

Recreation Opportunities Work Group Report
for
Parks and Trails Legacy Plan,
a 25-year long-range plan for Minnesota
Parks and Trails of State and Regional Significance

February 15, 2011



ACKNOWLEDGMENTS

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Minnesotan's use of parks and trails, and perceived adequacy of current opportunities

Park and trail facilities are important to Minnesotans, who are well known as avid outdoor recreators. Just over half of residents use near-home natural park areas each year, and just over two thirds use paved trails for walking, hiking, skating and biking (Table 1—Reference 1). Other park and trail facilities are also used frequently. It is not uncommon for state residents who use these facilities to rate their near-home availability as “too few.” Such ratings are the motivations behind the public provision of new and expanded park and trail opportunities.

Table 1

Minnesotan's use of near-home park and trail facilities, and, if used, their rating of the adequacy of facility supply

(Source: MN DNR, 2006 Facility Adequacy Survey of Minnesota Residents)

<u>Park and trail facilities</u>	Household use of near-home facility in last 12 months (percent)	If used, ratings of "too few" near-home facilities (percent)
<i>Park facilities</i>		
Natural park areas/open spaces	51%	32%
Wildlife/nature observation areas	34%	37%
Nature/Interpretive centers	28%	25%
Off-leash dog parks	11%	55%
Skateboard parks	8%	32%
<i>Trail facilities</i>		
Paved trails for walking, hiking, skating, biking	68%	21%
Unpaved trails for walking, hiking, biking	43%	28%
Nature/interpretive trails	30%	30%
Snowmobile trails	14%	30%
Plowed winter hiking trails	12%	30%
Mountain bike trails	10%	43%
Cross-country ski trails	10%	26%
Motorized, off-highway vehicle trails	10%	56%
Snowshoe trails	4%	47%
Horseback trails	4%	33%

Purpose of recreation opportunities work group plan

The purpose of this effort is to develop recommendations on priorities for new and expanded state and regional park and trail opportunities by evaluating the current status and history of parks and trails. “New” opportunities are just that, and “expanded” opportunities include the purchase of in-holdings and expansion of the ownership boundary of existing facilities.

State and regional facilities offer nature-based recreation opportunities. Along the spectrum of facilities from the national to the neighborhood, state and regional facilities occupy a middle ground. For example, state and regional parks are generally not as extensive as national parks, but they are usually larger and offer more natural-resource based recreation opportunities than city and other local parks. Examples of natural-resource activities include camping, picnicking, hiking, swimming, boating, canoeing, fishing, and nature study. Similarly, state and regional trails tend to offer longer-distance opportunities in more natural settings than city and other local trails.

This evaluation does not deal with the internal development of the park or trail facility (e.g., provision of campgrounds, trail-side benches, visitor centers). It is limited to the facility itself.

Plan approach

State and regional parks and trails are of several types that represent too broad a range of conditions to be evaluated as a single group. Thus, the evaluation is done in subgroups (or tracks) that are more consistent within:

- Regional parks, including park reserves

- State and regional paved bicycle trails outside of park units (“paved” means that the treadway is asphalt or compacted aggregate such as crushed limestone)

- Less-traditional state and regional parks, including special recreation facilities in the Twin Cities metropolitan area, and state recreation areas

- State and regional snowmobile trails

- State and regional off-highway vehicle (OHV) trails, including all-terrain vehicle (ATV), off-highway motorcycle (OHM), and off-road vehicle (ORV) trails

- State and regional non-motorized unpaved trails outside of parks; for example, trails for hiking, mountain biking, and horseback riding (“unpaved” means the treadway is a natural surface)

State water trails, formerly referred to as state canoe and boating routes (most, but not all, are river trails)

State parks

For each track, evaluation criteria were developed based on statute, policy, plans, studies, and professional judgment (Table 2—Reference 2). Deliberations by a work group formed around this topic sorted the criteria into primary and secondary classes. Primary criteria lay out the essential considerations when evaluating the value of a new or expanded opportunity. The secondary criteria include considerations that add value to the opportunity, but they are not judged essential.

Table 2

Primary and secondary criteria for new and expanded facilities
(revised in September 2010)

NOTE: X = primary criterion; x=secondary criterion

Site criteria (internal characteristics of the facility)	Facility type					
	State parks	Regional parks and park reserves	State recreation areas and regional special recreation facilities	State and regional paved non-motorized bicycle trails	State and regional unpaved trails (both motorized and non-motorized)	Water trails
1. Quality of natural and cultural resources	X	X	X	X	X	X
2. Access to specific resources for nature-based activities, participation in which permits users to attain desired experiences	X	X	X	X	X	X
3. Durability of site for planned activities	X	X	X	X	X	X
4. Size	X	X	X	X	X	X
Location criteria (external relations of facility to its surroundings)						
1. Proximity to people/users	x	X	X	X	X	X
2. Proximity to substitute facilities	X	X	X	X	X	X
3. Market area (geographic draw of people)	x	x	x	x	x	x
4. Proximity to complimentary recreation facilities	x	x	x	x	x	x
5. Linkage to other recreation facilities	x	x	x	x	x	x
6. Linkage to non-recreation destinations (e.g., job locations)	x	x	x	x	x	x
7. Location within the larger landscape	x	x	x	x	x	x
8. Location relative to natural corridors	x	x	x	x	x	x
9. Location within the watershed	x	x	x	x	x	x

All of the evaluation done here are limited to the primary criteria. Refer to Appendix A for a description of all criteria by facility track.

Criteria are to two types: site and location. Site criteria define the internal characteristics of the facility (e.g., type of natural communities within the park; or length of trail). Location criteria define the external relations of the facility to its surroundings (e.g., proximity to population).

An example should help clarify how the application of the primary criteria works. Take regional parks. Regional parks offer nature-based recreation opportunities to a market area covering multiple communities. They are a population-oriented facility (location criterion), meaning more dense concentrations of people (now and in the future) are priority locations for the parks. Locations are particularly high priority if substitute facilities (location criterion) are not readily

available. For the parks to offer a range of nature-based opportunities, the park itself needs to meet certain site criteria, which include a minimum size (around 100 acres), and access to specific resources for nature-based activities (e.g., lakes for fishing, uplands for hiking, natural communities for nature observation and study).

Development history of state and regional parks and trails, and what the near future may hold

When thinking about the future of parks and trails, it is useful to examine their development history. Some facilities have mainly been developed in the past, with only small additions in recent years, while others have mainly come into existence over the last few years. The relative slower-growing facilities in recent years are the parks, especially state parks (Table 3—Reference 3). The less-traditional parks (state recreation areas and metro special recreation facilities) have grown more rapidly in recent years. Also growing more rapidly are paved bicycle, snowmobile, and water trails.

State and regional off-highway vehicle (OHV) trails,—including all-terrain vehicle (ATV), off-highway motorcycle (OHM), and off-road vehicle (ORV) trails—are not described historically. The reason is that much of the recent growth in mileage is due to “designation” of the trail as part

Table 3

Growth of park and trail recreation systems in recent decades

<i>Percent of today's system developed prior to 1980 . . .</i>		<i>Percent of today's system developed since . . .</i>			
<u>Recreation system</u>		<u>. . . 1980</u>	<u>. . . 1990</u>	<u>. . . 2000</u>	<u>Size of today's system (2009)</u>
<i>Slow growth in recent decades</i>					
State parks	95%	5%	2%	0%	66 parks (Lake Vermilion added in 2010)
<i>Modest growth in recent decades</i>					
Metro regional parks	72%	28%	26%	12%	50 regional parks & park reserves
Greater MN regional parks	70%	30%	23%	10%	118 Greater MN regional parks
State water trails	68%	32%	31%	23%	4,289 miles
Metro regional SRFs	50%	50%	50%	33%	6 special recreation features
State snowmobile trails	31%	69%	46%	23%	22,023 miles
<i>Rapid growth in recent decades</i>					
State recreation areas	14%	86%	86%	43%	7 state recreation areas
State paved bike trails	9%	91%	68%	40%	575 miles
Metro regional paved bike trails	6%	94%	88%	39%	229 miles
Greater MN regional paved bike trails	5%	95%	81%	49%	353 miles

of forest planning. Designation changed the status of the trail, but not the existence of the trail, so mileages based on designation can be misleading.

Historical development can provide—under certain assumptions—a rough picture of the near future. Assuming the next ten years (2010 to 2019) maintain the same pace of development as the last ten, facility additions would occur, and the amounts added in the last decade are used in the text to discuss the pace of development.

Now, no one expects the past to map into the future precisely. For example, nearly 500 miles of paved bicycle trails were developed in the previous ten years. If given these many miles of paved bicycle trails to allocate over the next ten years, what should be of highest priority? Providing more bike trails for the expanding Twin Cities metropolitan area? Ensuring minimum trail access for regional centers in greater Minnesota? Creating more trail opportunities for tourists?

Evaluation of facility tracks

Of the eight facility tracks, six are evaluated and two are not (see Reference 4 for sources of facility information). Those that are evaluated include: state parks, regional parks, state and regional paved bicycle trails outside of parks, state and regional snowmobile trails, state and regional off-highway vehicle (OHV) trails, and state water trails. All of these, except state parks, are evaluated relative to users (or a surrogate measure of users) in their home location (“near home” evaluations) and at destinations users travel to (“away from home” evaluations). State parks are different because the primary criteria are site based (from state statute; see Table 2), except for the availability of substitute facilities, which all tracks share.

Not evaluated are less-traditional state and regional parks and state and regional non-motorized unpaved trails outside of parks. The former includes special recreation facilities in the Twin Cities metropolitan area, and state recreation areas. The latter includes, for example, natural surfaced trails for hiking, mountain biking, and horseback riding. These tracks are discussed at the end of this report.

Near-home evaluations of tracks

Each of the remaining tracks is examined relative to where facility users live. The concentrations of facilities are compared with the concentrations of users in their home locations to see where in the state there are more or less facility supply per user, which in turn can create priorities for new and expanded facilities to even out supply relative to users.

Some two-thirds of all outdoor recreation occurs within a half-hour drive of home (Table 4—Reference 6). Many of the activities that comprise the use of parks and trails have even more activity time spent near home, although some (especially camping) is an away-from-home activity. Motorized activities (ATV riding and snowmobiling) are typical of outdoor recreation as a whole, with about two-thirds of activity time within a half-hour drive of home. Three Rivers Park District has estimated that two-thirds of their regional park use just under half of regional park reserve use originates within a half hour drive of home (Reference 7). State paved bicycle trail use in the Twin Cities (a surrogate for general regional paved bicycle trails) has over 90 percent of use originating within 25 miles of the trail (Reference 8).

Having quality opportunities near home is particularly important today, because of concerns about declining participation rates in nature-based activities. High-quality, near-home opportunities should facilitate participation.

Two of the facility tracks (regional parks, and paved bicycle trails) employ population as a surrogate measure for facility users. This surrogate measure is a relative measure, since not all people visit parks and trails. A place with 10 times as many people is treated as having 10 times as many park and trail users. The other facility tracks have the relative number of users defined by vehicle and boat registrations. Prior to getting into track evaluations, population patterns are described.

Table 4

Near-home outdoor recreation participation
(2004 MN DNR participation survey of MN adults 20+)

<u>Common park and trail activities</u>	<u>Percent of annual activity time within 1/2 hour drive of home</u>
Running or jogging	93%
Inline skating, rollerblading, roller skating, roller skiing	91%
Horseback riding	86%
Biking (bicycling outdoors of all types, including mountain biking)	86%
Walking/hiking (walking of hiking outdoors for exercise or pleasure)	82%
Viewing, identifying or photographing birds and other wildlife	81%
Viewing, identifying or photographing wildflowers, trees or other natural vegetation	78%
Cross country skiing	76%
Picnicking	69%
Visiting nature centers	69%
Offroad ATV driving	64%
Snowmobiling	64%
Snowshoeing	61%
Swimming or wading in a lake or stream	56%
Fishing	51%
Visiting historic or archaeological sites	35%
Camping using a camping vehicle (e.g., pop-up/hard-sided trailer, third	25%
Camping using a tent	22%
Overall outdoor recreation use	67%

Population patterns

The regional framework for this plan consists of five regions. Current population is concentrated in a few places (especially the metro region), and some three-fourths of projected population growth over the next 25 years is concentrated in metro and central region, which is just north of the metro region (Table 5—Reference 9).

A finer resolution description of population patterns is attained by using county statistics for current population concentrations and population change, both recent and projected. There is considerable overlap between places with high population density (Figure 1) and rapid population growth (Figure 2), which means that—roughly speaking—population is expected to continue to concentrate where it is already high. A group of 15 counties, largely centered in and about the Twin Cities metro region, have high current population concentrations and/or rapid population growth, both recent and projected; most have a high current concentration in conjunction with rapid growth (Figure 3). These 15 counties—covering 10 percent of land area in the state—contain two-thirds of Minnesota’s current population, and are expected to receive just over 80 percent of the state’s population growth over the next 25 years. For population-oriented facilities like regional parks and paved bicycle trails, these counties are likely to receive a lot of attention.

Table 5

Minnesota population in 2009, and projections to 2035

Region	Population estimate, 2009*	Percent of 2009 population	Projected change in population, 2010 to 2035**	Percent of projected change from 2010 to 2035
Northwest	448,530	9%	61,280	6%
Northeast	412,768	8%	43,060	4%
South	994,221	19%	125,130	13%
Central	564,119	11%	323,570	32%
Metro	<u>2,846,576</u>	<u>54%</u>	<u>446,010</u>	<u>45%</u>
Total	5,266,214	100%	999,050	100%

* Source: U.S. Census Bureau. County population estimates. (<http://www.census.gov/popest/counties/CO-EST2009-01.html>)

** Source: Minnesota State Demographic Center. 2007. Minnesota Population Projections 2005 – 2035
(<http://www.demography.state.mn.us/resource.html?d=19167>)

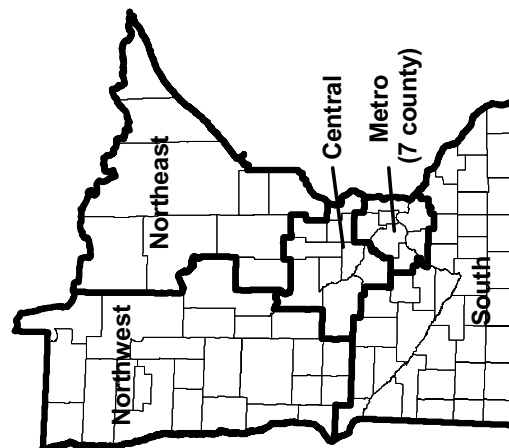


Figure 1

County population density, 2009

(Source: U.S. Bureau of the Census; population density derived from 2009 estimate figures)

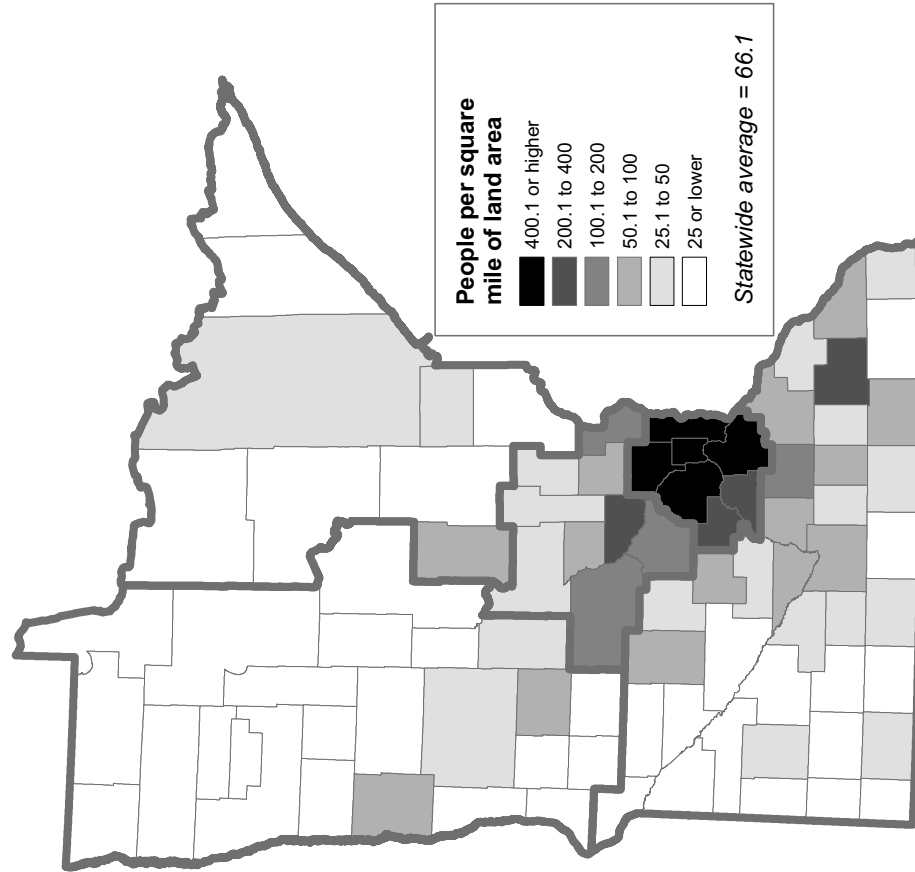
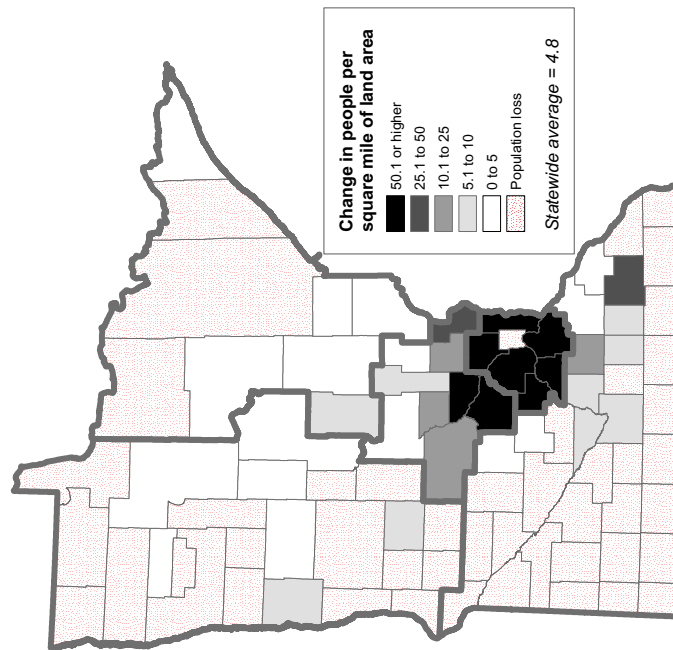


Figure 2

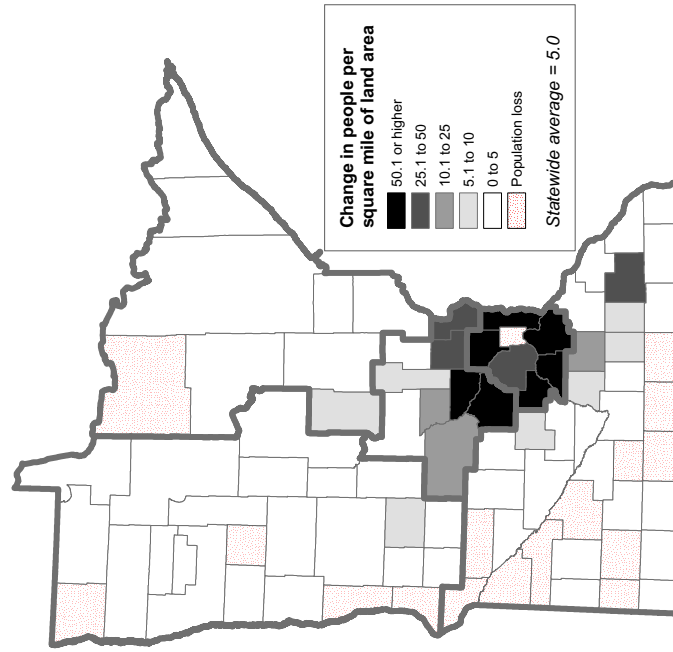
County population density change, 2000 to 2009

(Source: U.S. Bureau of the Census; population change derived from 2000 census and 2009 estimate figures, and change put on a 10-year basis)



Projected county population density change, 2010 to 2035

(Source: MN State Demographer; population change derived from 2010 and 2035 projected figures, and change put on a 10-year basis)



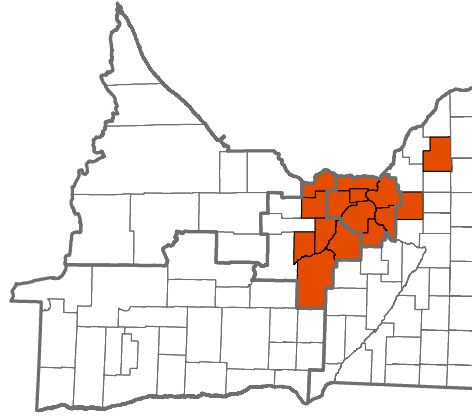
Note: The correlation coefficient between these two county maps is 0.95 .

Figure 3

Densely settled and rapidly growing Minnesota counties

Note: **X** indicates that the county meets the criterion in the column header

County code (FIPS)	County name	Population density, 2009, greater than 100 people per square mile of land area	Population density change, 2000 to 2009, greater than 10 people per square mile of land area (adjusted to a ten year period)	Projected population density change, 2010 to 2035, greater than 10 people per square mile of land area (adjusted to a ten year period)
3	Anoka County	X	X	X
9	Benton County		X	X
19	Carver County	X	X	X
25	Chisago County	X	X	X
37	Dakota County	X	X	X
53	Hennepin County	X	X	X
59	Isanti County		X	X
109	Olmsted County	X	X	X
123	Ramsey County	X		
131	Rice County	X	X	X
139	Scott County	X	X	X
141	Sherburne County	X	X	X
145	Stearns County	X	X	X
163	Washington County	X	X	X
171	Wright County	X	X	X



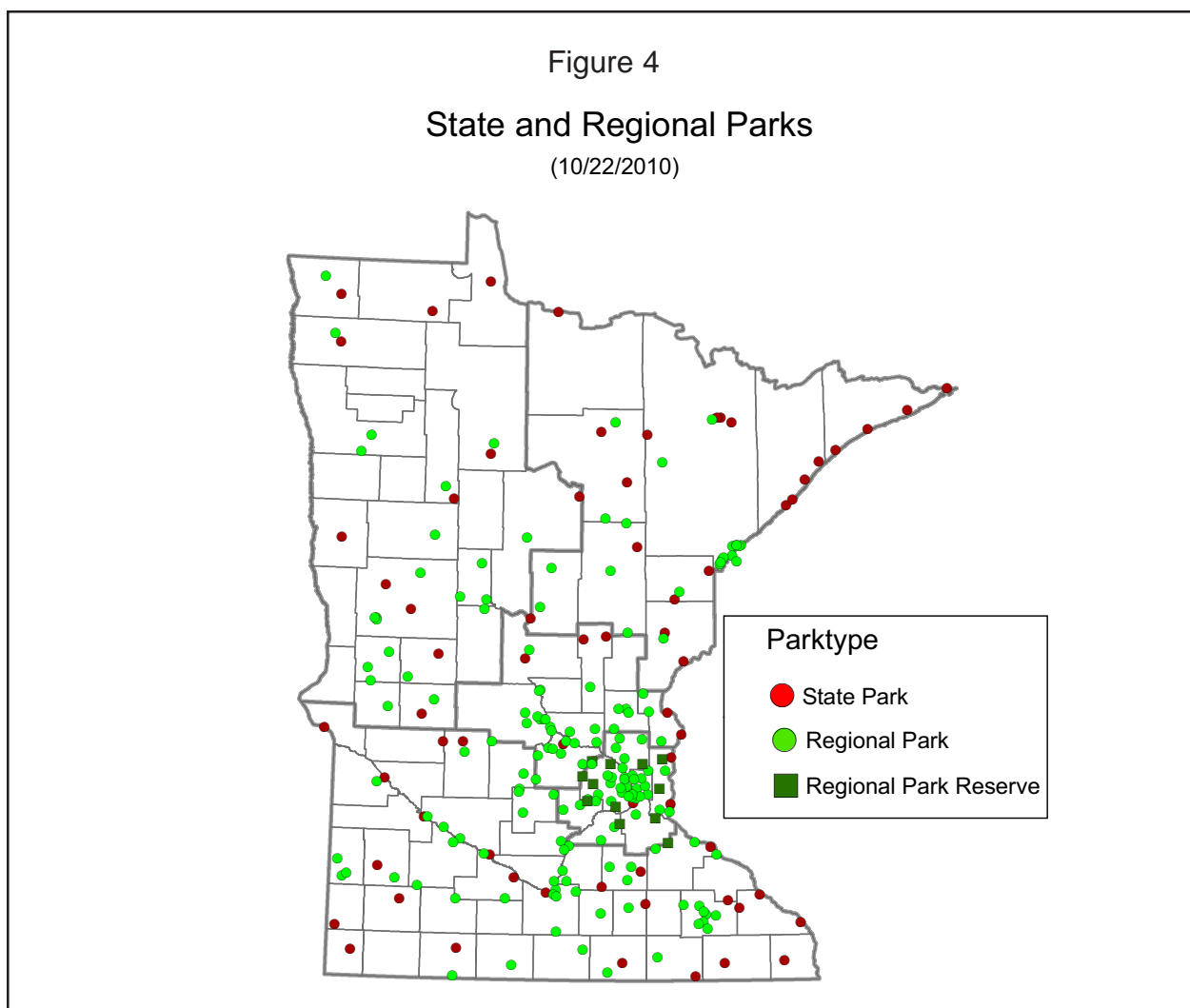
Comment: These 15 counties account for 67% of Minnesota's population in 2009, 81% of projected population change from 2010 to 2035, and 69% of project population in 2035. They cover 10 percent of the land area in Minnesota.

Regional parks and park reserves

At present in Minnesota there are 176 regional parks and park reserves covering some 96,000 acres (Figure 4). The pace of regional park development has been modest in recent years. If the pace of development over the last decade were to continue for another 10 years, 18 regional parks would be developed, which is just under two per year.

For the first location analysis, regional parks are evaluated relative to population, a surrogate measure of park users. The substitute facilities for regional parks include other regional parks (of course) and state parks. About half of all state park use is comprised of day users coming from home, which is the largely the same market regional parks serve (Reference 11) .

The comparison of regional and state park numbers with current population indicates that the greater Minnesota regions have more supply per person; the metro region has the least (Table 6, top box). When projected population is used, the central region falls below the other regions in greater



Minnesota (Table 6, middle box). The acreage comparison indicates that the metro, especially, but also the central and south have the least acres per person (Table 6, lower box). The value of the acreage comparison is diminished by the large acreage in some state parks. If the “regional park” equivalent was carved out of these large state parks, then the acreage comparison would be more meaningful.

Overall, the comparison with population indicates that the densely settled and rapidly growing places have the least supply per person; these places are delineated at the county level on Figure 3.

For a second location analysis, park numbers were also examined relative to regional centers in the state to see how well these places are served. A regional center was defined as a place of 8000 or more people in 2009 (Figure 5). Distance bands of 10 and 30 miles were used to count park opportunities around each center.

The results show that all centers have at least one park located within 30 miles, though seven centers in greater Minnesota have no opportunities within 10 miles (Table 7). Those seven centers are listed in Table 8 and mapped in Figure 6. It is noted in the table and on the map that several of these centers also have no state or regional paved bike trails within the distance bands (this same regional center analysis is done for bike trails in the next section).

The site criteria of a regional park include size (100+ acres, with exceptions) and natural resources in the park. The park should provide settings with high quality natural resources and offer outdoor recreation facilities and activities that are primarily natural resource based. Examples include camping, picnicking, hiking, swimming, boating, canoeing, fishing, and nature study. A site on a large recreation lake is preferred, so opportunities to boat, fish and swim are possible.

Park reserves (metro region) are similar to regional parks, but they are substantially larger than the parks because they are to contain a diversity of natural resources with adequate space for protection and management of natural resources. However, park reserves, like regional parks, are expected to provide for a diversity of outdoor recreational activities.

For both regional parks and park reserves, the site should be capable of sustaining controlled amounts or recreational use without substantial adverse impact on the resource, adjacent lands, or land uses.

A detailed site analysis of potential park opportunities is not possible, because the detailed data needed for such an analysis is not in any single data system. Rather, the potential opportunities are best known locally by the agencies that provide the parks. The sites (or search areas within which a site is to be found) are described in plans and grant applications. This is similar to the state park study (described above) that guides the site selection for new state parks to represent landscape regions. The plans and grant applications are also the first step in vetting whether the site meets the size and natural resource requirements of a regional park. Periodic inventories of such plans and grants would provide an ongoing picture of how the park system will likely develop on the ground.

Table 6

Comparison of regional and state park facilities with population by region
(October 22, 2010)

A. Park opportunities current and population 2009

Region code	Region name	Regional parks and park reserves	State parks	Total regional and state parks	Population, 2009*	Total parks per 100,000 people	Index of total parks per person (Statewide = 100)
1	Northwest	22	12	34	448,530	8	164
2	Northeast	22	21	43	412,768	10	226
3	South	50	25	75	994,221	8	163
4	Central	32	6	38	564,119	7	146
5	Metro	<u>50</u>	<u>3</u>	<u>53</u>	<u>2,846,576</u>	<u>2</u>	<u>40</u>
Total	Statewide	176	67	243	5,266,214	5	100

* 2009 population estimates from U.S. Bureau of the Census.

B. Park opportunities current and population 2035

Region code	Region name	Regional parks and park reserves	State parks	Total regional and state parks	Population, 2035*	Total parks per 100,000 people	Index of total parks per person (Statewide = 100)
1	Northwest	22	12	34	509,810	7	172
2	Northeast	22	21	43	455,828	9	243
3	South	50	25	75	1,119,351	7	173
4	Central	32	6	38	887,689	4	110
5	Metro	<u>50</u>	<u>3</u>	<u>53</u>	<u>3,292,586</u>	<u>2</u>	<u>42</u>
Total	Statewide	176	67	243	6,265,264	4	100

* 2035 population estimate from Minnesota State Demographic Center

C. Park acres current and population 2009 (full acreage of large state parks diminishes the value of this comparison)

Region code	Region name	Regional parks and park reserve acres	State park acres	Total regional and state park acres	Population, 2009*	Total park acres per 1,000 people	Index of total park acres per person (Statewide = 100)
1	Northwest	13,957	55,356	69,313	448,530	155	253
2	Northeast	9,471	113,603	123,074	412,768	298	489
3	South	14,675	31,287	45,962	994,221	46	76
4	Central	7,653	18,936	26,589	564,119	47	77
5	Metro	<u>49,945</u>	<u>6,258</u>	<u>56,203</u>	<u>2,846,576</u>	<u>20</u>	<u>32</u>
Total	Statewide	95,701	225,440	321,141	5,266,214	61	100

* 2009 population estimates from U.S. Bureau of the Census.

Table 7

Number of state and regional park opportunities within 10 and 30 miles of Minnesota cities of 8,000 or more population in 2009
(October 22, 2010)

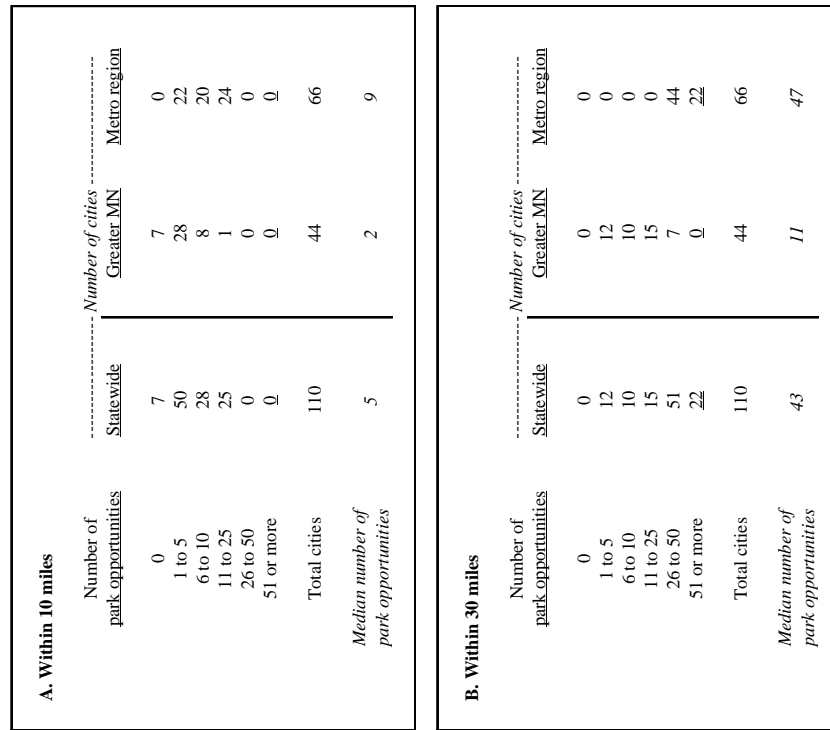


Table 8

Places of 8,000 or more people with no regional or state park within 10 or 30 miles

-- No park within indicated mile radius = X--
10 miles 30 miles

Place	Population 2009	10 miles	30 miles
Detroit Lakes*	8,268	X	
Grand Rapids	11,680	X	
Moorhead*	36,804	X	
Thief River Falls*	8,557	X	
Virginia	8,481	X	
Winona**	26,502	X	
Worthington*	11,125	X	

All have a park within 30 miles

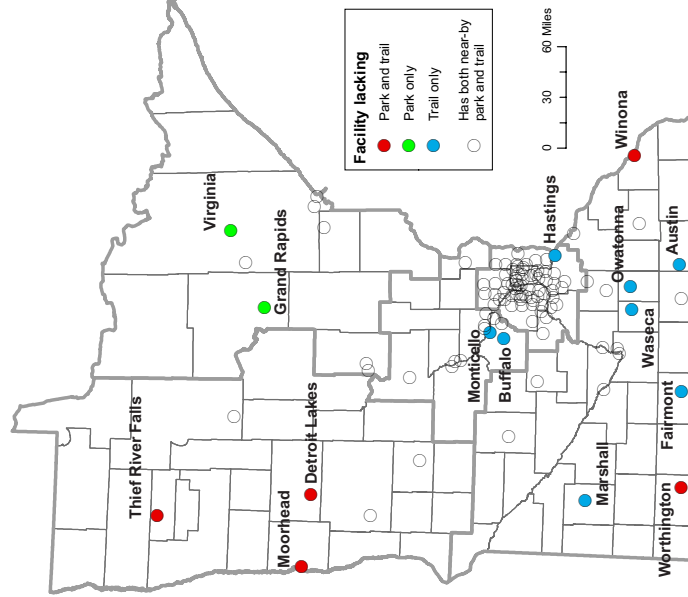
* Also has no state or regional paved bike trail within 30 miles

** Also has no state or regional paved bike trail within 10 miles

Figure 6

Places with 8,000 or more people (2009) that lack a near-by state or regional park and/or paved bike trail

("near-by" means within 10 miles and, in the four following trail cases, within 30 miles: Thief River Falls, Moorhead, Thief River Falls, and Worthington)



The Minnesota DNR, however, is exploring a general site analysis methodology, which combines land use and land cover information with recreation lake locations and land ownership patterns to predict the likelihood that a suitable site for a new regional park exists. The methodology is initially focusing on the densely settled and rapidly growing parts of the state. Results of this effort, and an evaluation of its effectiveness, may not be available prior to the completion of this plan.

Based on the preceding location and site considerations, the following are recommended:

- *Place a priority on the densely settled and rapidly growing parts of the state for new parks that have the least park opportunities per person at present and projected into the future.*
- *Place a priority on regional centers that lack a near-home park.*
- *As with state parks, accelerate the acquisition of park in holdings, and add lands to existing parks to enhance resource protection and recreational opportunities.*
- *If regional park system planning is implemented, use periodic inventories of park plans and grants to evaluate how the park system will likely develop on the ground.*
- *Redo the greater Minnesota regional park and trail study (conducted in 2004 by the Association of Minnesota Counties and sponsored by LCMR) to get an updated inventory of regional parks using consistent criteria to vet potential parks, a difficult and uncertain task for this planning effort.*
- *Complete the testing of the general site analysis methodology by the Minnesota DNR, and evaluate the effectiveness of the effort for predicting suitable sites for new regional parks.*
- *Conduct an inventory of institutional land holdings on recreation lakes as potential regional parks. Some institutions (YMCA, Campfire Girls, religious organizations) have sponsored camps for years on prime lakeshore sites. And some of these have begun to divest themselves of these valuable holdings. Such land could serve as a nucleus of a regional park.*

State and regional paved bike trails outside of parks

The analysis of paved bike trails parallels that of regional parks.

At present in Minnesota there are 1200 miles of paved bike trails, with about half provided by the state and half by regional agencies (Figure 7). The pace of paved bike trail development has been relatively rapid in recent years. If the pace of development over the last decade were to continue for another 10 years, nearly 500 miles would be developed, which is just under 50 miles per year.

For the first location analysis, paved bike trails are evaluated relative to population, a surrogate measure of trail users. The only substitute facilities for these trails are the trails themselves.

The comparison of state and regional trail miles with current population indicates that the greater Minnesota regions have more supply per person; the metro region has the least, followed by the central region (Table 9). Since projected population growth is concentrated in the metro and central regions, this inter-regional disparity would be expected to widen in the future, assuming the same regional pattern of trail growth continues. Overall, the comparison with population indicates that the densely settled and rapidly growing places have the least supply per person; these places are delineated at the county level on Figure 3.

For a second location analysis, paved bike trails were also examined relative to regional centers in the state to see how well these places are served. A regional center was defined as a place of 8000 or more people in 2009 (Figure 5). Distance bands of 10 and 30 miles were used to count trail opportunities and miles around each center.

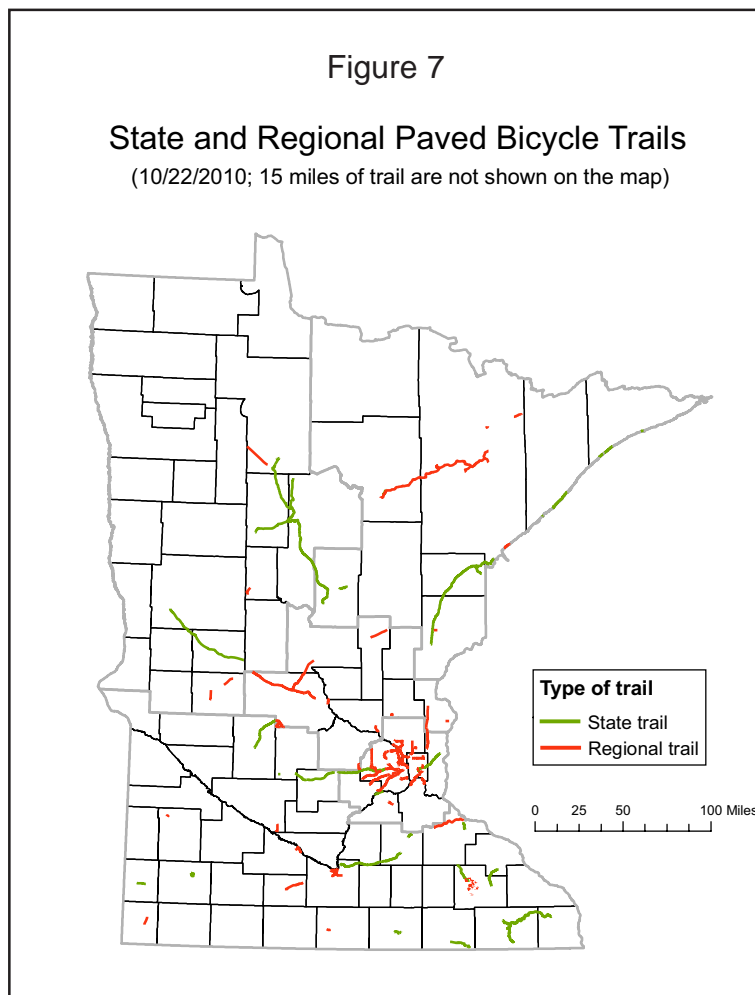


Table 9

Comparison of miles of regional and state paved bicycle trails with population by region
(October 23, 2010)

Region code	Region name	Miles of regional paved bicycle trails	Miles of state paved bicycle trails	Total miles for regional and state paved bicycle	Population, 2009*	Total miles per 100,000 people	Index of total miles per person (Statewide = 100)
1	Northwest	33	180	213	448,530	47	209
2	Northeast	112	140	252	412,768	61	269
3	South	88	225	313	994,221	31	139
4	Central	120	0	120	564,119	21	94
5	Metro	243	51	295	2,846,576	10	46
Total	Statewide	596.4	596.1	1,193	5,266,214	23	100

* 2009 population estimates from U.S. Bureau of the Census.

The results show that one metro center and 12 greater Minnesota centers have no trail opportunities within 10 miles, and that four greater Minnesota centers have no opportunities within 30 miles (Table 10). These centers are listed in Table 11 and mapped in Figure 6. It is noted in the table and on the map that several of these centers also have no state or regional park within the distance bands (this same regional center analysis is done for parks in the previous section).

The site criteria of a state and regional paved bike trail are general. The trail should be located in a regionally desirable setting. Criteria include attractive, unusual, and/or representative landscapes, important destinations and connections (e.g., parks, points of natural or cultural interest), historically significant routes, or high quality natural areas. The trail should provide at least an hour of outdoor recreation opportunity, or connects to other facilities that can provide at least an hour of recreation in total. In addition, the site should be capable of sustaining controlled amounts or recreational use without substantial adverse impact on the resource, adjacent lands, or land uses.

As with parks, it is suggested that any site analysis not be attempted, due to lack of feasibility. Instead, future additions should be based on the plans and grant applications of the agencies that provide the trails. The plans and grant applications are also the first step in vetting whether the trail meets the size and natural resource requirements of a state and regional trail. Periodic inventories of such plans and grants would provide an ongoing picture of how the trail system will likely develop on the ground.

Based on the preceding location and site considerations, the following are recommended:

- *Place a priority on the densely settled and rapidly growing parts of the state for new trails (or trail additions) that have the least trail opportunities per person at present and projected into the future.*

Table 10

Miles of state and regional parved bike trails within 10 and 30 miles of Minnesota cities of 8,000 or more population in 2009
(October 23, 2010)

A. Within 10 miles		<i>Number of cities</i>	
<i>Number of miles</i>	<i>Statewide</i>	<i>Greater MN</i>	<i>Metro region</i>
0	13	12	1
1 to 10	23	16	7
11 to 25	21	11	10
26 to 50	18	5	13
51 to 100	25	0	25
100 or more	10	0	10
Total cities	110	44	66
<i>Median miles of trails</i>	24.66	6.89	54.535

Number of state and regional paved bicycle trails within 10 and 30 miles of Minnesota cities of 8,000 or more population in 2009
(October 23, 2010)

A. Within 10 miles		<i>Number of cities</i>	
<i>Number of trails</i>	<i>Statewide</i>	<i>Greater MN</i>	<i>Metro region</i>
0	13	12	1
1 to 5	48	32	16
6 to 10	13	0	13
11 to 25	32	0	32
26 to 50	4	0	4
51 or more	0	0	0
Total cities	110	44	66
<i>Median number of trails</i>	4	1	13

B. Within 30 miles		<i>Number of cities</i>	
<i>Number of miles</i>	<i>Statewide</i>	<i>Greater MN</i>	<i>Metro region</i>
0	4	4	0
1 to 10	2	2	0
11 to 25	2	2	0
26 to 50	13	13	0
51 to 100	16	16	0
100 or more	73	7	66
Total cities	110	44	66
<i>Median miles of trails</i>	233.29	51.59	277.805

B. Within 30 miles		<i>Number of cities</i>	
<i>Number of trails</i>	<i>Statewide</i>	<i>Greater MN</i>	<i>Metro region</i>
0	4	4	0
1 to 5	27	27	0
6 to 10	5	5	0
11 to 25	6	5	1
26 to 50	68	3	65
51 or more	0	0	0
Total cities	110	44	66
<i>Median number of trails</i>	42	3	47

Table 11

Places of 8,000 or more people with no regional or state paved bicycle trail within 10 or 30 miles

Place	Population 2009	-- No trail within indicated mile radius = X--	
		10 miles	30 miles
Detroit Lakes*	8,268	X	X
Moorhead*	36,804	X	X
Thief River Falls*	8,557	X	X
Worthington*	11,125	X	X
Austin	22,981	X	
Buffalo	14,390	X	
Fairmont	10,104	X	
Hastings	22,246	X	
Marshall	12,754	X	
Monticello	11,994	X	
Owatonna	24,958	X	
Waseca	8,749	X	
Winona*	26,502	X	

* Also has no state or regional park within 10 miles

- *Place a priority on regional centers that lack a near-home trail.*
- *Place a priority on filling critical gaps that prevent users from connecting with other trails and other destinations.*
- *If regional paved bike trail system planning is implemented, use periodic inventories of trail plans and grants to evaluate how the trail system will likely develop on the ground.*
- *Redo the greater Minnesota regional park and trail study (conducted in 2004 by the Association of Minnesota Counties and sponsored by LCMR) to get an updated inventory of regional trails using consistent criteria to vet potential trails, a difficult and uncertain task for this planning effort.*
- *Consider using a State Wayside as the trail center or rest area (note: State Waysides are administered by the MN DNR, Division of Parks and Trails. They are relatively small [1 to 240 acres] and have limited facilities compared with a state park or recreation area. Five of the waysides are along the North Shore or in the Arrowhead; two are located in the Minnesota River Valley; and one is northwest of Alexandria).*

Snowmobile trails

At present in Minnesota there are nearly 22,000 miles of snowmobile trails that are used by about 250,000 machines (Figure 8—Reference 10). Snowmobile registrations declined over the last decade, and stabilized in the last few years (Figure 9). The pace of trail development has been modest in recent years. If the pace of development over the last decade were to continue for another 10 years, some 5000 miles would be developed, which is around 500 miles per year.

For the location analysis, snowmobile trail miles are evaluated relative to registered machines, a measure of trail users. The only substitute facilities for these trails are the trails themselves.

The comparison of snowmobile trail miles with registrations indicates that the greater Minnesota regions have more miles per sled; the metro region has the least, followed by the central region (Table 12).

The primary site criteria for snowmobile trails are: a natural setting is desirable, snow quality is of primary importance, and the trail should be long enough for at least a two-hour outing. In addition, the site should be capable of sustaining

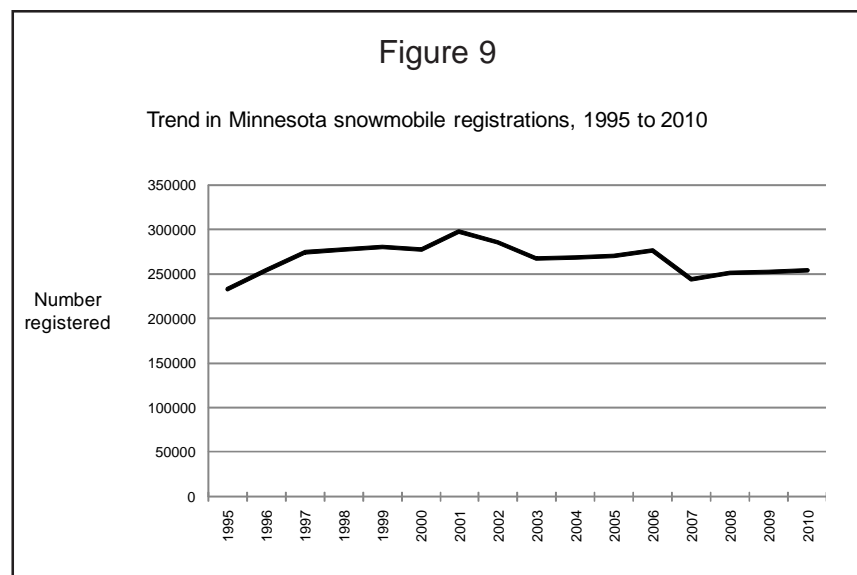
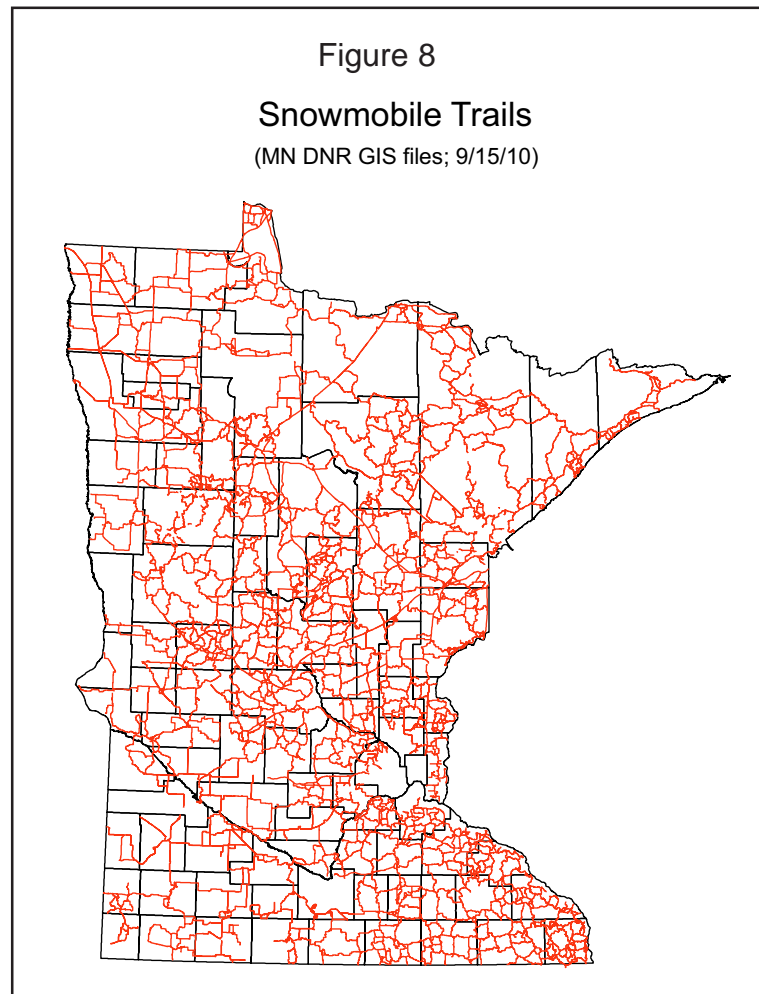


Table 12

Comparison of snowmobile trail miles and registrations by region, 2010

Region code	Region name	Snowmobile trail miles*	Snowmobiles registered by a MN individual**	Trail miles per thousand snowmobiles	Index of trail miles per snowmobile (Statewide = 100)
1	Northwest	6,770	43,992	154	176
2	Northeast	5,017	42,340	118	135
3	South	6,761	48,108	141	161
4	Central	2,260	46,419	49	56
5	Metro	990	68,191	15	17
Total	Statewide	21,798	249,050	88	100

* Miles taken from MN DNR GIS snowmobile trail file

** An "individual" is distinct from a "company" or other "organization". Nearly all snowmobiles (99%) are registered by an individual.

controlled amounts or recreational use without substantial adverse impact on the resource, adjacent lands, or land uses.

No site analysis is attempted at this time, and none could be done until site plans are assembled and evaluated.

Based on the preceding location and site considerations, the following are recommended:

- *Place a priority on new trail opportunities that are closer to the concentration of snowmobiles that are in and about the Twin Cities metropolitan area.*
- *Acquire permanent trail easements to ensure that trail opportunities are not lost to development or other land use changes.*
- *Maintain current trail miles so opportunities are not lost.*

State and regional off-highway vehicle (OHV) trails

In Minnesota, most OHVs are all-terrain vehicles (about 261,000 ATVs), with a smaller number of off-highway motorcycles (about 14,000 OHMs), and an even smaller number of off-road vehicles (about 3,300 ORVs, which are 4x4 trucks). Over that last decade, ATVs increased rapidly, but began to plateau by the end of the decade (Figure 10—Reference 10). The growth rate of ATVs started to drop around 2002, and the pace of the drop was almost certainly accelerated by the recent recession. OHMs, too, grew rapidly in the early part of the last decade, but began to decline in the last few years (Figure 11). The trend in ORV registrations is difficult to identify, because so many of the previously registered ORVs were switched to an ATV registration in the latter part of the decade (the registration switch was for the larger class 2 ATVs)(see Figure 10).

OHV trail opportunity miles of each type were assembled by hand from forest classification and other public trail offerings available on the MN DNR website (accessed in September 2010). The miles reported here are for trails, and do not include the forest system roads.

For the location analysis, ATV, OHM and ORV trail miles are evaluated relative to registered vehicles, a measure of trail users. The only substitute facilities for these trails are the trails themselves.

The comparison of trail miles with registrations indicates that the two northern Minnesota regions have many more miles per vehicle; the metro region has the least, followed by the central region, and the south region (Table 13). OHV trail designations have predominately occurred on public forest land, which is concentrated in northern Minnesota.

Site criteria for OHV trails include the following: A natural setting is important element of the experience, with highly technical areas a secondary attraction. Natural, hilly areas make for the best trails. Develop trails in areas already influenced by human activity. In addition, the site should be capable of sustaining controlled amounts or recreational use without substantial adverse impact on the resource, adjacent lands, or land uses.

No site analysis is attempted at this time, and none could be done until site plans are assembled and evaluated.

Based on the preceding location and site considerations, the following are recommended:

- *Place a priority on new trail opportunities that are closer to the concentration of vehicles that are in and about the Twin Cities metropolitan area.*
- *Place a priority on trail systems.*
- *Maintain the current system so opportunities are not lost.*

Figure 10

Trend in Minnesota ATV and ORV registrations, 1995 to 2010

Reason ATVs and ORVs are combined on this chart: From 1995 to 2006, "ATVs" included class 1 ATVs (up to 900 pounds), and "ORVs" included 4x4 trucks and class 2 ATVs (900 to 1500 pounds). Beginning in 2007, class 2 ATVs were registered as ATVs, not ORVs. Since registrations are for three years, it took 3 years (2007 to 2009) to move the class 2 ATVs out of ORVs and into ATVs. Further shifts between vehicle types started in 2010, when the ATV class 1 weight limit was raised to 1000 pounds and the class 2 limit to 1800 pounds.

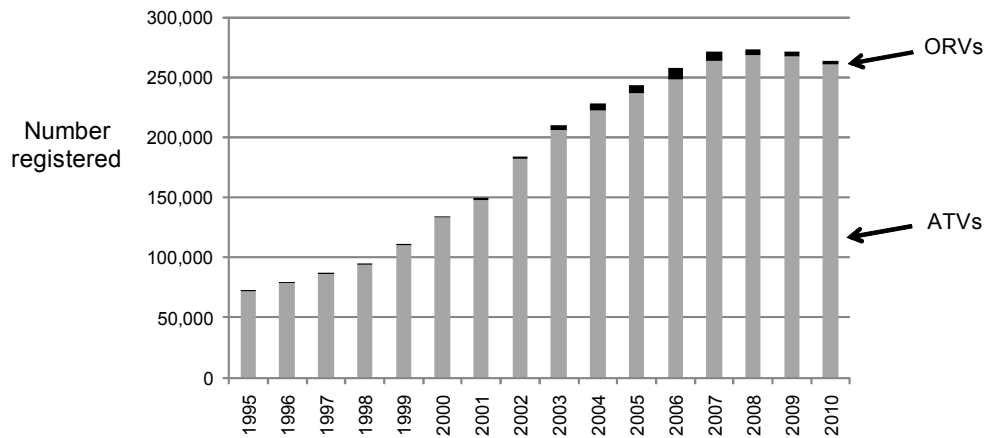


Figure 11

Trend in Minnesota OHM registrations, 1995 to 2010

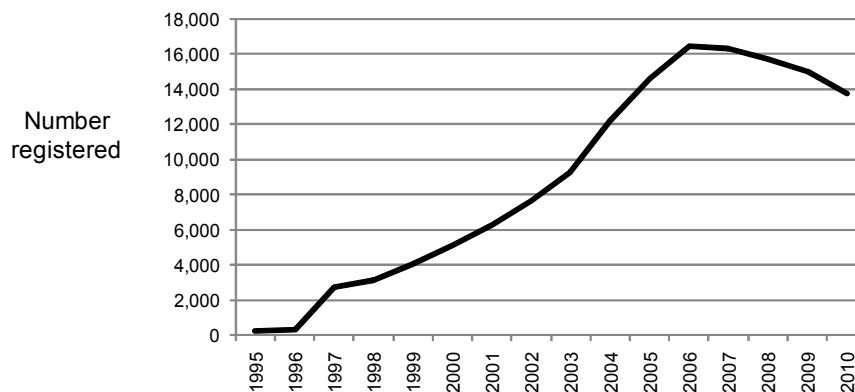


Table 13

Comparison of ATV trail opportunity miles and registrations by region, 2010
(table includes Class 1 and 2 ATVs)

<u>Region code</u>	<u>Region name</u>	ATV trail opportunity miles*	ATVs registered by a MN individual**	Trail miles per thousand ATVs	Index of trail miles per ATV (Statewide = 100)
1	Northwest	859	46,374	19	240
2	Northeast	952	50,748	19	243
3	South	102	44,990	2	29
4	Central	28	51,094	1	7
5	Metro	0	57,946	0	0
Total	Statewide	1,941	251,151	8	100

* Miles taken from MN DNR GIS website; includes state forest plans, GIA, and local opportunities.

** An "individual" is distinct from a "company" or other "organization". Nearly all ATVs (98%) are registered by an individual.

Comparison of OHM trail opportunity miles and registrations by region, 2010

<u>Region code</u>	<u>Region name</u>	OHM trail opportunity miles*	OHMs registered by a MN individual**	Trail miles per thousand OHMs	Index of trail miles per OHM (Statewide = 100)
1	Northwest	593	1,306	454	535
2	Northeast	491	1,765	278	328
3	South	41	1,959	21	25
4	Central	6	2,395	2	3
5	Metro	0	5,886	0	0
Total	Statewide	1,131	13,311	85	100

* Miles taken from MN DNR GIS website; includes state forest plans, GIA, and local opportunities.

** An "individual" is distinct from a "company" or other "organization". Nearly all OHMs (99%) are registered by an individual.

Comparison of ORV trail opportunity miles and registrations by region, 2010

<u>Region code</u>	<u>Region name</u>	ORV trail opportunity miles*	ORVs registered by a MN individual**	Trail miles per thousand ORVs	Index of trail miles per ORV (Statewide = 100)
1	Northwest	22	356	63	162
2	Northeast	78	486	161	416
3	South	10	624	16	41
4	Central	0	467	0	0
5	Metro	0	926	0	0
Total	Statewide	111	2,859	39	100

* Miles taken from MN DNR GIS website; includes state forest plans, GIA, and local opportunities.

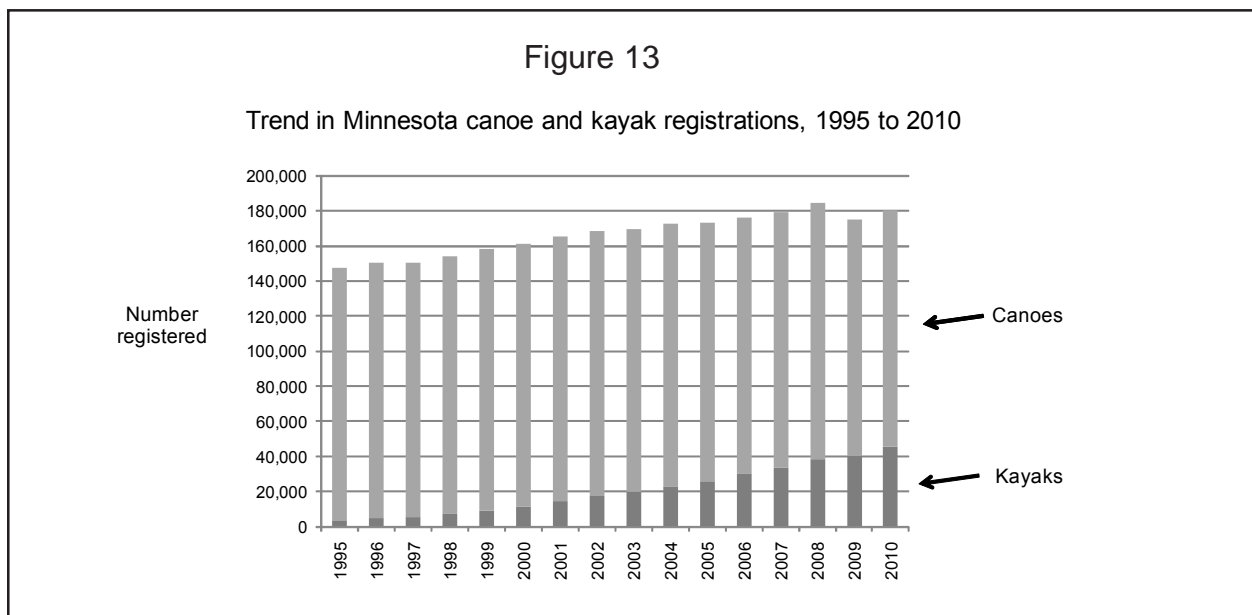
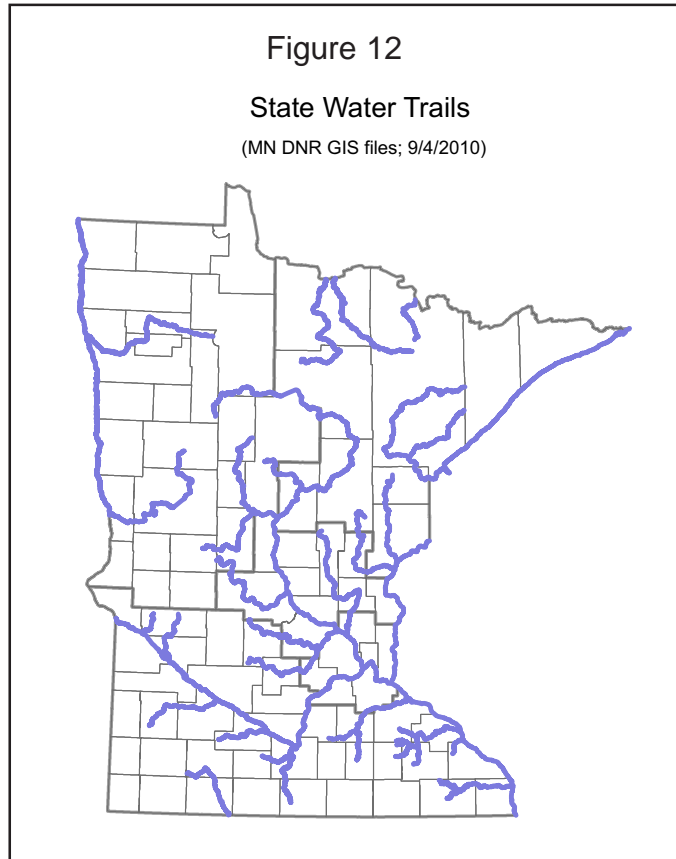
** An "individual" is distinct from a "company" or other "organization". Nearly all ORVs (96%) are registered by an individual.

State water trails

Minnesota has nearly 4400 mile of water trails, formerly referred to as state canoe and boating routes (Figure 12) . Except for the Lake Superior water trail (155 miles long), the trails are located on rivers. The trail map displays the river reaches that are canoeable at least three months a year.

Paddle craft (canoes and kayaks) are a primary user group for the water trails. Over the last 15 years, the registrations of paddle craft have increased, with kayaks leading the way (Figure 13—Reference 10). Kayaks have continued to increase in recent years, but canoes have declined, leading to a plateauing in paddle craft over the last five years.

The designation of water trails grew at a modest pace over the last decade. If the pace of designation over the last decade were to continue for another 10 years, nearly 1000 miles of new water trails would be designated.



For the location analysis, water trail miles are evaluated relative to registered paddle craft, a measure of trail users. The only substitute facilities for these trails are the trails themselves.

The comparison of trail miles with registrations indicates that the two northern Minnesota regions and the south region have more trail miles per paddle craft; the metro region has the least, followed by the central region (Table 14).

Table 14

Comparison of Water Trail miles and paddle-craft registrations by region, 2010
(table includes "pleasure" [non-commercial] registrations)

<u>Region code</u>	<u>Region name</u>	<u>Water Trail miles*</u>	<u>Canoes and kayaks registered by a MN individual**</u>	<u>Trail miles per thousand canoes and kayaks</u>	<u>Index of trail miles per canoe and kayak (Statewide = 100)</u>
1	Northwest	1,127	14,638	77	272
2	Northeast	1,198	28,500	42	149
3	South	1,335	23,524	57	200
4	Central	490	18,715	26	93
5	Metro	247	70,011	4	12
Total	Statewide	4,397	155,388	28	100

* Miles obtained from MN DNR.

** An "individual" is distinct from a "company" or other "organization". Nearly all canoes and kayaks (99%) are registered by an individual.

Site criteria for water trails include the following: canoeable at least three months of the year, preferably between May 1 and September 1; potentially free of numerous snags and manmade obstacles (no more than an average of one portage per mile) and unavoidable safety hazards; river shorelands are suitable for campsite and rest area development, preferably on land already owned by the state; water quality is high enough to allow for body contact; and minimum trail length is five-mile. In addition, the site should be capable of sustaining controlled amounts or recreational use without substantial adverse impact on the resource, adjacent lands, or land uses.

No site analysis is attempted at this time, and none could be done until site plans are assembled and evaluated.

Based on the preceding location and site considerations, the following are recommended:

- *Place a priority on new trail opportunities that are closer to the concentration of paddle craft that are in and about the Twin Cities metropolitan area.*
- *Acquire the land needed for support facilities (e.g., accesses, portages, rest areas) in priority areas.*
- *Develop a grant-in-aid program to provide assistance to local communities in developing regional water trails.*

Away-from-home evaluations of tracks

Although the bulk of outdoor recreation time is spent near home, traveling away from home to recreation destinations is a common occurrence. When Minnesotans travel away from home, they predominately go to the northeast region for each of the tracks (Table 15). The northeast is followed by the northwest and south region. Few Minnesotans travel to the metro region for outdoor recreation.

Much of the recreation travel originates in the two fastest growing regions of the state, which are the metro and central region. Population growth in these regions will fuel more travel to greater Minnesota, assuming the propensity to travel and travel patterns persist.

The destinations for away from home travelers is generally known in Minnesota, but is not known at a finer resolution that would be helpful in locating new tourist-related parks and trails. With the release of the new U.S. Census (seasonal home locations) and the geocoding of Explore Minnesota's accommodations database, it may be possible to produce a finer resolution distribution of tourist concentrations.

Based on the preceding the following are recommended:

- *Place a priority on new parks and trails that serve both tourists and locals. A number of current facilities do both. For example, the Paul Bunyan Trail starts in Baxter/Brainerd and extends north into resort and seasonal-home concentrations; the Heartland and Central Lakes Trail are similar in this respect to the Paul Bunyan. And state parks are known to be about an even mix of day users from home (locals) and users on overnight trips away from home (tourists).*
- *Attempt to produce a finer-resolution distribution of tourist concentrations in the state to assist locating tourist-related parks and trails.*

Table 15

Minnesota destination regions for longer-distance outdoor-recreation travel by Minnesotans: table values are percent of longer-distance use

Destination region code	Destination region name	Park use***	Paved bicycle trail use*	Snowmobiling*	ATV riding*	OHM riding*	ORV riding*	Canoeing/kayakin g**
2	Northeast	51%	42%	51%	43%	41%	52%	49%
1	Northwest	18%	12%	26%	29%	25%	21%	24%
3	South	22%	24%	12%	10%	15%	14%	8%
4	Central	7%	17%	10%	17%	16%	10%	12%
5	Metro	3%	5%	1%	0%	4%	2%	8%
Total	Statewide	49%	100%	100%	100%	100%	100%	51%

*Percent of longer-distance use
originating in the two largest
projected population growth regions
(metro and central)*

* Travel exceeding 30 minutes; based on 2008 trail activity study. Paved bicycle trail use based on biking; the large majority (near 90%) of long-distance travel to state bicycle trails is for biking.

** Based on cross-region travel to "county most used", information available in the boating registration file.

*** Based on state-park trips away from home (not day use trips from home); 2007 study.

State parks

At present, there are 67 state parks (Figure 4), which contain some 225,000 acres of public land and about 25,000 acres of private in holdings. Few state park units have been designated in recent years. One was added in 2010 (Lake Vermilion).

State parks are evaluated relative to their primary function as defined in statute, which is a site criterion:

Park exemplifies the natural characteristics of the major landscape regions of the state, as shown by accepted classifications, in an essentially unspoiled or restored condition or in a condition that will permit restoration in the foreseeable future; or contains essentially unspoiled natural resources of sufficient extent and importance to meaningfully contribute to the broad illustration of the state's natural phenomena.

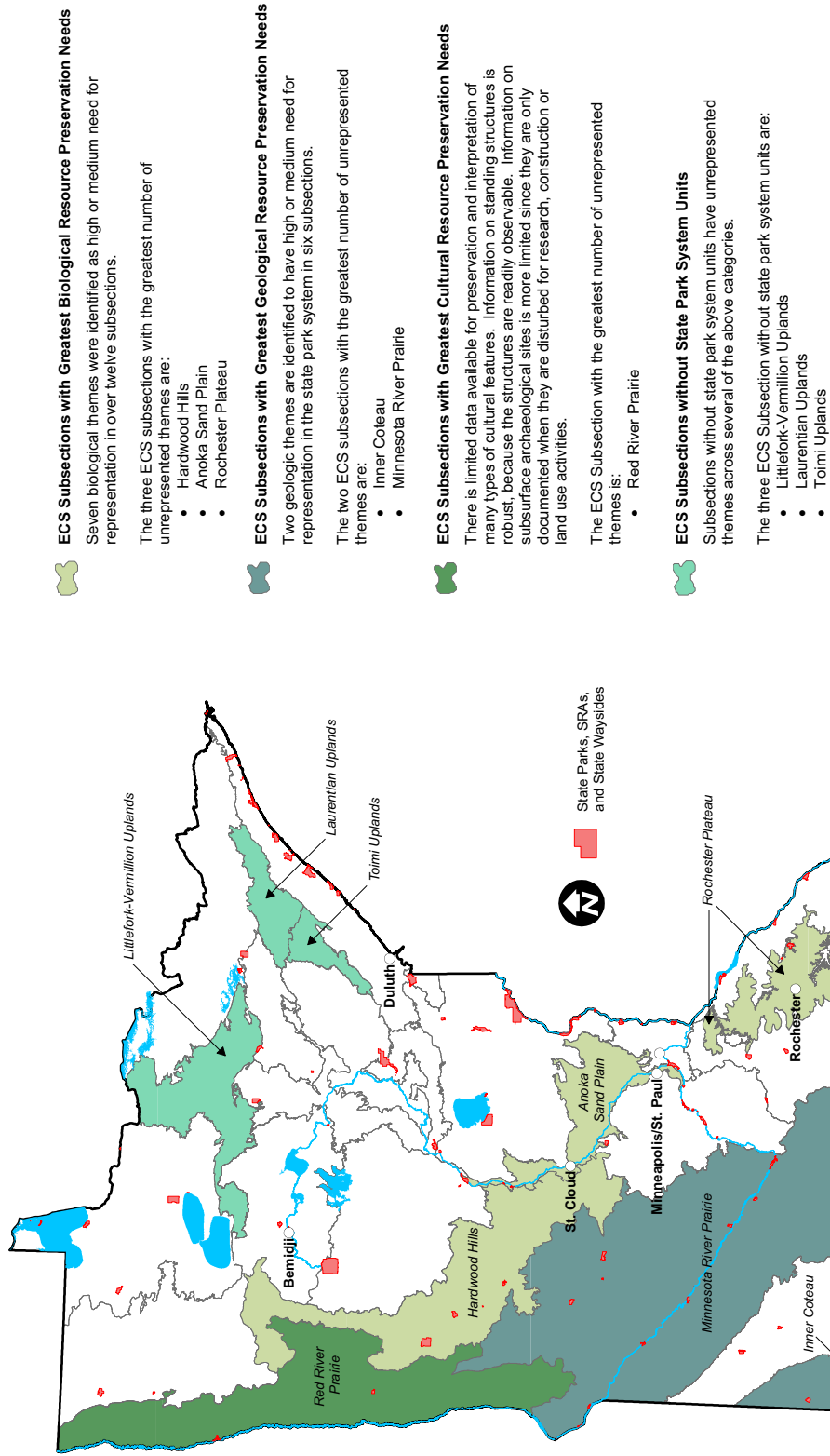
Park contains natural resources, sufficiently diverse and interesting to attract people from throughout the state.

Most of the landscape regions have state parks that represent them, but a few do not. The latter were identified in 2000 *Minnesota State Park System Land Study* (Figure 14—Reference 5). Based on this type of study, and on other considerations that would facilitate the primary function of the parks, the following recommendations are made:

- *Accelerate the acquisition of private state park in holdings. Parks must purchase from willing sellers, but as willing sellers materialize the DNR should strive towards presenting 100% of willing sellers within statutory boundaries with an offer for land purchase.*
- *Add lands to existing parks to enhance resource protection and recreational opportunities. This will require amending and/or expanding the statutory boundaries.*
- *Update the 2000 Minnesota State Park System Land Study no later than 2015 to identify priority acquisition areas for new state parks. The update should include:*
 - *The most accurate version of the Ecological Classification System (ECS) map to ensure each ECS subsection is represented by a State Park or adequate substitute.*
 - *Substitutes for state parks, such as federal lands or large regional parks that offer similar recreational experiences, should be assessed so that ECS subsections are evaluated on the opportunities for recreation and preservation by public land as a whole, and not solely by those offered by state parks.*

Figure 14

Figure 4 - Resource Preservation Needs for Minnesota's Landscape Regions



Source: Minnesota Department of Natural Resources, Division of Parks and Recreation. 2000. Minnesota State Park System Land Study.

- *Models to predict priority acquisition areas based on anticipated landscape changes due to climate change.*
- *Maintain flexibility to take advantage of rare, unique opportunities (e.g. Lake Vermilion). As another example: A land donation or transfer could significantly reduce start-up costs of a state park thereby becoming a rare opportunity to add a park to the state system with less financial resources than would otherwise be necessary.*

Facility tracks not evaluated

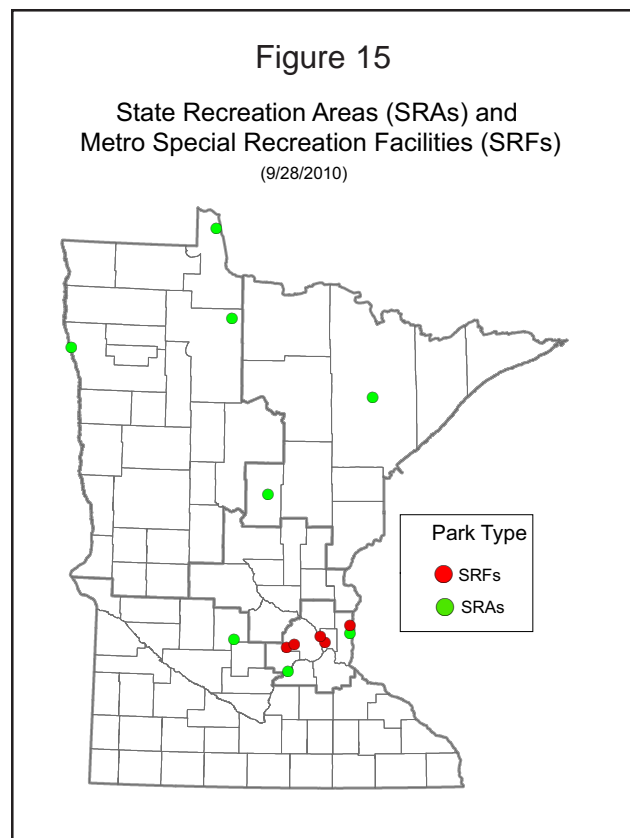
Of the eight facility tracks, six are evaluated and two are not. Not evaluated are less-traditional state and regional parks and state and regional non-motorized unpaved trails outside of parks. The former includes special recreation facilities in the Twin Cities metropolitan area, and state recreation areas. The latter includes, for example, natural surfaced trails for hiking, mountain biking, and horseback riding.

The less-traditional parks are few in number (13 total—see Figure 15) and are not similar to each other (e.g., gardens, mined areas, natural areas), so it is not possible to discuss this as an internally consistent group. What the group represents is a park-designation option for niche facilities that do not fit well in the traditional park classifications.

- *The recommendation for this group is to maintain this designation option and use it when needed.*

The other facility group that is not evaluated is not an internally consistent group, either. It includes long-distance hiking trails (e.g., North County, Superior), long-distance mountain biking trails (e.g., Agassiz, North Shore), horse trails in state forests and horse trails that parallel paved bike trails. The group is too mixed to be dealt with as a single group. And there do not appear to be any complete inventories of any piece in the group. A lot of the trail mileage of some pieces may be mainly in park units (e.g., natural surface hiking trails). For these reasons, there is no overall evaluation for the group.

- *The recommendation for the group is to consider new or expanded facility proposals on a case-by-case basis, using the best available information.*



References

1. Minnesota Department of Natural Resources (MN DNR). 2006 Facility Adequacy Survey of Minnesota Residents.
2. Criteria information came from many sources:
 - State parks (criteria from state statute 86A)
 - State recreation areas (criteria from state statute 86A)
 - Park reserves (criteria based on policy of Metropolitan Council. 2030 Regional Parks Policy Plan, 2006)
 - Regional parks (including “Special Features”; criteria from this project, based on policy of Metropolitan Council and state grants)
 - State non-motorized trails (criteria from state statute 86A)
 - Regional non-motorized trails (criteria from this project, based on policy of Metropolitan Council and state grants)
 - State and regional motorized trails (criteria based on work group and staff discussions, and on publication Trail Planning, Design, and Development Guidelines, MN DNR, 2006)
 - Water trails (MN DNR policy)
3. Information for the history of development came from several sources:
 - State facility information came from the Minnesota Department of Natural Resources
 - Regional facility information for the metro region came from the Metropolitan Council (Arne Stefferud)
 - Regional facility information for greater Minnesota came from the facility providers
4. Facility information came from the inventory efforts of the Center for Changing Landscapes, University of Minnesota. The inventory was conducted as part of the larger park and trail Legacy Amendment planning effort. The facility information, which is constantly being refined, was frozen on October 21, 2010, so tables and maps could be generated for this report. The original source of the state facility information is the Minnesota Department of Natural Resources, and is the Metropolitan Council for metro region facilities. Greater Minnesota information was obtained directly from the facility providers.
 - State park and recreation area acreage information obtained from Minnesota Department of Natural Resources.
 - Metro region park, park reserve, and special recreation facility acreage obtained from Metropolitan Council (Arne Stefferud)
 - Greater Minnesota park acreage came from the park geographic information system (GIS) file.
 - Paved bicycle trail lengths came from the GIS files.
 - Snowmobile trail lengths from the GIS file.

Off highway vehicle (OHV) trail lengths from the Minnesota Department of Natural Resources (data posted on the website for public OHV opportunities and forest planning trail designations)

Water trail lengths from the Minnesota Department of Natural Resources

5. Minnesota Department of Natural Resources. 2000. Minnesota State Park System Land Study.
6. Minnesota Department of Natural Resources. 2005. 2004 Outdoor Recreation Participation Survey of Minnesotans: Report on Findings. Report prepared by Tim Kelly.
7. Personal communication with Jonathan Vlaming and Jon Nauman, Three Rivers Park District, October 15, 2010.
8. Minnesota Department of Natural Resources. 2000. State Trail Use: Summary of Summer Trail Use and User Surveys Conducted in 1996, 1997 and 1998.
9. Population information for 2000 and 2009 from U.S. Department of Commerce, Bureau of the Census (<http://www.census.gov/>).
Population projections to 2035 from: Minnesota State Demographic Center. 2007. Minnesota Population Projections: 2005 – 2035. Report prepared by Martha McMurry.
10. Recreation vehicle and watercraft registration information from Minnesota Department of Natural Resources.
11. Minnesota Department of Natural Resources. 2008. 2007 State Parks Research Summary Report. Report prepared by Tim Kelly.

APPENDIX A:

Criteria for Park and Trail Facility Acquisition and Expansion

Types of facilities in this criteria review

1. State parks (criteria from state statute)
2. Park reserves (criteria based on policy of Met Council)
3. State recreation areas (criteria from state statute)
4. Regional parks (including “Special Features”; criteria from this project, based on policy of Met Council and state grants)
5. State non-motorized trails (criteria from state statute)
6. Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)
7. State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)
 - a. Snowmobile trails
 - b. OHV trails
8. Water trails (MNDNR policy)

Types of criteria

- A. Site: Criteria that define the internal characteristics of the facility (e.g., type of natural communities within the park; or length of trail)
- B. Location: Criteria that define the external relations of the facility to its surroundings (e.g., proximity to population)

Listing of criteria

- A. Site criteria for prospective facility (from group discussion at previous meetings)
 1. Quality of natural and cultural resources
 2. Access to specific resources for nature-based activities (e.g., lakes for fishing)
 3. Durability of site for planned activities
 4. Size

B. Location criteria for prospective facility (from group discussion at previous meetings)

1. Proximity to people (both seasonal and permanent population; both current and projected population); this is a surrogate for “users”, and in some cases users may be explicitly identified (e.g., location relative to registered ATVs)
2. Market area (geographic draw of people)
3. Proximity to substitute facilities
4. Proximity to complimentary recreation facilities
5. Linkage to other recreation facilities
6. Linkage to non-recreation destinations (e.g., job locations)
7. Location within the larger landscape
8. Location relative to natural corridors
9. Location within the watershed

Discussion questions about criteria listing:

1. What criteria should be added?
2. Are some criteria primary (e.g., filtering criteria) and some secondary?
3. Do we have enough information on a criterion to evaluate its effect on facility shortages, surpluses?
4. What should the criteria for the state and regional motorized trail’s track be?
5. Other questions?

Site and location criteria

A. Site criteria for prospective facility

1. Quality of natural and cultural resources.
2. Access to specific resources for nature-based activities (e.g., lakes for fishing)
(Criterion 1 and 2 are grouped together)

State parks (criteria from state statute)

Park exemplifies the natural characteristics of the major landscape regions of the state, as shown by accepted classifications, in an essentially unspoiled or restored condition or in a condition that will permit restoration in the foreseeable future; or contains essentially unspoiled natural resources of sufficient extent and importance to meaningfully contribute to the broad illustration of the state's natural phenomena.

Park contains natural resources, sufficiently diverse and interesting to attract people from throughout the state

Park reserves (criteria based on policy of Met Council)

Park reserves, like regional parks, are expected to provide for a diversity of outdoor recreational activities. The major feature that distinguishes the park reserve from a regional park is that the reserve is also intended to provide, protect and manage representative areas of the original major landscape types in the metropolitan area to permit appreciation and enjoyment of the natural resources that influenced the region's development.

State recreation areas (criteria from state statute)

Area contains natural or artificial resources which provide outstanding outdoor recreational opportunities that will attract visitors from beyond the local area; contains resources which permit intensive recreational use by large numbers of people.

Regional parks (including "Special Features"; criteria from this project, based on policy of Met Council and state grants)

The park should provide settings with high quality natural resources and offer outdoor recreation facilities and activities that are primarily natural resource based. Examples include camping, picnicking, hiking, swimming, boating, canoeing, fishing, and nature study. A related measure is the range of these activities accommodated within the park (e.g., a park with a beach, campground and boat launch facilities is more likely to attract a regional clientele than a park with only one of these facilities).

Special Features:

Unique or unusual landscape features, historically significant sites, or parks containing characteristics of regional or statewide significance.

State non-motorized trails (criteria from state statute)

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

- (i) (Location criterion) travel along a route which connects areas or points of natural, scientific, cultural, and historic interest;
- (ii) travel through an area which possesses outstanding scenic beauty;
- (iii) travel over a route designed to enhance and utilize the unique qualities of a particular manner of travel in harmony with the natural environment;
- (iv) travel along a route which is historically significant as a route of migration, commerce, or communication;
- (v) (Location criterion) travel between units of the state outdoor recreation system or the national trail system;

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

The trail is located in a regionally desirable setting. Criteria include attractive, unusual, and/or representative landscapes, important destinations, or high quality natural areas.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

a. Snowmobile trails

Snow quality is of primary importance

Natural setting is desirable

b. OHV trails

A natural setting is important element of the experience, with highly technical areas a secondary attraction.

Natural, hilly areas make for the best trails

Develop trails in areas already influenced by human activity. Trails may be best suited in previously disturbed or degraded natural areas. Take advantage of areas of low ecological value or in ecological areas well preserved elsewhere.

Water trails (MNDNR policy)

Canoeable at least three months of the year, preferably between May 1 and September 1

Potentially free of numerous snags and manmade obstacles (no more than an average of one portage per mile) and unavoidable safety hazards

River shorelands are suitable for campsite and rest area development, preferably on land already owned by the state

Water quality is high enough to allow for body contact

3. Durability of site for planned activities

This criterion is explicit or implicit for all of the facilities. It is, for example, a routine topic in the publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006 (a guiding principle is “Ensure that trails remain sustainable”). The policy statement for water trails is generally representative:

Capable of sustaining controlled amounts or recreational use without substantial adverse impact on the resource, adjacent lands, or land uses.

4. Size

State parks (criteria from state statute)

Park is sufficiently large to permit protection of the plant and animal life and other natural resources which give the park its qualities and provide for a broad range of opportunities for human enjoyment of these qualities.

Park reserves (criteria based on policy of Met Council)

The park reserves are substantially larger than the parks because they are to contain a diversity of natural resources with adequate space for protection and management of natural resources and for the pursuit of compatible outdoor activities. Experience has shown that an optimum size exceeds 2,000 acres, while the minimum is about 1,000 acres.

State recreation areas (criteria from state statute)

(no criteria in statute)

Regional parks (including “Special Features”; criteria from this project, based on policy of Met Council and state grants)

Size: 100+ acres, with exceptions based on use characteristics, special features, etc.

State non-motorized trails (criteria from state statute)

(no criteria in statute)

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

Adequate length: The trail provides at least an hour of outdoor recreation opportunity, or connects to other facilities that can provide at least an hour of recreation in total.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

- a. Snowmobile trails
- b. OHV trail

Trail long enough for at least a two-hour outing. Because of the varying operating speeds of the different motorized vehicles, this time translates into different minimum trail lengths.

Water trails (MNDNR policy)
Minimum five-mile reach

B. Location criteria for prospective facility

1. Proximity to people (both seasonal and permanent population; both current and projected population); this is a surrogate for “users”, and in some cases users may be explicitly identified.

The population criterion is not addressed directly in plans, statute at this time. Access to potential facility users is explicit or implicit for all facilities, since the facilities are expected to attract users. Proximity to population can be thought of as a general measure of access to potential users. The policy statement for water trails is generally representative:

Has reasonable proximity to potential users.

2. Market area (geographic draw of people)

State parks (criteria from state statute)

Park contains natural resources, sufficiently diverse and interesting to attract people from throughout the state

Park reserves (criteria based on policy of Met Council)

Service area is a county or multi-county area.

State recreation areas (criteria from state statute)

Area contains natural or artificial resources which provide outstanding outdoor recreational opportunities that will attract visitors from beyond the local area;

Regional parks (including “Special Features”; criteria from this project, based on policy of Met Council and state grants)

Use: Evidence that the park serves at least a regional clientele (multiple communities). Other related factors may include evidence that the facility currently or potentially may draw tourists and generate economic impact from outside the local area.

State non-motorized trails (criteria from state statute)
(no criteria in statute)

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

Trail attracts a regional clientele (multiple communities), potentially may draw tourists, and generates an economic impact from outside the local area.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

- a. Snowmobile trails
- b. OHV trail

(no statement on this criterion)

Water trails (MNDNR policy)
(no policy statement on this criterion)

3. Proximity to substitute facilities

State parks (criteria from state statute)
(no criteria in statute)

Park reserves (criteria based on policy of Met Council)
(appears to be implicit in 2030 Plan’s need analysis of where new facilities are not needed)

State recreation areas (criteria from state statute)

Area may be located in areas which have serious deficiencies in public outdoor recreation facilities, provided that state recreation areas should not be provided in lieu of municipal, county, or regional facilities.

Regional parks (including “Special Features”; criteria from this project, based on policy of Met Council and state grants)

Scarcity of Recreational Resources: The park provides public natural resource based recreational opportunities that are not otherwise available within a reasonable distance.

Examples include water-based activities, such as swimming, fishing and boating; interpretive nature trails; public campgrounds; etc.

State non-motorized trails (criteria from state statute)

Trail takes into consideration predicted public demand and future use.

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

The trail should not duplicate an existing trail.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

- a. Snowmobile trails
- b. OHV trail

(no statement on this criterion)

Water trails (MNDNR policy)

(no statement in policy)

4. Proximity to complimentary recreation facilities

This criterion is not directly addressed in plan or statute, but parks and trails are considered important facilities throughout the state, so this is probably covered under 3 above (proximity to substitutes).

5. Linkage to other recreation facilities

This is a trail criterion.

State non-motorized trails (criteria from state statute)

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

- (i) (Location criterion) travel along a route which connects areas or points of natural, scientific, cultural, and historic interest;
- (v) (Location criterion) travel between units of the state outdoor recreation system or the national trail system;

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

Connections: The trail currently or potentially will link to an existing trail of regional or statewide significance. This includes providing connections between significant trails, or connecting communities/ community facilities to these trails. The Regional non-motorized trail cannot be entirely contained within a regional park unit.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

- a. Snowmobile trails
- b. OHV trail

Desirable to have fully connected trail systems

Water trails (MNDNR policy)
(no statement in policy)

6. Linkage to non-recreation destinations (e.g., job locations)

This is a trail criterion.

State non-motorized trails (criteria from state statute)

A State non-motorized trail shall be established to provide a recreational travel route which connects units of the outdoor recreation system or the national trail system, provides access to or passage through other areas which have significant scenic, historic, scientific, or recreational qualities or reestablishes or permits travel along an historically prominent travel route **or which provides commuter transportation.**

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

Connections: The trail currently or potentially will link to an existing trail of regional or statewide significance. This includes providing connections between significant trails, or connecting communities/ community facilities to these trails. The Regional non-motorized trail cannot be entirely contained within a regional park unit.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

- a. Snowmobile trails
- b. OHV trail

Needs access to local services, rest stops, lodging, restaurants, and businesses.

Water trails (MNDNR policy)
(no statement in policy)

7. Location within the larger landscape

This is a trail criterion, but could be extended to parks (e.g., provides views of Lake Superior).

State non-motorized trails (criteria from state statute)

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

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

Regional non-motorized trails (criteria from this project, based on policy of Met Council and state grants)

The trail is located in a regionally desirable setting. Criteria include attractive, unusual, and/or representative landscapes, important destinations, or high quality natural areas.

State and regional motorized trails (criteria based on work group and staff discussions, and on publication *Trail Planning, Design, and Development Guidelines*, MNDNR, 2006)

- a. Snowmobile trails
- b. OHV trail

Natural, scenic setting is desirable.

Water trails (MNDNR policy)

Scenic qualities contribute to the recreational experience.

8. Location relative to natural corridors

The public land purchases that go along with all these facilities may be located in “natural corridors” and provide protection to those corridors.

9. Location within the watershed

The public land purchases that go along with all these facilities are, of course, located in a watershed. Are certain watershed positions more desirable? (e.g., high in the watershed?; shoreline of a large lake?).