkin County include ensuring public approval and acceptance of trail development plans, enforcing trail rules and regulations and managing conflicts between user groups. The county has an established system of oversight from the Park Commission and the Forestry Advisory Committee that provides an important feedback mechanism for monitoring public concerns about activities on the county managed lands. The county has also developed a collaborative monitoring and enforcement plan that is responsive to public concerns about user compliance with rules and regulations on recreation trails. The county is working actively with user groups to avoid and minimize conflicts.

### **Trail Suitability Matrix**

A component of the plan development process was the creation of an evaluation tool for determining trail suitability. The complete Trail Suitability Matrix is included as Appendix B. The overall objective of the matrix is to provide a mechanism to evaluating the potential environmental impacts of a proposed trail and to determine areas where trail development may be most suitable given existing soil, wildlife habitat and other conditions.

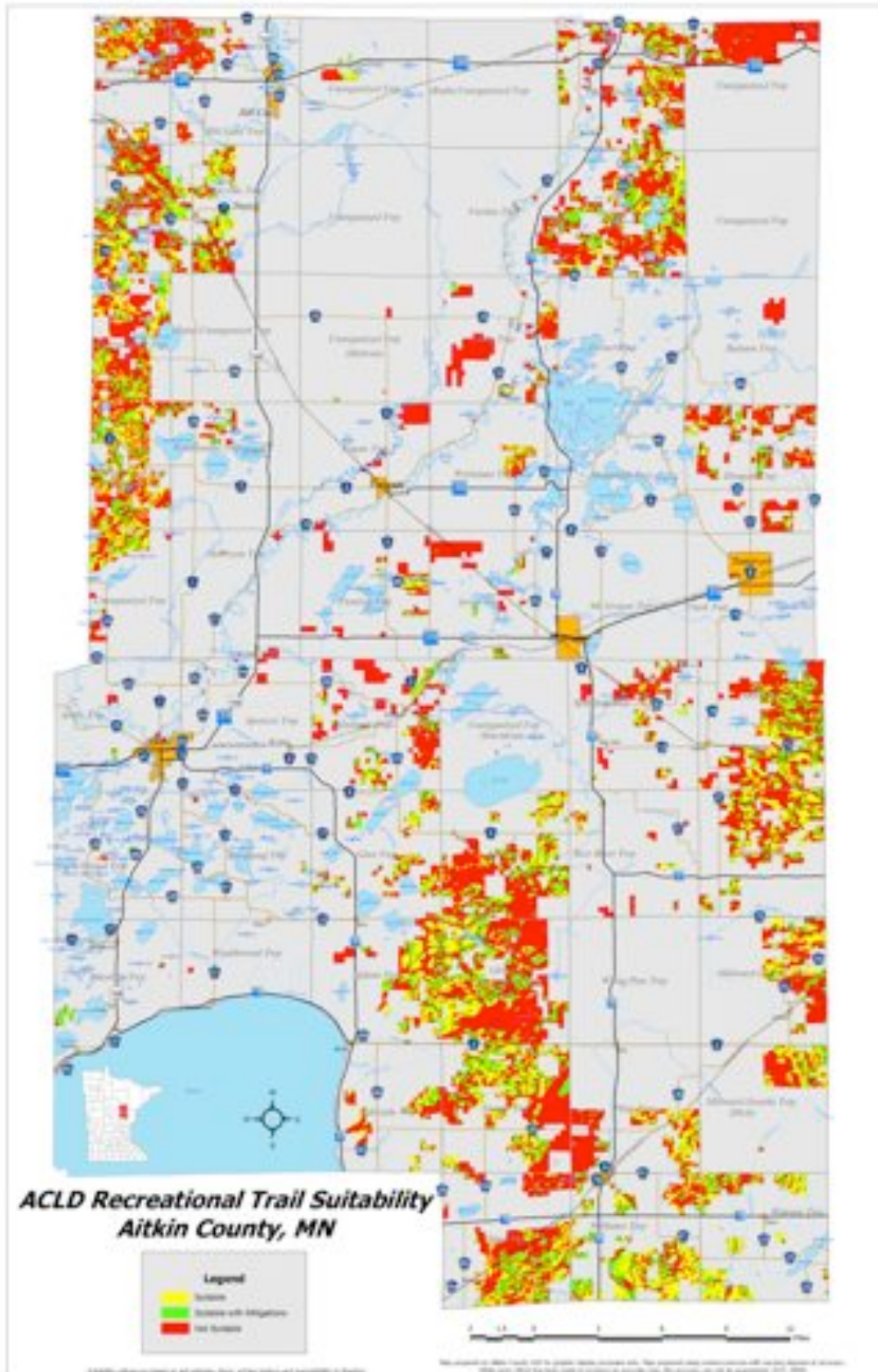
The Trail Suitability Criteria used in the matrix describe the site characteristics to be considered when identifying appropriate recreation activities for a given area. The criteria also help support the overall goals for the Comprehensive Recreation Trail Plan, including:

- Guiding recreation trail management on county managed lands,
- Evaluating current recreation demands to identify opportunities to enhance recreation opportunities while balancing natural resource protections and competing land uses, and
- Providing an opportunity to gather public input to help inform the management of recreation trails.

Criteria considered within the matrix include existing trail uses, proximity to residential areas, rare species or habitats, wetlands and public waters, and soil conditions, slope and grade.

The results of the trail suitability analysis for Summer-Motorized trails is show on the following page (Figure 5). On the map, red areas indicate it is not suitable for this type of rail, green areas are suitable but mitigations may be necessary and yellow areas are suitable for summer-motorized trails.

**Figure 5. Suitability Evaluation for Summer Motorized Trails**



## Section Three: Recreation Trail Uses

What *is* a recreation trail?

As defined by the County Parks and Recreation Ordinance, a “recreation trail” means a trail or strip of land designated and administered by Aitkin County for a specific recreational purpose, such as hiking, ATV, snowmobile, cross country skiing, etc. The ordinance also defines “county forest road” as an Aitkin County Land Department inventoried forest access road. Forest roads are not considered part of the public road infrastructure.

### ***Related Ordinances, Trail Guidelines and Classifications***

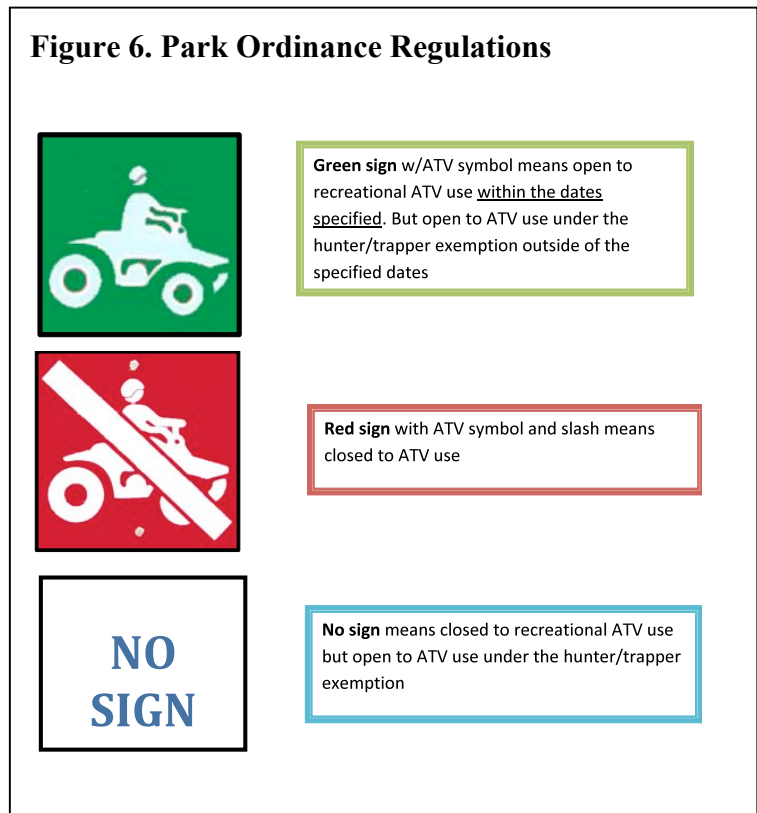
The County Parks and Trails Ordinance (approved on May 13, 2009, Resolution #051308-048) governs the operation of the County Parks System, the Long Lake Conservation Center and the recreational use of lands managed by Aitkin County. The ordinance also establishes the duties and authority of the Park Commission and County Land Department.

The purpose of this ordinance, enacted pursuant to Minnesota Statutes, is to secure the orderly, suitable use and enjoyment of developed and undeveloped recreation areas such as recreation trail systems, forestlands, campgrounds, historical sites, and public water accesses that are managed or established by Aitkin County. The purpose is also to further the safety, health, comfort and welfare of all persons using these facilities.

The Land Department has classified park land into two main categories: LIMITED USE and OPEN USE areas.

**LIMITED USE AREAS:** Include camping areas, parking areas, tent camping areas, boat accesses, limited access nature trails, swimming areas, recreation trails, ball fields, environmental education areas, wayside rests, scenic areas, etc.

**OPEN USE AREAS:** shall be all other park land not designated as limited use areas.



## ***Summary and Evaluation of General Trail Use Considerations***

The county has an established system of recreation trails. A key component of the comprehensive trail plan was the evaluation of the existing system and identification of recommendations for each user group and recreation trail type.

### **Snowmobiling**

Aitkin County has over 600 miles of groomed snowmobile trails. These are maintained by various clubs in Aitkin County. Snowmobile maps of these trails are available thru the Aitkin County tourism and at the County website. Two of the existing snowmobile trails are major corridor trails - the old north and south Soo Line Railroad grades. Aitkin County snowmobile trails wind through scenic forests and by quiet lakes. The trails allow riders to enjoy the beauty of the wilderness, and watch the wildlife in areas that aren't accessible any other time of the year. Many of these trails cross private land. These landowners have been kind enough to provide an easement across their lands for snowmobiling, and riders are reminded to respect the rights of the property owner and to stay on the trails. Riders are also asked to keep the trails clean and if to remove any garbage or other materials they bring with them.



The county does not anticipate developing any additional snowmobile trails beyond the existing system. In the near term, the county will focus efforts on activities that reduce conflicts between snowmobile riders and other trail uses, the improvement of trail signs and maps, and communications about planned logging operations.

#### *Considerations regarding snowmobile trails:*

- Off season trail damage by ATVs and 4x4s
- Trail map accuracy needs to be improved
- Trail signs are good but could be more consistent across the system
- Lack of communication about planned winter logging operations near trails

#### **Action Step Recommendations:**

- Maintain existing trails with local clubs
- Collaborate with clubs and partners to ensure maps are printed accurately
- Continue to monitor and enforce ATV/OHV riding to comply with ordinance
- Review trail signs and work with clubs and partners to improve consistency
- Plan an annual (or as needed) meeting (or other form of communication) between the county, contracted loggers and snowmobile clubs to share information about planned forest management activities and to reach agreement on how to address trail use in the area during the activity
- Provide information about trail conditions at the County website and maintain electronic communications with the clubs
- Foresters to work with the Recreation Forester to contact snowmobile clubs when sales could affect snowmobile trails and should attempt to contact clubs before the sale starts

## ATV/OHV/OHMs

Aitkin County maintains over 100 miles of designated ATV trails for summertime riding, including the Soo Line trails, Rabey Line trail, the Blind Lake ATV trail, and the Redtop Loop trail. Trails may be closed at any time during the year without notice if the trail conditions deteriorate and dictate that closer is necessary. Notices of trail closures are announced on the county website as soon as possible.

Aitkin County is in the process of establishing the Northwoods Regional ATV Trail System in collaboration with Itasca County. Formerly called the 70-Mile Trail Project, the Northwoods Regional ATV Trail System will include connecting routes incorporating the North and South Soo Line trails along with loops off of the main routes. The first of these new trails are anticipated to open in 2010. The trail system will also be designated for Off-High Motorcycle (OHM) use.



The Aitkin County Board of Commissioners has passed a resolution designating Aitkin County Lands as limited use for ATV's. The limited use designation means that unless it is posted as open for ATV riding, it is closed. Riders should look for the open signs on forest roads to see what is open and available to ride on. Given the forest and environmental conditions in the county, the county does not currently have trails designated for 4x4s or other Off-Highway Vehicles (OHVs) besides ATVs and OHMs. In accordance with the County Parks and Recreation Ordinance, county forest roads are open to highway licensed vehicle use unless gated or posted closed. Off-highway vehicles (OHV), including ATVs and OHMs, are prohibited on County forest roads or recreation trails unless designated open for a specific OHV use. Off-highway vehicle travel on County forest roads or recreation trails not designated open to OHV use is prohibited except for ATVs used for trapping during open season and big game hunting during October – December. Operating a motorized vehicle on a designated non-motorized trail is prohibited. Off-trail, cross-country travel with a motorized vehicle is prohibited on County managed land, except to retrieve downed big game animals with ATVs during the legal hunting season.

### *ATV Trails and Riding Seasons in Aitkin County:*

South Soo Line Trail	Open April 1st to November 30th
North Soo Line Trail	Open April 1st to November 30th
Rabey Line Trail	Open May 15th to November 30th
Blind Lake Trail	Open May 15th to October 31st
Redtop Loop Trail	Open May 15th to October 31st.

### *Considerations regarding ATV/OHM trails:*

- Lack of ATV Trail Maps
- Need sites with more riding challenges and county could use old gravel pits
- Soo Line routes create opportunities for expansion of motorized recreation
- Need to ensure existing infrastructure addresses emergency medical services
- Need to work with the economic opportunities offered by motorized recreation trails
- Conflicts between property owners and ATV trails need to be addressed

### **Action Step Recommendations:**

- Complete the Northwoods Regional ATV Trail System in a manner that is environmentally sensitive, economically beneficial and community supported
- Develop trail maps and signs in conjunction with the completion of the Northwoods Regional ATV Trail System
- Continue to implement the monitoring and enforcement plan developed for motorized recreation trails to ensure compliance with the ordinance and all other rules and regulations and to reduce conflicts with property owners.
- Develop interpretive signage along the Soo Line trails.
- Support youth safety training.
- Establish grant-in-aid recognition for ATV routes.
- Actively pursue economic promotion of trail routes with local towns.

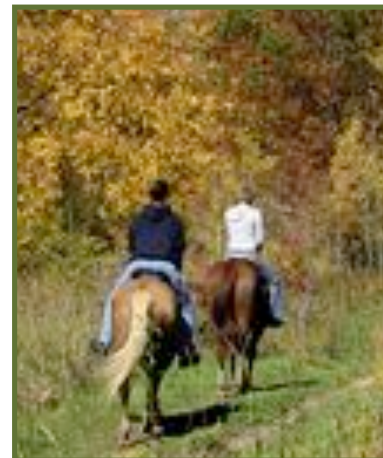
As the Northwoods Regional ATV Trail System is further developed, it will be necessary to ensure that the routes, as well as the maps and signs along the routes, connect trail uses to local amenities, including food, lodging and other services.

### **Equestrian trails**

Aitkin County does not currently have designated equestrian trails on county managed forestlands. Horse trail opportunities are allowed on existing snowmobile and hiking trails, but the conditions are not always well suited due to the trail conditions, lack of water and inadequate parking or camping areas.

#### *Considerations regarding equestrian trails:*

- Need accessible water and large/level parking and camping areas
- Potentially challenging to share trails and sites with ATVs
- Need help from clubs and riders for trail planning and maintenance
- Can share trails with non-motorized uses (e.g., hiking)
- Could develop more horse trails in areas where ATV use is not suitable
- Prefer 10-15 mile trails lengths with stacked shorter loop options



### **Action Step Recommendations:**

- Explore possibilities of a designated equestrian trail that will meet the need of users groups
- Identify opportunities to collaborate with a rider group or equestrian club on trail planning, development and maintenance

## Geocaching

Geocaching is a relatively new form of recreation that is described by the Minnesota DNR as an outdoor activity combining hiking and exploring while using a hand-held Global Positioning System (GPS) to locate either virtual or actual treasure caches. To support geocaching activities, the GPS coordinates of caches are provided and participants use their GPS device to navigate to the location. Caches should be waterproof containers (i.e., weather resistant) such as sealed bottles or canisters and may contain a trinket or other small item as well as a logbook to record the visit. Visitors to the cache may remove and replace items within the cache and can post their finds and share experiences online (e.g., [www.geocaching.com](http://www.geocaching.com)). There are additional rules related to geocaching, including complying with applicable laws, including private property rights. The MN DNR allows geocaching in state parks and requires that caches are placed in locations that do not negatively impact natural or cultural resources, visitor safety or other outdoor recreational uses.



Geocaching does not need to be a trail-based activity. Caches may be located along roadways, trails or waterways so that they are accessible by car, kayak or canoe, ATV, hiking or on a snowmobile.

### *Considerations regarding geocaching:*

- Caches can be placed along trails or in areas to draw people
- Can place caches so they are accessible by car, kayak, ATV, etc.
- May need a permitting system and rules to govern caches on county lands
- Geocaching participants may prefer to see cache sites in groups (e.g., more than one in an area)
- Cache sites can be linked to geologic, historic and other locations of interest
- Could create a link to businesses but caches should be “non-commercial”
- Could have brochures, coupons, etc in cache
- County could open an online account to manage and register caches

### **Action Step Recommendations:**

- Develop guidelines and online registry process for caches located on county-managed lands
- Identify opportunities to collaborate with local communities and geocaching interests to enhance geocaching opportunities in the county

## Birding/Wildlife Observation

Aitkin County offers unique birding and wildlife observation opportunities. A bird-finding guide has been developed for the county and is available at the Rice Lake National Wildlife Refuge. Other parts of Minnesota have developed birding trails, including the “Pine to Prairie” trail in northwestern Minnesota and a series of looping trails in the Minnesota River Valley in the southern part of the state. Aitkin County offers opportunities to view Minnesota’s native wildlife, including amphibians and fish as well as fox, deer, bears, wolves, moose and otters. Birds found in the region include sandhill cranes, hooded mergansers, ruffed grouse, sharp-tailed grouse, owls, alder flycatchers, black-capped chickadees, woodcock, mallards, blue-winged teals, woodpeckers, scarlet tanagers, Canada geese, swans, Canada warblers, eagles, gray catbirds, sparrows, loons, wrens, ducks, ravens, hawks, nuthatches, common yellowthroats and many more!

### Action Step Recommendations:

- Explore opportunities to develop interpretive trails and other services to support birding and/or wildlife watching opportunities on county managed forestlands



## Waterway Trails

Aitkin County is within the Upper Mississippi River Watershed and the county includes more than a dozen rivers and streams. The major navigable rivers that can be used for recreation are the Snake, Mississippi, Willow and Ripple Rivers. The county includes nearly 100 miles of the Mississippi River. There are carry-in and trailer accesses on lakes in Aitkin County, and there are designated campsites along the Mississippi River. The Mississippi Headwaters Board developed maps and canoe and boating guides for the Upper Mississippi River, including routes in Aitkin County.

### Considerations regarding waterway trails:

- Need to improve and maintain accesses
- Waterway development opportunities could make Aitkin a destination
- Area lacks outfitters that are needed to support use and provide equipment and service
- Snake River offers a “white water” experience
- Kayak trips designed for families could include routes that are 3-4 hours in length

### Action Step Recommendations:

- Evaluate existing accesses and campsites to identify opportunities for improvement
- Investigate feasibility of outfitter and guiding services being developed in the region

## Hiking/ Hunter Walking Trails

All of the county's tax forfeited lands are open to public hunting and/or trapping with the appropriate licenses and according to state law. Exceptions to this rule include no hunting allowed in any of the county campgrounds or on the Long Lake Conservation Center lands. Enclosed permanent hunting stands are not allowed on Aitkin County tax forfeited lands and trees may not be cut without first obtaining a permit from the Aitkin County Land Department.



During big game hunting season, off trail travel by ATV's or similar light vehicles is permitted exclusively for the purpose of retrieving downed big game as per game regulations. Off trail motorized travel across County administered tax forfeited lands is otherwise prohibited. All motorized recreational vehicles must stay on existing trails in accordance with use designations. The creation of unauthorized trails on County administered tax forfeited lands is prohibited.

The county currently offers 13 miles of hunter walking trails (non-motorized forest roads) as well as two walking/fishing trails. These trails may also be used for hiking.

### *Considerations regarding hunter walking trails:*

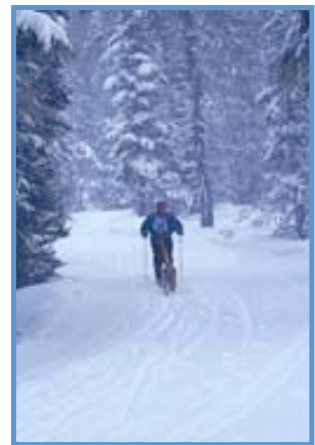
- Hunting and fishing are significant recreation interests in Aitkin County
- Residents and visitors participate in hunting opportunities in the county
- Need to manage conflict between hunter walking trails and motorized recreation
- Need to designate non-motorized hiking/hunter walking trails to include seasonal ATV restrictions

### **Action Step Recommendations:**

- Evaluate opportunities to expand existing hunter walking trail opportunities
- Continue to monitoring and enforce ATV trails to ensure compliance with the county ordinance as well as applicable laws

## Cross Country Skiing

There are three groomed cross country ski trails in Aitkin County. The No Achen Trail is located near the City of Aitkin, the Long Lake Conservation Center near Palisade offers cross country skiing, and the third one is the Vispo Ski Trail near Glen, Minnesota. All of the routes are in forested areas. The No Achen trail crosses private land and trail users are reminded to respect landowner rights, to stay on the trail and to follow the signs.



### **Action Step Recommendations:**

- Continue to maintain existing cross-country skiing opportunities
- Explore possible expansion via land exchange

## **Biking/Cycling and Mountain Biking**

The county currently does not offer any designated biking or mountain biking trails on county-managed lands. The county currently does not have plans to develop trails specific to these uses.

## **Paved Trails for Multiple Uses**

The county-managed lands are mainly forested lands and paved trails are not compatible with the other lands uses, including forest and wildlife management. The plan does not include the development of paved bike trails. There are possibilities for paved bike trails within cities and towns, but the planning and/or development of these opportunities is not addressed in the county-lands plan.

## **Snowshoeing**

The county currently does not offer any designated snowshoeing trails on county-managed lands. Snowshoeing is compatible with other trail uses, including hiking, but it can create conflicts with groomed cross-country ski trails. Snowshoeing can also be done cross-country and off-trail or on frozen lakes in the county. The county currently does not have plans to develop trails specific to this use. There may be opportunities for snowshoeing offered at the Long Lake Conservation Center.

## **Skijoring, dog sledding**

The county currently does not offer any designated skijoring or dog sledding trails. These activities are compatible with other trail uses, including hiking, but it can create conflicts with groomed cross-country ski trails. Skijoring and dog sledding may also be enjoyed on frozen lakes in the county. The county currently does not have plans to develop trails specific to this use.

## **Forest Access Routes**

In accordance with the County Parks and Recreation Ordinance, county forest roads are open to highway licensed vehicle use unless gated or posted closed. Off-highway vehicles (OHV), including ATVs and OHMs, are prohibited on County forest roads or recreation trails unless designated open for a specific OHV use. Off-highway vehicle travel on County forest roads or recreation trails not designated open to OHV use is prohibited except for ATVs used for trapping during open season and big game hunting during October – December. Operating a motorized vehicle on a designated non-motorized trail is prohibited. Off-trail, cross-country travel with a motorized vehicle is prohibited on County managed land, except to retrieve downed big game animals with ATVs during the legal hunting season.

Aitkin County has a network of over 200 miles of forest roads on County managed lands. These roads have been developed over the years by the County or the forest industry to provide access to the many acres of County managed lands and to support forest and wildlife management activities. These roads are generally open to outdoor recreational uses such as hiking, hunting, berry picking, and bird watching. Some of the roads are also used in the summer by ATVs and in the winter by snowmobilers. Signs are posted on the roads and identify what use the roads are open to. These are multiple use roads, so recreational users should be aware of other uses on these roads and trails to ensure everyone has a safe experience. Many are gated to restrict access during periods when road damage could occur due to heavy traffic or because of the season. Others are gated and restricted to foot travel only.

*Considerations regarding forest access roads:*

- Must balance forest management purposes with recreation interests

### **Action Step Recommendations:**

- Monitor road conditions and close roads as necessary due to season or safety concerns
- Maintain road signs that indicate allowed uses
- Evaluate and maintain a balance of motorized and non-motorized designations
- Consider developing a map of forest access roads that are available for recreation

### **Parks and Recreation Areas**

Aitkin County has four campgrounds around the county. They are located in Aitkin, Palisade, Jacobson, and just south of McGrath. All of these campgrounds are located on rivers, including three on the Mississippi River and one on the Snake River. All of the campground facilities are open from May 1st to October 15th. Reservations are accepted, however, the site must be paid for before the reservation can be accepted.

Because of the various insects and diseases that are around the United States and pose a threat to the health of the area's forests and trees, visitors to Aitkin County are restricted from bring in firewood to the campgrounds except for wood purchased from a certified firewood seller. Information about certified firewood sellers is available from the County Land Department and at the County website.

At the county website, there is a map for each campground that can be viewed when making a reservation and that provides additional information about the site.

*Considerations regarding parks and recreation areas:*

- Camping sites along the river may be a key strategy for supporting the further development of Aitkin County as a destination for waterway trails
- Additional camping sites may be needed to support equestrian trails, ATV trails and other users
- Online reservation system could be enhanced to provide additional information and functionality

**Action Step Recommendations:**

- Inventory and evaluate existing campgrounds to determine current conditions and opportunities for enhancements
- Consider development of enhanced online reservation information, including photos of campsites, GPS location information, trip planning functionality (e.g., Mapquest or Google), etc.

**Long Lake Conservation Center**

The Long Lake Conservation Center (LLCC) is an environmental education center owned and operated by Aitkin County. The Park Commission oversees the operation of the LLCC and the Land Commissioner supervises the Executive Director of the Center. It is prohibited to operate any motorized or non-motorized recreation vehicle, including but not limited to ATVs, snowmobiles and dirt bikes within LLCC unless authorized in writing by the Park Commission or Executive Director of LLCC. Non-motorized recreation vehicles can be used, but only on a trail or road designated by that purpose. It is unlawful to hunt, trap, take, disturb or cause to be disturbed any species of wildlife within the boundaries of LLCC unless authorized by the Park Commission.

*Considerations regarding the Long Lake Conservation Center:*

- Must balance environmental education purposes with recreation interests

**Action Step Recommendations:**

- Continue to maintain and promote recreation opportunities as compatible with environmental education mission and purpose

## **Section Four: Trail Management Plan**

### ***Roles and Responsibilities***

The primary responsibilities for implementing the comprehensive recreation trail plan lies with the County Land Department. In addition to the skills and expertise of staff, the many recreation trail partners in the county can continue to contribute to the success of recreation trails in the region. Collaborations with other public agencies, enforcement agencies, clubs and riders groups, private citizens and other stakeholders are important to ensuring that the plan and recreation trails in Aitkin County continue to provide safe and enjoyable outdoor experiences.

The Park Commission monitors recreation trail activities in the County and can benchmark progress on the action steps and recommendations included within the comprehensive recreation trail plan.

### ***Public Involvement***

There will be continued opportunities for public involvement in recreation trail planning, management and maintenance in Aitkin County. The Park Commission and the Forestry Advisory Committee provide formalized feedback mechanisms for the public. Residents and visitors are also welcome to contact the county directly with questions, concerns or ideas they may have about recreation trails. The county may consider developing additional public feedback mechanisms or questionnaires to evaluate public support for specific recreation trail proposals and management actions. The trail suitability matrix is a tool to aid in evaluating new trail proposals.

### ***Education and Training***

The county has initiated an effort at the Long Lake Conservation Center to further expand environmental education courses to include a curriculum addressing safe and ethical trail riding etiquette. This course will address rules and regulations associated with motorized recreation in Minnesota and in Aitkin County. The course will also address safety and environmental stewardship for youth and their families when engaged in motorized recreation.

### ***Monitoring, Enforcement and Safety***

The county has established a trail monitoring, maintenance and enforcement plan that is a guide to monitoring general trail conditions, determining relative amounts of use and use patterns, determining impacts to the environment, establishing trail maintenance procedures and monitoring adherence to state laws and county ordinance. Although initially developed specifically to address ATV/OHM trail considerations, the plan has broad applicability to all types of recreation trails. Information gathered through the monitoring process is used to determine thresholds for trail management actions including maintenance scheduling, facility development, enforcement needs, trail rehabilitation and trail closure. The plan includes a monitoring form used by County personnel to document observations and trail conditions.

Addition monitoring methods to be used include photo reference points, electronic traffic counters and user surveys.

Enforcement activities on recreation trails in Aitkin County are within the jurisdiction of MN DNR Conservation Officers and the County Sheriff's Department. Trail Ambassadors and members of local clubs and rider groups are not agents of law enforcement but may provide information and assistance to trail users, including guidance related to applicable laws and ordinances, and may report misconduct observed on the trail or trail conditions needing attention.

Implementation of the monitoring and enforcement plan includes collaborative efforts between the County Land Department, trail ambassadors and local trail clubs, the County Sheriff's Department, DNR Conservation Officers, Townships and the DNR Trails & Waterways Unit. The County retains sole authority to determine conditions for trail closure.

### **Emergency services**

Emergency events may occur on county-managed lands and recreation trails. To minimize the negative impacts of emergency events, it is important to be prepared for them to the extent possible and to plan trails to allow for Emergency Medical Service (EMS) access.

#### ***Tips for Emergency Medical Service (EMS) preparedness include:***

- **Pre-plan** for trail rescue by equipping vehicles with maps of trails in your service area. Mark the access points and make sure you know the limitations for vehicle access.
- **Know the capabilities** of trail surfaces to support vehicle traffic. A trailhead wide enough for an ambulance or rescue truck may not stay that wide. Or be able to support the vehicle weight.
- **Request additional resources** early, like an ATV with rescue trailer, so it is ready if the ambulance cannot access the patient.
- **Always have the essentials** with you for assessment and the treatment of life threats. Patients are invariably much closer or much further from the trail head than anticipated.
- **Warn other trail users** of an on-trail emergency. Ask them to slow down before passing the incident or reroute as needed.
- Leave at least **one person at the ambulance**. After finding the patient, you may realize that the safest and easiest extrication point is different than the ambulance location.
- **Schedule a training exercise** to locate, access, and extricate a simulated injured trail user from a remote trail. Apply those lessons to preplanning for a future incident.

*Source: <http://www.ems1.com/ems-products/patient-handling/tips/500771-Accessing-Patients-on-Trails/>*

## Helicopter Evacuations

It is possible that a helicopter evacuation could be necessary in response to an emergency on a recreation trail in Aitkin County. To address this possibility, the county should coordinate with local emergency service providers and first responders to evaluate existing access and evacuation preparedness plans.

The following table (Table 1) indicates the specifications for planning and constructing helicopter landing sites (i.e., helispots) according to the National Interagency Fire Center.

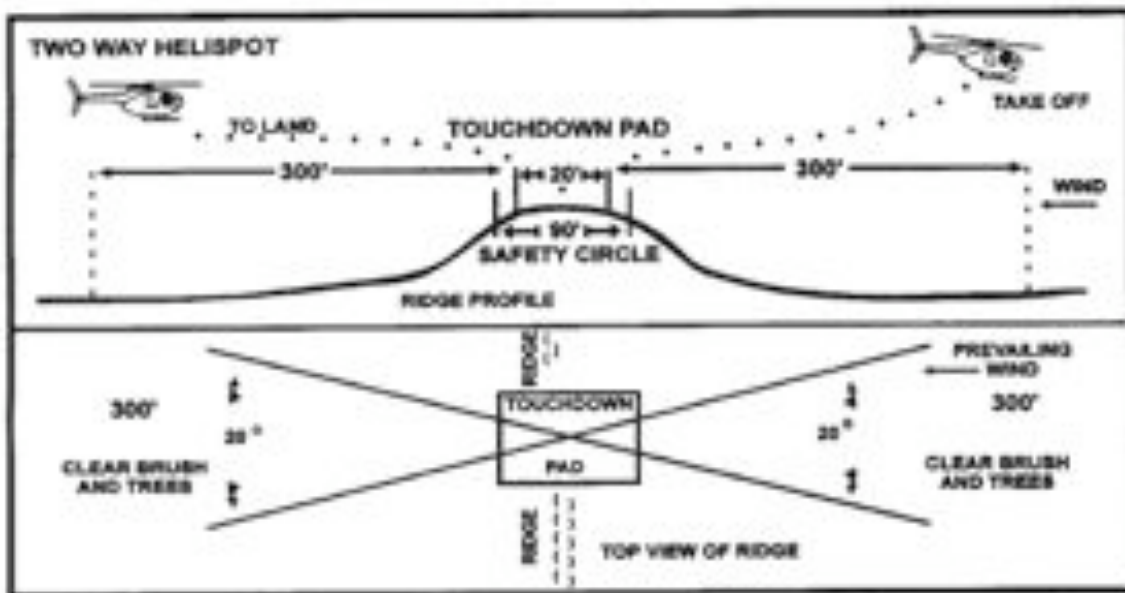
**Table 1: Specifications for Planning and Constructing Helispots**

Helicopter Type*	1	2	3
Touchdown Pad Dimension	30' x 30'	20' x 20'	15' x 15'
Safety Circle Diameter	110'	90'	75'

Source: NIFC, 2006; [www.nifc.gov/ihog/chapters/2006chapter08.pdf](http://www.nifc.gov/ihog/chapters/2006chapter08.pdf)

\*Type 1 are the heaviest helicopters with a weight >12,501 lbs and 15 or more passenger seats; Type 2 are 6,000 -12,500 lbs and 9-14 seats; Type 3 are up to 6,000 lbs and 4-8 seats.

**Figure 7. Example of a Two-Way Helispot (Type 2)**



Source: NIFC, 2006; [www.nifc.gov/ihog/chapters/2006chapter08.pdf](http://www.nifc.gov/ihog/chapters/2006chapter08.pdf)

### ***General maintenance***

Trail maintenance is the responsibility of the County Land Department and is done in partnership with trail clubs, rider groups and ambassadors. Clubs are important partners for maintaining quality trails and doing the necessary tasks such as trail grooming, the removal of litter and the reporting of repair needs or damage. The county will continue to collaborate with trail users and local clubs to identify opportunities to improve trail services and amenities and to secure the grant-in-aid funding to support this work.

### ***Marketing and Promotion***

Maps, signs, information kiosks and trailhead monuments are all important tools for communicating the recreation trail opportunities in the county and to inform trail users of applicable rules and regulations, local services and amenities and other trail related information. The county will continue to make maps available online and through local business, clubs and rider groups.

The county recently completed a project to place historical markers along trail routes to inform visitors about the history of local communities. Opportunities to support artwork and other forms of regional cultural and historical awareness will continue to be explored.

## References and Additional Resources

1. Aitkin County Tax Forfeited Land Management Plan
2. 70-Mile Trail All-Terrain Vehicle/Off-Highway Motorcycle Monitoring, Maintenance and Enforcement Plan
3. MN DNR OHV Study: [http://www.dnr.state.mn.us/ohv/trail\\_studies/index.html](http://www.dnr.state.mn.us/ohv/trail_studies/index.html)
4. MN DNR 2004 Recreation Participation Survey:  
[http://files.dnr.state.mn.us/aboutdnr/reports/orsurvey2004\\_report.pdf](http://files.dnr.state.mn.us/aboutdnr/reports/orsurvey2004_report.pdf)
5. MN DNR Ten Year Rec. Forecast:  
[http://files.dnr.state.mn.us/aboutdnr/reports/ten\\_year\\_rec\\_forecast.pdf](http://files.dnr.state.mn.us/aboutdnr/reports/ten_year_rec_forecast.pdf)
6. MN DNR State Comp. Rec. Plan:  
[http://files.dnr.state.mn.us/aboutdnr/reports/scorp\\_final\\_3308.pdf](http://files.dnr.state.mn.us/aboutdnr/reports/scorp_final_3308.pdf)
7. MN DNR Trail Planning, Design, and Development Guidelines. Trails & Waterways Division, 2007.

## Appendix A: Public Request for Input

### Aitkin County Comprehensive Recreation Trail Plan - Request for Input

Aitkin County is developing a Comprehensive Recreation Trail Plan for all county lands managed by the Aitkin County Land Department (ACLD). The plan will guide recreation trail management and uses. The following questions are being asked of stakeholders to help inform the plan's development.

1. What are the main recreational assets in Aitkin County (e.g., the resources that the plan should build upon, enhance, or protect)?
2. What are the main recreational deficiencies (or threats) that the plan should help address?
3. Are there any specific trails or areas of the county that the plan should pay special attention to (e.g., develop more detailed strategies for or longer-terms plans, etc.)?
4. Where do you see recreation going in the county in the next 5, 10, 15 years? (What changes do you anticipate?)
5. Is there any particular role you would like to have in the plan development or implementation?

Please send your reactions and comments to: [info@dovetailinc.org](mailto:info@dovetailinc.org) with "Trail Plan Input" in the subject line. You may also mail your comments to: Dovetail Partners, 528 Hennepin Ave, Suite 202, Minneapolis, MN 55403

If you have questions, please call 612-333-0430. More information about the project is also available at:  
<http://www.dovetailinc.org/aitkincomprectrailplan.html>

If you would like to be on the project contact list to received updates about the project and meeting notices, please provide your contact information (e.g., email address) with your response.

Thank you!

## Appendix B. Trail Suitability Matrix

Trail Suitability Matrix  
Aitkin County Comprehensive Recreation Trail Plan  
December 2008

### Background

The Trail Suitability Matrix has been designed to support the development of the Aitkin County Comprehensive Recreation Trail Plan. The Matrix provides a framework for evaluating recreation areas, trails, and resources in the county to determine which activities and recreational uses are suitable for each area. The suitability of a given recreation type for a given area depends upon a number of factors, including soil types, the occurrence of rare species or habitats, proximity to residential areas and other site characteristics. Identifying suitable uses for each area is an important step for supporting the development of a comprehensive plan for trail-based recreation on county-managed lands.

### Description

Different types of recreation require different conditions and create various types of impact at the local and landscape scale. While most types of recreation are suitable somewhere, not all types are suitable everywhere. By evaluating which recreational activities are suitable for specific sites, designated uses can be planned to minimize negative impacts and to manage trail construction and maintenance costs. Appropriate trail layout and design also creates better user experiences and safer trail conditions.

### Trail Suitability Criteria

The Trail Suitability Criteria describe the site characteristics to be considered when identifying appropriate recreation activities for a given area. The criteria also help support the overall goals for the Comprehensive Recreation Trail Plan, including:

- Guiding recreation trail management on county managed lands,
- Evaluating current recreation demands to identify opportunities to enhance recreation opportunities while balancing natural resource protections and competing land uses, and
- Providing an opportunity to gather public input to help inform the management of recreation trails.

### Evaluation Process

The following table (Table 1) lists the Trail Suitability Criteria and the ranking system for determining if a given area is (1) suitable for a specific use, (2) suitable with mitigations, or (3) not suitable. The ranking system distinguishes between motorized and non-motorized recreation

types. Based upon maps that illustrate existing recreation resources as well as soil conditions, wetland areas, known occurrences of rare species and habitats, residential areas, public waters and services (gas, food, lodging, parking), the following criteria are applied and areas can be ranked for their suitability for motorized and non-motorized recreation activities.

*Table 1. Trail Suitability Criteria*

	Motorized Recreation			Non-Motorized Recreation		
	1 Suitable	2 Suitable with Mitigations	3 Not Suitable	1 Suitable	2 Suitable with Mitigations	3 Not Suitable
Visual Quality and Landscape	Diverse, dramatic or high interest scenic features.	Few high interest scenic features.	No high interest scenic features.	Diverse, dramatic or high interest scenic features.	Few high interest scenic features.	No high interest scenic features.
Trail Linkages and Networks	Critical link in existing system or opportunity for important new link	Linking is possible but would require significant mitigations.	No significant linking opportunities	Critical link in existing system or opportunity for important new link	Linking is possible but would require significant mitigations.	No significant linking opportunities
Existing Trail Use	Current, well maintained and appropriate trail use	Current trail use, but trail is not well or easily maintained or trail is underutilized.	No current use and/or trail not compatible with use.	Current, well maintained and appropriate trail use	Current trail use, but trail is not well or easily maintained or trail is underutilized.	No current use and/or trail not compatible with use.
Proximity to Residential Areas	Trail is at least 2 miles from sensitive residential areas	Trail is at least 1 mile from sensitive residential areas	Trail is less than 1 mile from sensitive residential areas	No limitations	No limitations	No limitations
Proximity to Services (gas, food, lodging, campgrounds, rest stops)	Services available within 20 miles of trailhead	Services available within 40 miles of trailhead	Services available within 60 miles of trailhead	No limitations	No limitations	No limitations
Access to Drinking Water	No limitations	No limitations	No limitations	Water available at trailhead, parking area or camping area	Water available within 1/2 mile of trailhead, parking area or camping area	Water available within 2 miles of trailhead, parking area or camping area

(Table 1. Continued)

	Motorized Recreation			Non-Motorized Recreation		
	1 Suitable	2 Suitable with Mitigations	3 Not Suitable	1 Suitable	2 Suitable with Mitigations	3 Not Suitable
Safety Considerations and Access for Emergency Services (lighting, night use of trails)	No safety hazards and sufficient access for emergency services	Some safety hazards and/or some barriers to emergency service access	Significant safety hazards and/or severely limited emergency service access.	No safety hazards and sufficient access for emergency services	Some safety hazards and/or some barriers to emergency service access	Significant safety hazards and/or severely limited emergency service access.
Trailheads, Gates and Signage	Existing, well-maintained	Need minor repair or replacement	Absent and/or in dis-repair	Existing, well-maintained	Need minor repair or replacement	Absent and/or in dis-repair
Availability of Parking Areas	Adequate capacity and well-maintained parking area (including trailer spaces)	Limited capacity and/or difficult to maintain parking area	No parking area and/or no appropriate area to developing parking	Adequate capacity and well-maintained parking area (including trailer spaces)	Limited capacity and/or difficult to maintain parking area	No parking area and/or no appropriate area to developing parking
Opportunities for Public Education	Areas for interpretive signs or other educational services	Few opportunities for public education	No opportunity for public education	Areas for interpretive signs or other educational services	Few opportunities for public education	No opportunity for public education
Soil Conditions, Slope and Grade	Gentle grades, stable soils and no cross slopes	Some areas of sensitive soils, steep slopes or steep grades	Significant areas of sensitive soils, steep slopes or steep grades	Gentle grades, stable soils and no cross slopes	Some areas of sensitive soils, steep slopes or steep grades	Significant areas of sensitive soils, steep slopes or steep grades
Rare, Threatened or Endangered Species or Habitats	No records of RTE Species or Habitats	Known RTE species or habitats but with limited risk of disturbance	Sensitive RTE species or habitats are present and could be impacted	No records of RTE Species or Habitats	Known RTE species or habitats but with limited risk of disturbance	Sensitive RTE species or habitats are present and could be impacted
Wetlands and Public Waters	No wetlands, shorelines or water crossings	Limited wetlands, shorelines or water crossings*	Extensive wetlands, shorelines or water crossings*	No wetlands, shorelines or water crossings	Limited wetlands, shorelines or water crossings*	Extensive wetlands, shorelines or water crossings*
Cultural Resources or Historic Sites	No sensitive sites	Some sites, but well protected	Sensitive sites vulnerable to disturbance	No sensitive sites	Some sites, but well protected	Sensitive sites vulnerable to disturbance

\* wetland areas MAY be suitable for winter recreation during frozen ground conditions (e.g., snowmobiles, cross country skiing, dogsledding, etc.)

Criteria that Apply to All Trails:

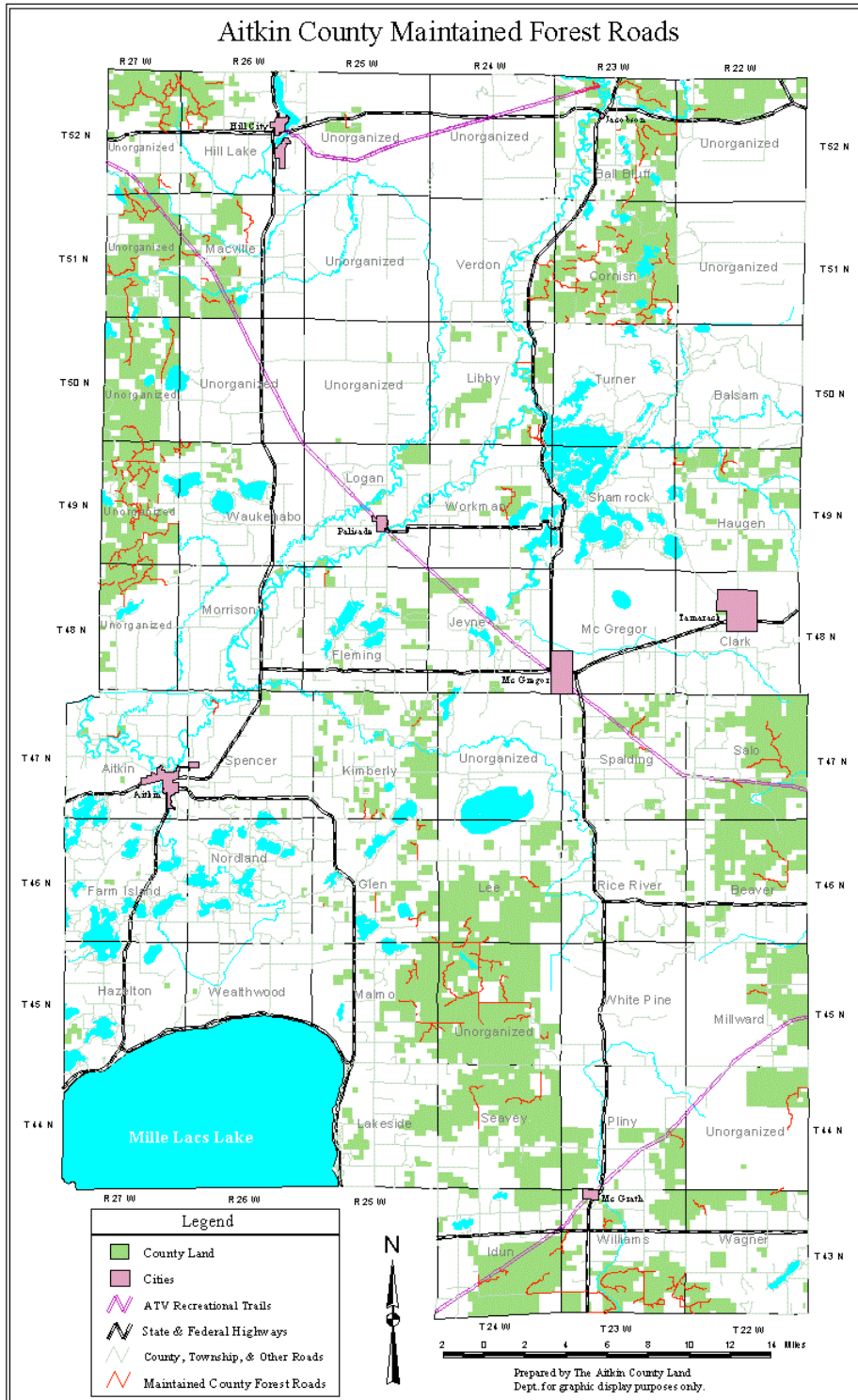
	ALL TRAILS		
	1 Suitable	2 Suitable with Mitigations	3 Not Suitable
Visual Quality and Landscape	Diverse, dramatic or high interest scenic features.	Few high interest scenic features.	No high interest scenic features.
Trail Linkages and Networks	Critical link in existing system or opportunity for important new link	Linking is possible but would require significant mitigations.	No significant linking opportunities
Existing Trail Use	Current, well maintained and appropriate trail use	Current trail use, but trail is not well or easily maintained or trail is underutilized.	No current use and/or trail not compatible with use.
Proximity to Residential Areas	Trail is at least 2 miles from sensitive residential areas	Trail is at least 1 mile from sensitive residential areas	Trail is less than 1 mile from sensitive residential areas
Proximity to Services (gas, food, lodging, campgrounds, rest stops)	Services available within 20 miles of trailhead	Services available within 40 miles of trailhead	Services available within 60 miles of trailhead
Safety Considerations and Access for Emergency Services (lighting, night use of trails)	No safety hazards and sufficient access for emergency services	Some safety hazards and/or some barriers to emergency service access	Significant safety hazards and/or severely limited emergency service access.
Trailheads, Gates and Signage	Existing, well-maintained	Need minor repair or replacement	Absent and/or in dis-repair
Availability of Parking Areas	Adequate capacity and well-maintained parking area (including trailer spaces)	Limited capacity and/or difficult to maintain parking area	No parking area and/or no appropriate area to developing parking
Soil Conditions, Slope and Grade	Gentle grades, stable soils and no cross slopes	Some areas of sensitive soils, steep slopes or steep grades	Significant areas of sensitive soils, steep slopes or steep grades
Rare, Threatened or Endangered Species or Habitats	No records of RTE Species or Habitats	Known RTE species or habitats but with limited risk of disturbance	Sensitive RTE species or habitats are present and could be impacted
Wetlands and Public Waters	No wetlands, shorelines or water crossings	Limited wetlands, shorelines or water crossings*	Extensive wetlands, shorelines or water crossings*
Cultural Resources or Historic Sites	No sensitive sites	Some sites, but well protected	Sensitive sites vulnerable to disturbance

\* wetland areas MAY be suitable for winter recreation during frozen ground conditions (e.g., snowmobiles, cross country skiing, dogsledding, etc.)

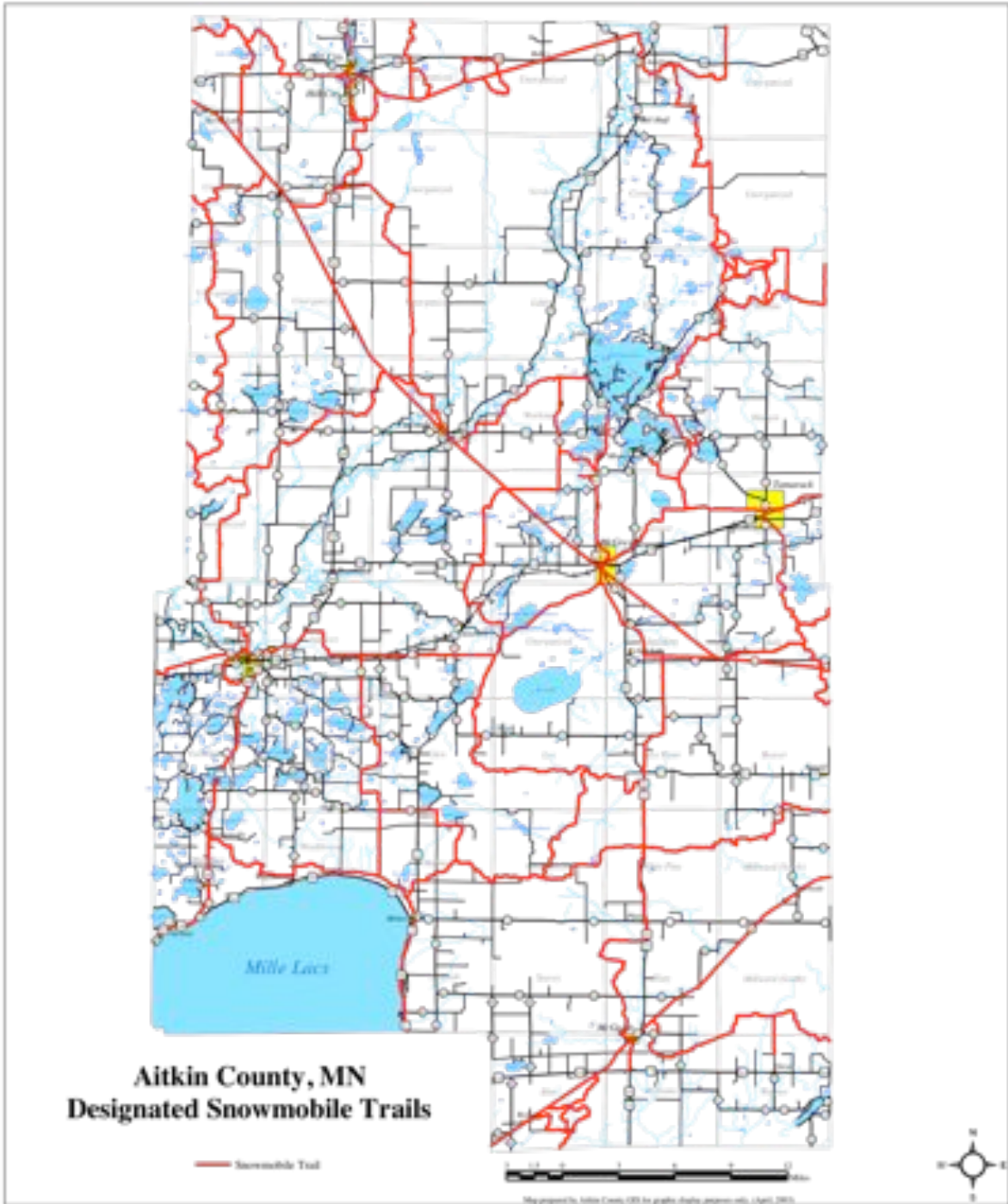
Streamlined Criteria for “Summer Only” Trails and Scoring System for GIS Mapping Analysis:

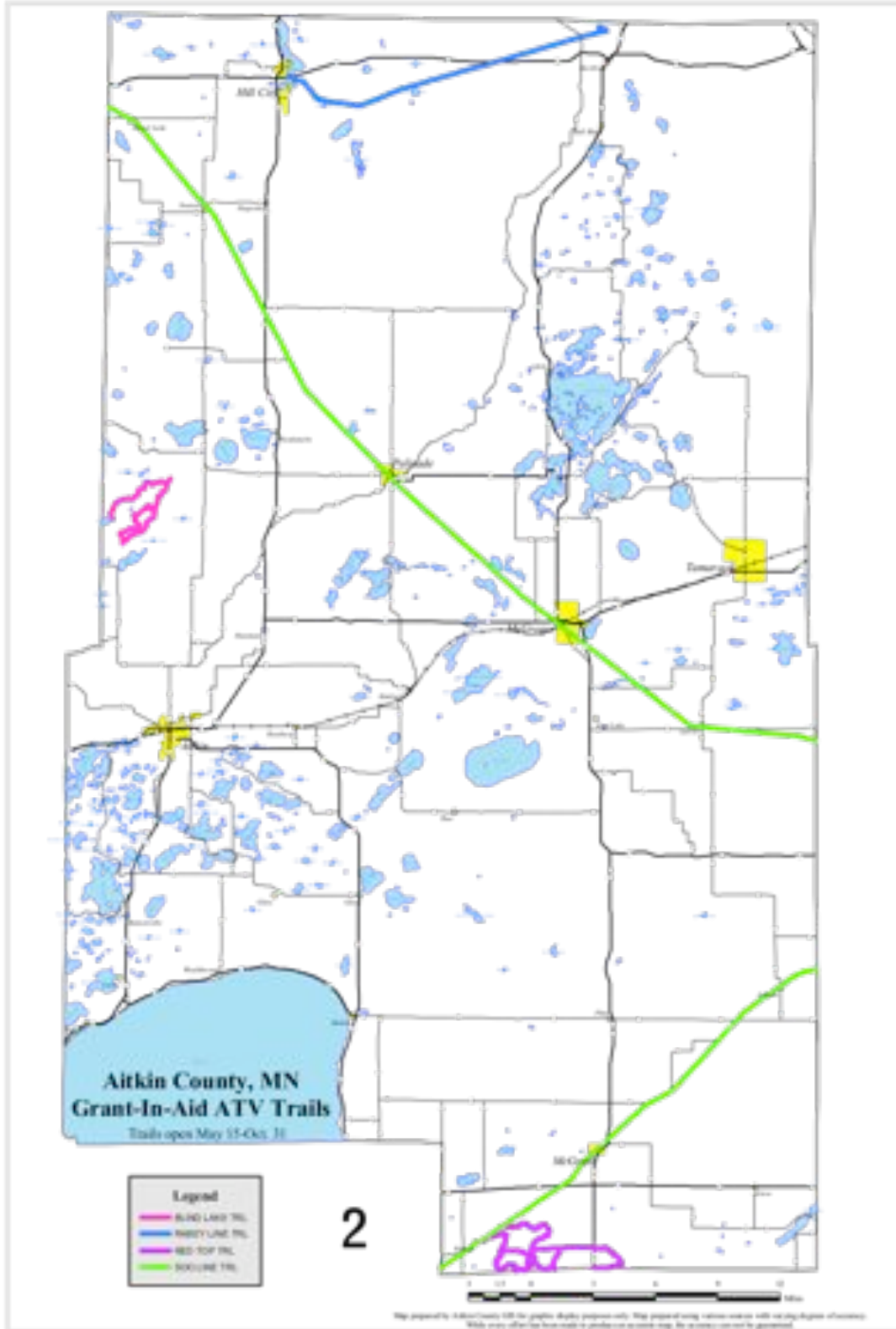
<b>Summer-Only Trail Mapping and Scoring</b>						
	<b>Summer-Only Motorized</b>			<b>Summer-Only Non-Motorized</b>		
	<b>1 Suitable</b>	<b>2 Suitable with Mitigations</b>	<b>3 Not Suitable</b>	<b>1 Suitable</b>	<b>2 Suitable with Mitigations</b>	<b>3 Not Suitable</b>
Existing Trail Use	Current, well maintained and appropriate trail use <b>1 Point</b>	Current trail use, but trail is not well or easily maintained or trail is underutilized. <b>2 Points</b>	No current use and/or trail not compatible with use. <b>3 Points</b>	Current, well maintained and appropriate trail use <b>1 Point</b>	Current trail use, but trail is not well or easily maintained or trail is underutilized. <b>2 Points</b>	No current use and/or trail not compatible with use. <b>3 Points</b>
Proximity to Residential Areas	Trail is at least 2 miles from sensitive residential areas <b>1 Point</b>	Trail is at least 1 mile from sensitive residential areas <b>2 Points</b>	Trail is less than 1 mile from sensitive residential areas <b>3 Points</b>	No limitations	No limitations	No limitations
Rare, Threatened or Endangered Species or Habitats	No records of RTE Species or Habitats <b>1 Point</b>	Known RTE species or habitats but with limited risk of disturbance <b>2 Points</b>	Sensitive RTE species or habitats are present and could be impacted <b>3 Points</b>	No records of RTE Species or Habitats <b>1 Point</b>	Known RTE species or habitats but with limited risk of disturbance <b>2 Points</b>	Sensitive RTE species or habitats are present and could be impacted <b>3 Points</b>
Wetlands and Public Waters	No wetlands, shorelines or water crossings <b>1 Point</b>	Limited wetlands, shorelines or water crossings <b>2 Points</b>	Extensive wetlands, shorelines or water crossings <b>3 Points</b>	No wetlands, shorelines or water crossings <b>1 Point</b>	Limited wetlands, shorelines or water crossings <b>2 Points</b>	Extensive wetlands, shorelines or water crossings <b>3 Points</b>
Soil Conditions, Slope and Grade	Gentle grades, stable soils and no cross slopes <b>1 Point</b>	Some areas of sensitive soils, steep slopes or steep grades <b>2 Points</b>	Significant areas of sensitive soils, steep slopes or steep grades <b>3 Points</b>	Gentle grades, stable soils and no cross slopes <b>1 Point</b>	Some areas of sensitive soils, steep slopes or steep grades <b>2 Points</b>	Significant areas of sensitive soils, steep slopes or steep grades <b>3 Points</b>
<b>Total Score</b>						

# Appendix C. Maps











# Aitkin County Campgrounds

