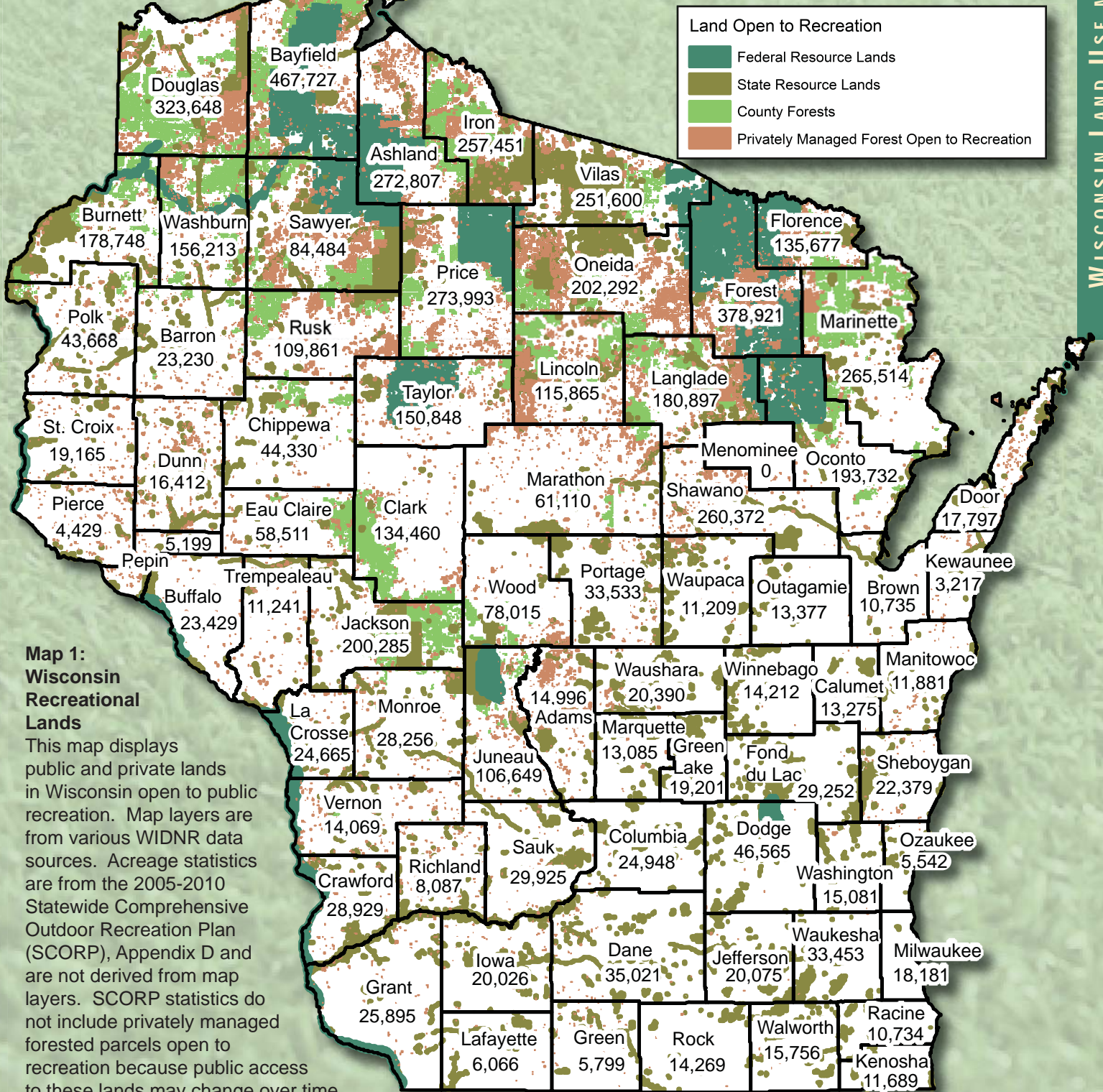


# WISCONSIN LAND USE MEGATRENDS:

# RECREATION



**Map 1:  
Wisconsin  
Recreational  
Lands**

This map displays public and private lands in Wisconsin open to public recreation. Map layers are from various WIDNR data sources. Acreage statistics are from the 2005-2010 Statewide Comprehensive Outdoor Recreation Plan (SCORP), Appendix D and are not derived from map layers. SCORP statistics do not include privately managed forested parcels open to recreation because public access to these lands may change over time.



## Introduction

The goal of this brochure is to illustrate state-wide land use trends related to recreation. The first two sections of the report discuss many of the historic, demographic, and geographic forces that have shaped Wisconsin's recreational landscape. Trends related to three types of recreational resources are highlighted in subsequent

sections: nature-based land recreation, water-based recreation, and developed land recreation. This brochure is intended to help local communities, government officials, planning professionals and individual landowners think about ways to plan for and better manage local and regional recreational resources.

## Public Recreation Lands: History and Trends

The scattered recreation sites found throughout Wisconsin were not how early settlers originally envisioned the state's future. In the mid-1800s, large areas suited to farming or forest harvesting encouraged settlement throughout the state. Land that could not be put to immediate economic use was of little value. Things began to change at the turn of the Century.

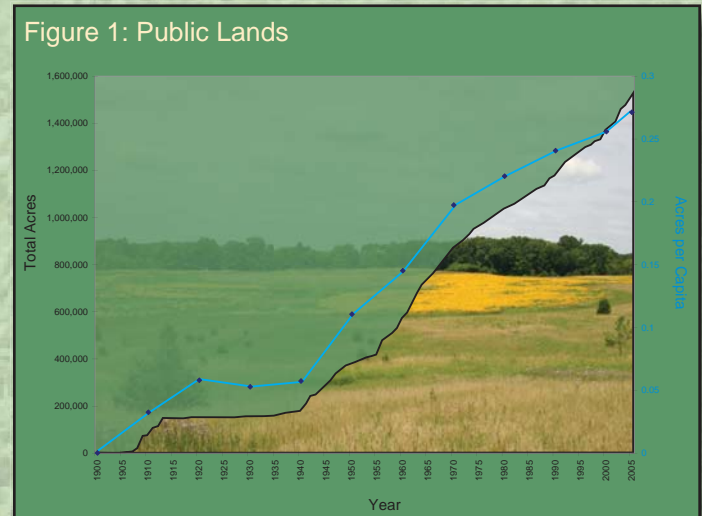
In 1900, the first state park was established at the Dalles of the St. Croix River. In 1909, famed planner John Nolen completed a plan for future parks in the state, including sites at Devil's Lake, Door County, Grant County, and the Wisconsin Dells. In 1907, Frederick Weyerhaeuser deeded the lands that would become the Brule River State Forest, an area prized for its recreation assets.

As farms failed in northern Wisconsin, an increasing amount of land was abandoned by industrial forest owners and resigned settlers. These lands provided the basis for today's county forest system. The federal and state government also increased their holdings at this time, acquiring lands near lakes and rivers.

In 1939, the State Planning Board produced a significant update to Nolen's plan, proposing numerous new parks and parkways. Growth and prosperity following World War II generated unprecedented demand for recreation land. In 1961, then-Governor Nelson began the Wisconsin Outdoor Recreation Action Program (ORAP), funded by a one-cent-per-pack cigarette tax. The tax yielded over \$400,000 each month, 90% of which was directed to land acquisition.

In 1969, Governor Knowles signed into law ORAP 200, the successor to Nelson's recreation plan, heralding what would become Wisconsin's environmental decade. Governor Thompson's Stewardship Program followed in 1989, authorizing \$250 million over ten years. The legislature reauthorized the Knowles-Nelson Stewardship Fund in 2000 to cover acquisitions through 2010 with \$60 million per year. Presently, Governor Doyle is proposing that the program be reauthorized before 2010 to permit state bonding at a level of \$105 million per year.

In a way, Wisconsin is a victim of its own success in promoting outdoor recreation. Early efforts to provide recreation to Wisconsinites instilled a widespread appreciation of the outdoors, which in turn, has fostered



high demand to "own a slice of heaven." As a result, increasing rural land values are making it harder and harder for the state to expand upon its holdings. The growing role of easements and similar "partial" ownership of recreation land is likely to increase as concerns over access to recreation land grows and agencies look to get the most public access for each dollar.

### ***What does all of this mean for the State of Wisconsin and their tourist guests?***

*It means the state will have one of the finest outdoor recreation systems in the country in the near future...there will be more wildlife, picnic areas and campsites, swimming beaches, ski hills, and hiking trails. Scenic beauty and public waters will be better preserved, and there will be land to manage intensively for outdoor recreation by your children's children.*

*L.P. Voigt, Director Wisconsin Conservation Department, 1962<sup>1</sup>*



## Demographic Trends

### Geographic Distribution

The state's long legacy of natural resources protection and public land acquisition ensures that there is an ample supply of public land available for recreation in Wisconsin. However, there is a growing divide between the location of public lands and population. Whereas the greatest concentrations of public land are located in northern Wisconsin, the majority of the state's residents are located in the southern and eastern parts of the state, with recent growth near the Twin Cities. As illustrated in Map 2, these urbanized areas contain relatively less land open to public recreation per capita.

More rural parts of the state are also experiencing change. Areas rich in natural resources, ever popular as tourist destinations, are experiencing steady levels of development as well as conversion of seasonal homes to year-round living. "Privatization" and parcelization of shorelands, forests and other natural resource areas serves to reduce the amount of land available for recreation, and also limits access.

### Participation Trends

The demographic structure of a region affects demand for recreation. Among older generations, quiet, low-impact activities such as bird-watching, gardening, walking and driving for pleasure are popular. Older generations, particularly members of the Baby Boom generation (born between 1946 and 1964), are expected to participate in a broader range of recreational activities later in life due to improved levels of health and fitness and higher levels of disposable income. Among younger generations, led by Generation Y (born between 1981 and 1995), activities such as running, disc golf, kayaking, paintball, and riding ATVs are popular. Among children, participation in outdoor activities has declined dramatically. In a typical week, only six percent of children, ages nine to thirteen, play outside on their own. Studies have found that getting kids outdoors more – and especially experiencing nature directly – provides many benefits. Specifically, outdoor activity reduces childhood obesity and increases motivation to learn, self-esteem, problem solving, and attention spans.<sup>2</sup>

According to a report by the Wisconsin Department of Natural Resources, a much higher proportion of Wisconsinites participate in outdoor recreation activities than the national average. Table 1 shows participation rates for selected outdoor recreational activities in Wisconsin. Many popular outdoor activities such as driving for pleasure, picnicking, sightseeing, and attending

Table 1: Participation in select outdoor recreation activities (age 16+)<sup>3</sup>

Activity	Percent Participating	1,000s of Participants
Walking for pleasure	86%	3,567
Viewing/photographing nature	68%	2,806
Gardening/landscaping	65%	2,715
Bicycling	49%	2,049
Swimming	46%	1,904
Fishing	41%	1,692
Day hiking	35%	1,455
Camping	32%	1,343
Running or jogging	29%	1,222
Canoeing	21%	852
Hunting	19%	798

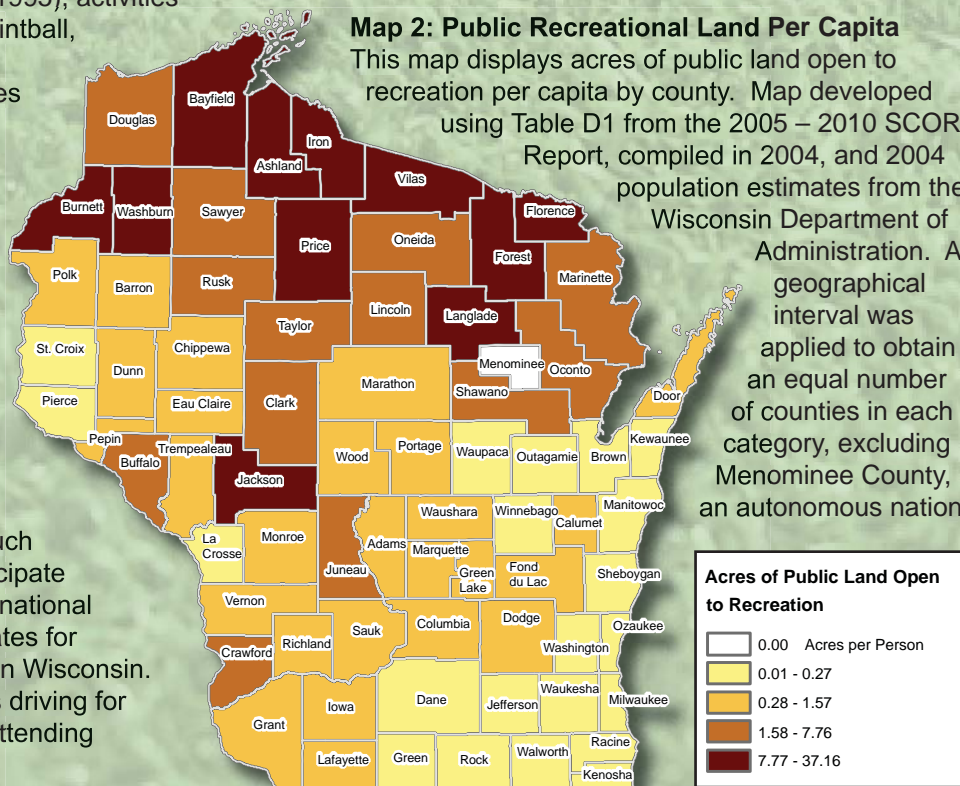
outdoor sporting events are not shown on this table. These activities are accessible to multiple generations, making them some of the most popular recreational activities in the state.

### Barriers to Participation

When asked about barriers to participation in outdoor recreation, time and money rated most highly. According to a nationwide study, 60% of participants don't have enough time to participate in outdoor activities and 39% feel it is cost-prohibitive. As time becomes more pressed between work, school, home life and other responsibilities, activities that are located close to home and that do not require scheduling are expected to increase in popularity.

### Map 2: Public Recreational Land Per Capita

This map displays acres of public land open to recreation per capita by county. Map developed using Table D1 from the 2005 – 2010 SCORP Report, compiled in 2004, and 2004 population estimates from the Wisconsin Department of Administration. A geographical interval was applied to obtain an equal number of counties in each category, excluding Menominee County, an autonomous nation.





## Nature-Based Land Recreation

Nature-based land recreation takes place throughout Wisconsin and has a significant impact on local economies. Key to this type of activity is the desire of participants to visit “natural” or undeveloped settings.

### Participation Trends

Table 2 provides participation rates for common nature-based land activities in Wisconsin. Visiting wilderness areas is the most popular nature-based land activity. Geocaching is a relatively new but rapidly growing sport that holds great appeal for those that want to combine the latest in technology with an outdoor activity. Other growing activities are wildlife viewing and bird watching which often take place in natural settings.

Table 2: Participation in nature-based land activities (age 16+)<sup>3</sup>

Activity	Percent Participating	1,000s of Participants
Visit wilderness area	38%	1,592
Day hiking	35%	1,455
Camping, developed	32%	1,343
Off-road ATV use	23%	973
Mountain biking	20%	848
Hunting	19%	790
Snowmobiling	18%	761
Camping, primitive	16%	665
Skiing, cross country	11%	474
Horseback riding, trails	8%	337
Snowshoeing	8%	333
Backpacking	7%	287
Rock climbing	6%	245
Geocaching	2%	83

A big change in recreation participation from 1994 to 2004 has been the increase of snow and ice-based activities as a result of advancements in equipment technology. Reduced winter snow cover and an aging population could significantly impact this trend.

### Hunting

In Wisconsin, hunting occurs more often on non-industrial private land than publicly-owned land.<sup>5</sup> Even though the number of Wisconsinites participating in hunting has remained steady, the overall participation rate has not kept pace with population growth. The average age of participants is increasing due to the fact that so few young people are taking up the sport.<sup>3</sup> Additional reasons for decline include: difficulty accessing lands open for hunting; urbanization and loss of habitat; increasing costs to participate; decreasing leisure time; and lack of mentors, a key component to hunting participation.<sup>6</sup>

### Camping

Statewide, an estimated 1,177 public and private campgrounds contain over 74,000 campsites. Occupancy rates for Wisconsin campgrounds have been increasing along with the number of campgrounds and campsites. State campgrounds are concentrated in the southern half of the state serving areas of higher population. Federal lands are located in the northern half of the state and provide more wilderness-type settings. Public campgrounds offer most of the tent camping opportunities while private campgrounds tend to focus on sites with increased amenities such as water and electrical hookups.

While the total number of campgrounds is highest in the northern half of the state, the largest campgrounds and greatest number of campsites are found in the southwestern and central parts of the state (see figure 2). These larger campgrounds have more of the amenities that RV campers are looking for. Currently, non-primitive camping is the preferred camping type (see figure 3). However, baby boomers have indicated a preference for RV camping.<sup>3</sup> This may lead to increased demand for these sites throughout the state as the population ages.

Figure 2: Campgrounds and Campsites

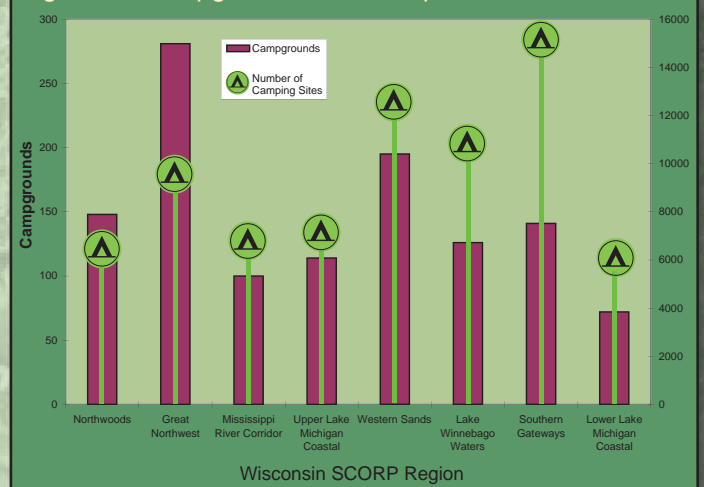
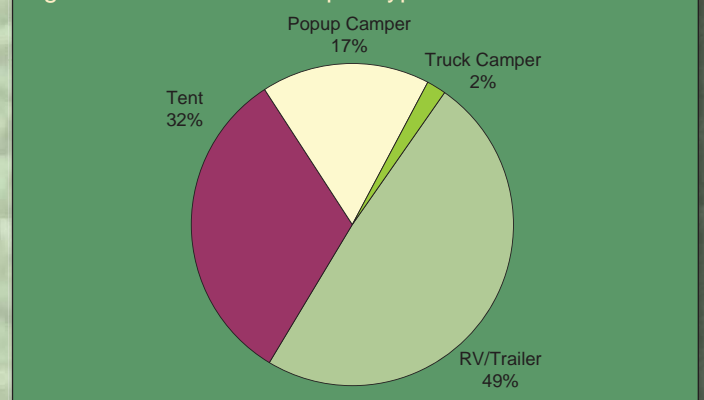


Figure 3: Wisconsin Camper Type





### Trails

Wisconsin state parks, forests, trails, wildlife areas, and other Department of Natural Resources lands provide more than 3,060 miles of recreational trails. They have a variety of surfaces suited for multiple activities such as walking, running, hiking, bicycling, in-line skating, horseback riding, all-terrain vehicles, snowmobiling, cross-country skiing, and snowshoeing. In addition, counties and municipalities have many miles of recreational trails. Trail networks are being established linking local and regional sites thereby increasing access to these facilities.

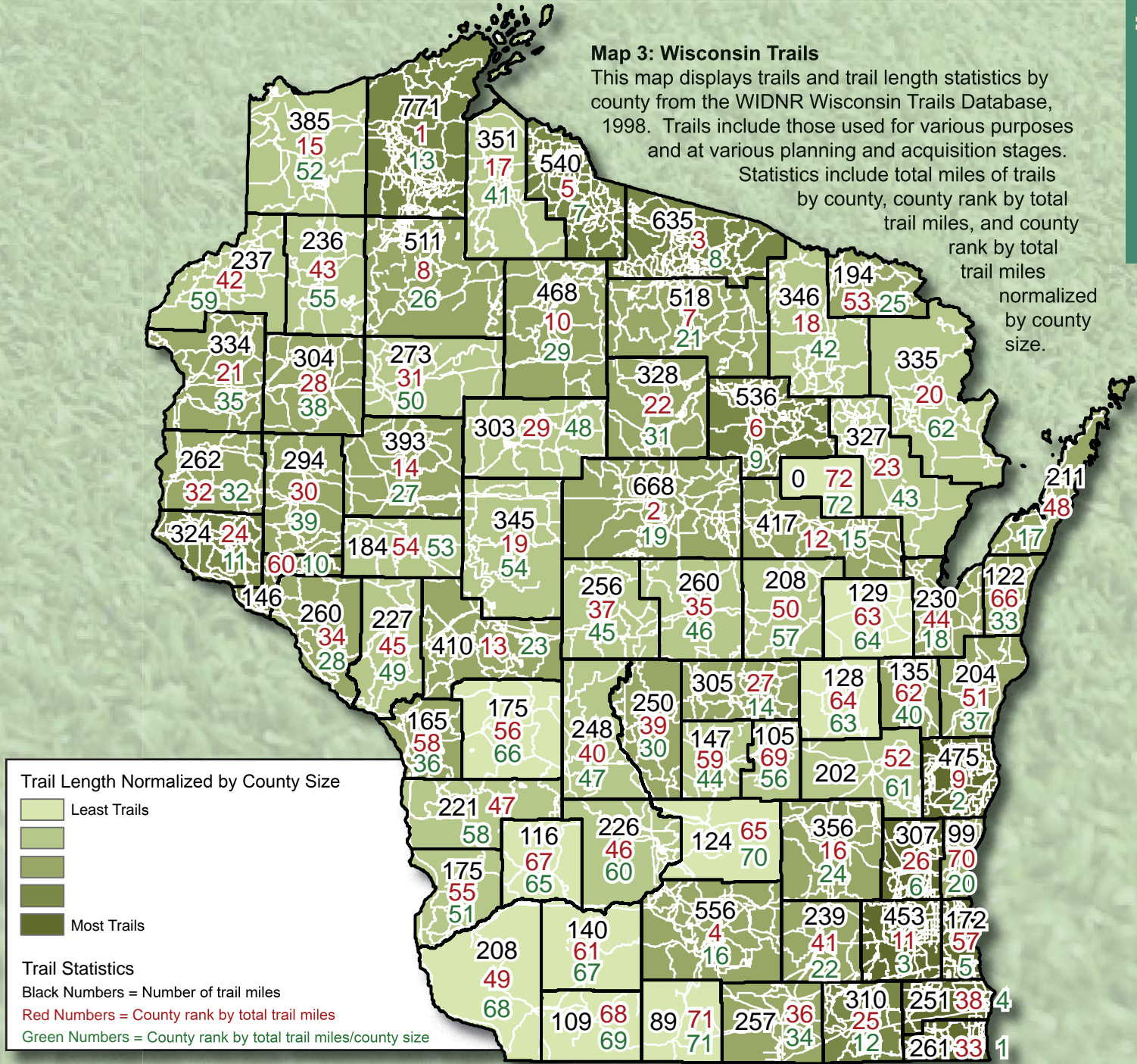
Statewide participation trends from 1994 to 2004 show a 50% or greater increase in linear activities such as kayaking, canoeing, horseback riding,

snowmobiling, day hiking, and running or jogging.<sup>3</sup> The popularity of these activities, combined with increasing pressure on leisure time, is expected to increase demand for trails closer to population centers. Maintaining snowmobile trails may become a challenge in the future due to development of rural areas and incompatibility of the sport with an urban setting.

Trail usage and the demand for more trails in urban areas should increase as a result of local and national obesity reduction efforts. Federal, state and private funding are being used to promote and build facilities for activities such as walking and biking that can be integrated into daily living habits. Walking for pleasure is already the most popular recreation activity and the easiest to participate in.

**Map 3: Wisconsin Trails**

This map displays trails and trail length statistics by county from the WIDNR Wisconsin Trails Database, 1998. Trails include those used for various purposes and at various planning and acquisition stages. Statistics include total miles of trails by county, county rank by total trail miles, and county rank by total trail miles normalized by county size.



**Trail Length Normalized by County Size**

- Least Trails
- Most Trails

**Trail Statistics**

- Black Numbers = Number of trail miles
- Red Numbers = County rank by total trail miles
- Green Numbers = County rank by total trail miles/county size



## Water-Based Recreation

Wisconsinites have a rich tradition of enjoying their time on and near the water. With more than 43,000 miles of rivers and 15,000 inland lakes, there should be plenty of room for everyone. However, the population of Wisconsin is increasing while nature isn't making any more lakes or streams. As a result, the growth in recreational use of our waters has increased to the point that we have started to feel "the squeeze."<sup>7</sup>

### Demand for Water-Based Recreation

Compared to the nation as a whole, a greater percentage of Wisconsinites participate in water-based activities.<sup>8</sup> The most popular activities on Wisconsin's waters include boating, visiting a beach, swimming in a lake or stream, and fishing. Nearly half of all Wisconsinites participated in each of these activities over the last year. Despite already high levels of participation, the popularity of many water-based activities continues to rise..

### Quantity and Quality of Water Resources

Map 4 shows the distribution of lakes in Wisconsin by county.<sup>3</sup> While the majority of lake acres are found across northern Wisconsin, the majority of Wisconsin's residents live in the southern part of the state, with recent growth concentrated near the Twin Cities region. Northwest Wisconsin is where we find the greatest overlap between high numbers of lakes and people. Not surprisingly, residents from this part of the state with abundant clean waters

participate most frequently in water based activities.<sup>3</sup>

Clear, clean water is important to swimmers, boaters and others who enjoy being on and near the water. The quality of water in lakes and streams is directly affected by the land surrounding it. Map 4 also shows Secchi disc depth – a measure of clarity – for lakes around Wisconsin.<sup>9</sup> Lakes in the northern part of the state where the watersheds are mainly forested are much clearer than those located in the southern part of the state where development and agriculture are more prevalent.

### Photo 1: Effects of Excessive Phosphorus

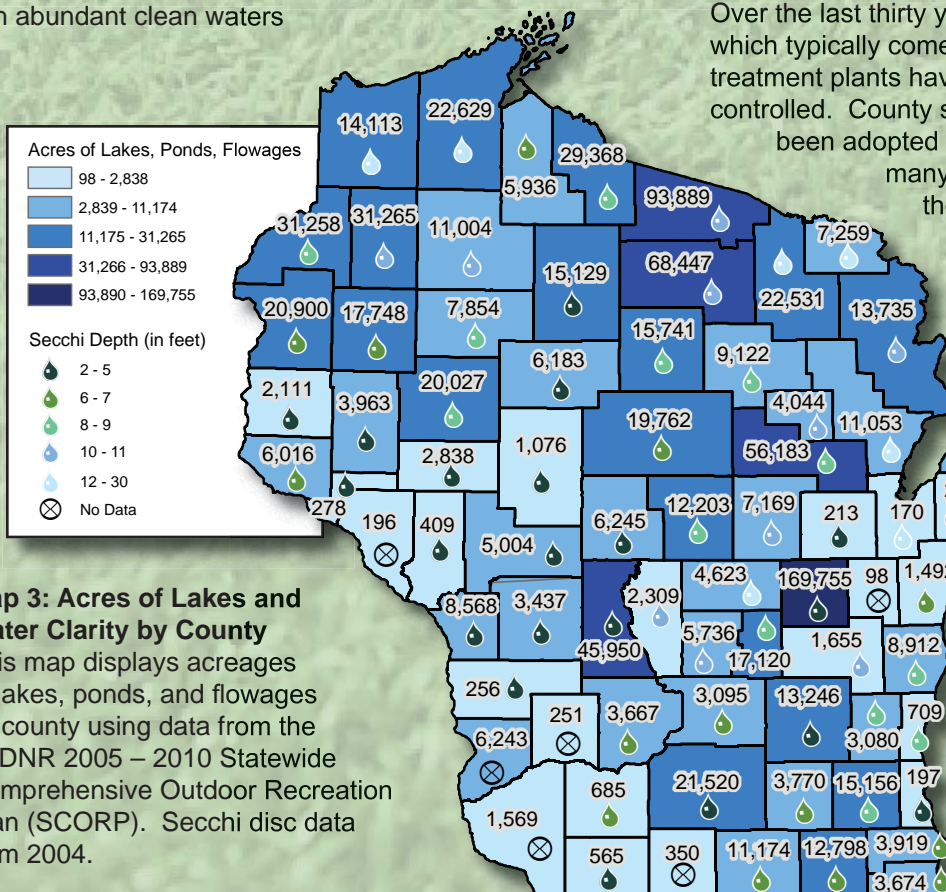
One pound of phosphorus can result in up to 500 pounds of algae growth.<sup>11</sup>



### Land Use Affects Water Recreation

If the amount of nutrients entering a lake from agriculture or development is excessive it can convert a clear lake into one with high concentrations of algae, thereby reducing the value and quality of lake water for all users. Over the last thirty years, point sources of water pollution which typically come from factories or wastewater treatment plants have been identified and largely controlled. County shoreland zoning ordinances have been adopted across the state and updated in many counties in an attempt to reduce the negative effects of waterfront

development. In 2002, Wisconsin adopted new runoff rules for agriculture and development that bode well but largely depend on future state funding. Our gains in controlling point sources are offset to some degree by continued inputs of excessive fertilizers and manure and additional runoff from new impervious surfaces, such as roads, driveways and rooftops that are associated with land development.<sup>10</sup> A commitment to stewardship is critical if we are to sustain the numerous benefits that our waters provide, including recreation.





## Developed Land Recreation

Developed land for recreation includes a broad range of activities such as ATV parks, country clubs, dirt bike tracks, playground facilities, fairgrounds, golf ranges and resorts, miniature golf, paintball game areas, skateboard parks, softball diamonds, zoos and seasonal or second homes. Below we focus on a few areas that have had and will continue to have a significant impact on land use in this state.

### Housing Growth

Figure 4 shows residential growth over a 65 year period, divided between growth in non-vacation and vacation homes. Perhaps surprisingly, the number of vacation homes remains stable from about 1985 to the present. However, the number of non-vacation homes has increased steadily over this period in part due to conversion of vacation homes to full-time residences.



### Indoor Waterparks

Another significant trend is the construction of waterparks, particularly indoor waterparks. Prior to 1983, few indoor waterparks existed. In 1983 less than 50,000 square feet was dedicated to indoor waterparks; by 2004 almost 2 million square feet existed. Hotel rooms associated with indoor waterpark resorts increased from about 1,000 rooms in 1983 to over 15,000 in 2004.<sup>12</sup> The trend continues with new indoor waterpark resorts planned and under construction throughout the United States.

## Conclusion

A variety of land use trends will need to be considered as communities plan for recreation. Among the more salient issues are the aging of the Baby Boom population and changing preferences for recreational activities; conflicts between users participating in multiple recreational activities; loss of natural resources to low-density development; limited access to lakes, streams and private lands once open to public recreation; and the growing

Wisconsin, with 30 indoor waterpark resorts, has the most of any other state. Minnesota and Michigan, ranked 2nd and 3rd, follow far behind with 9 and 7 resorts, respectively. The average size of an indoor waterpark in Wisconsin is 50,000 square feet. Michigan and Minnesota's resorts are on average half that size. The Wisconsin Dells claims the largest concentration of waterparks in one area. According to that city's visitor and convention bureau, there are 18 indoor waterparks and 3 outdoor waterparks within 18 square miles, with more than 200 waterslides using 16 million gallons of water.

### Golf

Golf is the second most popular individual outdoor sport in Wisconsin with 26% of the population hitting the greens<sup>3</sup> at 489 courses.<sup>13</sup> Golf courses in Wisconsin cover 54,000 acres. If all of these golf courses were in one location they would cover an area nine miles long by nine miles wide.

Both the number of golf courses and the number of golfers have seen steep increases in recent years. In the last 20 years, 120 new golf courses have been built covering 19,000 acres. Since 2001, the largest concentration of new courses has been in southeast Wisconsin.<sup>13</sup> Along with more courses have come more golfers. From 1995-2004, the number of golfers in Wisconsin has increased more than 20% to over 1 million people. People living in urban areas are more likely to golf than those from other parts of the state,<sup>3</sup> so the increase in golfers may result in part from an increasing urban population.

### Disc Golf

Disc golf is a rapidly expanding sport in Wisconsin that is played with an advanced type of frisbee on open or wooded courses. Over 8% of residents currently play disc golf and over ¾ of players are less than 35 years of age.<sup>3</sup> Wisconsin has 99 frisbee golf courses, located mainly in the central and southeast part of the state.<sup>14</sup> Disc golf courses are often incorporated into existing parks and may displace previous park uses.

divide between population centers and public land. Despite these concerns, there are multiple opportunities to integrate recreational features into our communities. Some of these solutions include public-private partnerships, continued acquisition and management of public lands for multiple groups, integration of natural features into new developments, and linkages between existing facilities through trails.



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Center for Land Use Education

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