Recreation Opportunities Analysis

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I. EXECUTIVE SUMMARY

The Department of Natural Resources manages over 1.6 million acres on behalf of state residents to provide a diversity of recreational experiences and meet a variety of ecological needs. Using information and input from many sources, the department makes ongoing decisions about what types of recreation opportunities to provide at different properties to meet its goal of providing high quality outdoor experiences for residents and visitors.

The DNR manages over 1.6 million acres on behalf of state residents.

The purpose of the ROA is to ensure that the DNR is providing high-quality recreation opportunities in the most effective places.

To ensure that the department is providing high quality recreation experiences at places well-suited to support these uses, the agency compiled this Recreation Opportunities Analysis (ROA) to bring together information and the public's ideas on:

- Current recreation opportunities
- Existing gaps and needs
- Department-managed properties that may be well-suited to help address these needs

To be sure, department-managed lands are only one potential solution to meeting recreation needs; our partners in the private sector and governments from local to federal levels all play important roles in helping provide outdoor recreation opportunities in Wisconsin. In many cases and for many reasons, the properties that the department manages simply may not be "good fits" to meet important needs.

Factors considered in identifying potential properties that might be "good fits" to help meet recreation needs:

- Statutory requirements
- Funding sources and restrictions
- Existing uses
- Physical attributes
- Landscape context
- Social needs and requests

The results of the ROA are intended to inform and streamline the department's master planning process. By identifying the department-managed properties that are potentially well-suited to meet recreation needs, the results of the ROA will allow department staff and the public to focus on the subset of recreation opportunities needed in the region that the property can meaningfully address.

The department started the analysis process by assembling leaders of statewide recreation organizations to provide insights and expertise about a range of recreation activities that occur on department and other public lands in Wisconsin. This group, known as the Statewide Stakeholders Team, provided critical information on recreation needs in the state (both in terms of existing gaps and the conditions that make for high-quality experiences) and how the department can help meet these needs. In addition, the Team has been instrumental in identifying ways for diverse recreation interests to work together to maximize benefits while minimizing impacts.

Eight Regions of Wisconsin

Because recreation opportunities and demands vary across the state, the ROA divides the state into eight regions. These are the same regions identified and used in previous Statewide Comprehensive Outdoor Recreation Plans (SCORP). The department initiated the ROA process in the Northwoods Region in spring of 2017, and proceeded to complete the rest of the regions in the state through the spring of 2018.

NORTHWOODS REGION

With an abundance of public conservation lands, the nine-county Northwoods Region has been an outdoor recreation destination for generations of families dating back to Wisconsin's earliest days. A wide range of recreation opportunities are currently provided in the region – from quiet wilderness areas and no-motor lakes to modern campgrounds with hot showers to developed mountain biking trails and thousands of miles of snowmobile trails.

The department sought public input on existing recreation participation and recreation opportunities that are in demand. Over 2,700 people provided input covering a variety of topics.

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Northwoods Region. A brief summary is provided here.

NORTHERN HIGHLAND AMERICAN LEGION STATE FOREST

- More **paved bike trails** that expand the existing network linking cities and villages to each other and campgrounds. Also, potentially create loop trails.
- More **mountain biking trails** that expand existing opportunities and create new destinations.
- **ATV/UTV riding** on forest roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks and to provide access during the fall hunting season.
- **Off highway motorcycle riding** on forest roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks.
- **Camping**. Consider adding electric hook-ups at some campgrounds or significant portions of campgrounds and creating quiet campgrounds where generators would be limited, as well as adding more group campgrounds.

A number and diversity of recreation needs were identified by the public, including:

- Trails for motorized recreation
- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Campgrounds – both rustic and developed
- Larger populations of big game species

STATE WILDLIFE AREAS, FISHERY AREAS, REARING STATIONS, AND NATURAL AREAS

- **Hiking/walking/running loop trails** of varying lengths.
- Some limited opportunities to provide **mountain biking trails**.
- **ATV/UTV riding and motorcycle riding** on roads that connect regional trail/route networks.
- Some limited opportunities to provide **primitive and rustic camping** opportunities.
- Additional **boat launches** at strategic locations to facilitate access to key waters.

FLOWAGES (SCENIC WATERS AREAS)

- **Hiking/walking/running loop trails** of varying lengths.
- **ATV/UTV riding and motorcycle riding** on roads that connect regional trail/route networks.
- Opportunities to provide more **primitive and rustic camping opportunities**.

STATE PARKS AND TRAILS

- Allow or expand **ATV/UTV riding and motorcycle riding** opportunities to help connect regional trail/route networks.
- Some options to add to the existing **camping and bicycling** opportunities at Council Grounds State Park.

Top activities that ROA input form respondents participate in include:

- ATV/UTV riding
- Bicycling – paved trails
- Bicycling – mountain biking, single track
- Camping – tent
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Fishing – from shore
- Fishing – ice fishing
- Harvesting berries, mushrooms, etc.
- Hiking, walking and running on trails
- Motorboating
- Snowmobiling
- Swimming
- Wildlife/bird watching

UPPER LAKE MICHIGAN COASTAL REGION

The Upper Lake Michigan Coastal Region has been an outdoor recreation destination for those looking for a mix of developed recreation facilities, Great Lakes scenery, and remote excursions. The state parks in the region are among the highest visited in the state, plus hunting and fishing opportunities are world-class. A wide range of recreation opportunities are currently provided in the region, from quiet wilderness areas to modern campgrounds with amenities to developed mountain biking trails and miles and miles of snowmobile trails.

Although the region is rich in current opportunities, a few needs were expressed by the over 1,500 respondents to the public input opportunity. The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Upper Lake Michigan Coastal Region. A brief summary is provided here.

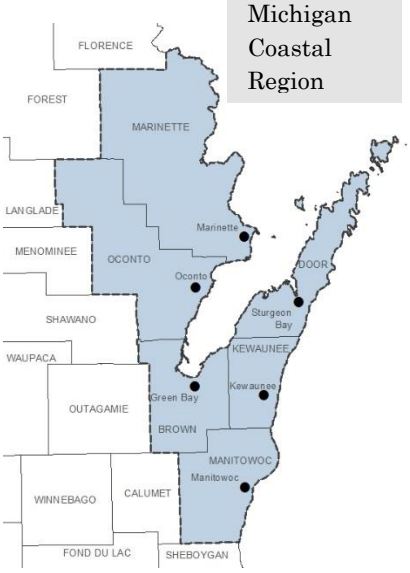
STATE PARKS AND FORESTS

- **Hiking/walking/running loop** trails of varying lengths. Properties in proximity to cities and villages would likely be most popular.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Developed camping**, including adding electrified sites to some campgrounds or significant portions of campgrounds.
- **Primitive camping**, particularly at the large parks and forests.
- **Equestrian trails** that either connect a network and/or are loop trails contained wholly in the property.
- Walk-in trails to expand **access to waterbodies** with canoes or kayaks.
- **Developed boat access sites** to provide access to Lake Michigan and Green Bay.

STATE WILDLIFE AREAS AND FISHERY AREAS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking trails** that expand existing opportunities and create new destinations. These would be single-track, constructed trails of varying difficulties, including potentially "technical" skills areas.
- **Primitive camping** that would serve the hunter, wilderness adventurer and water recreationist.
- Walk-in trails to expand **access to waterbodies** with canoes or kayaks.

Upper Lake Michigan Coastal Region



A number and diversity of recreation needs were identified by the public, including:

- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Horseback riding opportunities
- Camping – rustic/quiet campgrounds

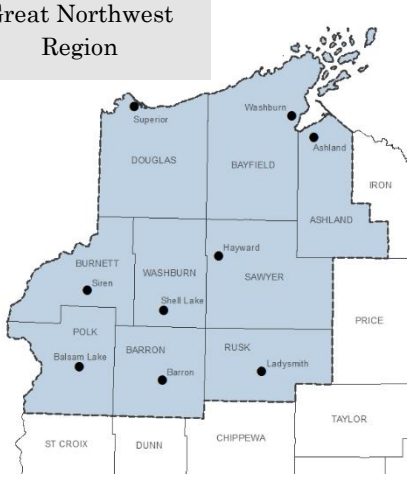
Top activities that ROA input form respondents participate in include:

- Bicycling - paved trails
- Bicycling – mountain biking, single track
- Camping – tent
- Camping – RV/pop-up
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Hiking, walking, and running on trails
- Horseback riding
- Swimming
- Wildlife/bird watching

GREAT NORTHWEST REGION

The Great Northwest Region has been an outdoor recreation destination, particularly for those in the Minneapolis-St. Paul Metro Area, for decades. With over 2 million acres of public lands the region hosts a diverse set of long distance and loop trails, as well as plentiful hiking, hunting and motorized riding opportunities to escape into the wilderness.

Great Northwest Region



Although the region is rich in current opportunities, several needs were expressed by over 1,300 people who provided input. The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Great Northwest Region. A brief summary is provided here.

STATE PARKS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- **Mountain biking trails** that expand existing opportunities and create new destinations.
- **Developed camping**, including adding electrified sites, as well as **primitive camping** to connect visitors to the lakes and rivers in the region.

STATE TRAILS

- **Hiking/walking/running loop trails** of varying lengths.
- **Paved bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **ATV/UTV riding** on roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks and to provide access during the fall hunting season.
- **Off-highway motorcycle riding** and **4WD-vehicle driving** on roads open to street-legal vehicles, with identification and signage of preferred routes to concentrate use in the most appropriate corridors.

A number and diversity of recreation needs were identified by the public, including:

- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Camping – rustic/quiet campgrounds
- Public shore access to lakes and streams

STATE FORESTS

- **Hiking/walking/running loop trails** of varying lengths.
- **Surfaced trail** and **mountain biking trails** to create new networks and destinations.
- **ATV/UTV riding** to create new connections for regional trail/route networks and to provide access during the fall hunting season.
- **Off-highway motorcycle riding** and **4WD-vehicle driving** on roads open to street-legal vehicles, with identification and signage of preferred routes to concentrate use in the most appropriate corridors.
- **Developed & primitive camping**, including adding electrified sites to significant portions of campgrounds.
- Walk-in trails to **expand access to paddlers** seeking a whitewater rapids or peaceful float on the river.

Top activities that ROA input form respondents participate in include:

- Bicycling – paved trails
- Bicycling – mountain biking, single track
- Camping – tent
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Fishing – from shore
- Harvesting berries, mushrooms, etc.
- Hiking, walking and running on trails
- Swimming
- Wildlife/bird watching

STATE WILDLIFE AND FISHERY AREAS

- **Hiking/walking/running loop trails** of varying lengths.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking trails** that could provide single-track, constructed trails of varying difficulties.
- **ATV/UTV riding** on roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks and to provide access during the fall hunting season.
- **Primitive camping**, allowing visitors to escape and surround themselves with the natural world.

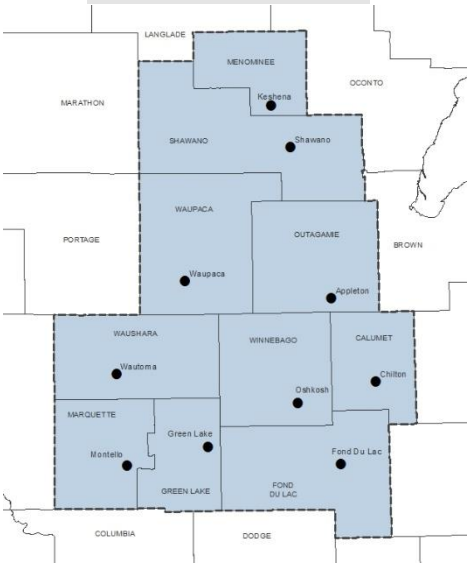
LAKE WINNEBAGO WATERS REGION

The combination of the Lake Winnebago system with a growing urban population creates a recipe for growing recreational demand in the region. Water-related activities are plentiful, and simultaneously areas for potential growth. Fishing from lakes and rivers, along with canoeing and kayaking, were noted as key opportunities with potential to expand within the Lake Winnebago Waters Region.

Camping, both primitive and modern, as well as hiking on trails are both also in-demand activities in the region. Even with smaller blocks of public land compared to regions further north, there remain regional opportunities to accommodate these activities. Among 1,200 public input participants, the emphasis on non-motorized recreation is further demonstrated in strong participant responses for keeping all roads on DNR properties closed to motorized recreation.

In general, the department believes the following areas provide additional opportunities for the growth of recreation opportunities in the Lake Winnebago Waters Region.

Lake Winnebago Waters Region



STATE PARKS

- **Surfaced bicycle trails** that expand the existing network linking cities, villages and campgrounds.
- **Developed camping**, including adding electrified sites to some campgrounds or significant portions of campgrounds.
- **Primitive camping** to accommodate calmer, more primitive experiences.
- Developed hiking trails and wildlife viewing platforms.

STATE WILDLIFE AND FISHERY AREAS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Walk-in trails to **expand access to waterbodies** with canoes or kayaks.
- **Developed boat access sites** to provide access to Lake Winnebago and its surrounding waters.
- **Fishing docks and access sites** to increase opportunities for fishers on streams, rivers and lakes.
- **Cross-country skiing trails** to support a network of trails for ambitious winter recreators.
- Developed **picnic areas** near parking areas.

A number and diversity of recreation needs were identified by the public, including:

- Hiking/walking/running trails
- Horseback riding trails
- Trails for motorized recreation
- Camping – rustic/quiet campgrounds
- Bicycle trails – both paved and natural surface

Top activities that ROA input form respondents participate in include:

- ATV/UTV Riding
- Bicycling – paved trails
- Camping – tent
- Camping – RV/pop-up
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Hiking, walking and running on trails
- Horseback riding
- Wildlife/bird watching

MISSISSIPPI RIVER CORRIDOR REGION

The topography and the riverine systems make the Mississippi River Corridor Region unique and draws a variety of outdoor recreationists, particularly for those in the Minneapolis-St. Paul Metro Area. The many rivers draining to the Mississippi draw trout fisherman from throughout the Midwest. These same rivers also attract a growing sector of paddlers to the area while the hills and valleys are attractive to mountain bikers. With the high-quality habitat for game and non-game species, hunting opportunity remains high, as does wildlife viewing along the Mississippi flyway. Hosting a diverse set of regional linear and loop trails, the region could expand existing and create new trail areas.

Mississippi River Corridor Region

Although the region is rich in current opportunities, a variety needs were expressed by the 1,700 public input participants. The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Mississippi River Corridor Region. A brief summary is provided here.

STATE PARKS AND RECREATION AREAS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- **Mountain biking trails** that expand existing opportunities and create new destinations.
- **Cross-country ski trails** could be established and/or expanded on existing trails.
- **Developed camping**, including adding electrified sites.
- **Primitive camping** to connect visitors to the lakes and rivers in the region.
- **Picnic areas** and **wildlife viewing areas** could be developed to meet the demand of day-users.
- Walk-in **access to waterways** for canoe/kayak users could be developed.

A number and diversity of recreation needs were identified by the public, including:

- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Camping – rustic/quiet campgrounds
- Public shore access to lakes and streams

STATE TRAILS

- **Hiking/walking/running loop trails** of varying lengths.
- **Cross-country ski trails** could be established and/or expanded.
- **Paved bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Primitive camping** to enable trail users to take multi-day trips.
- **Picnic areas** could be developed or expanded at trailhead areas.

Top activities that ROA input form respondents participate in include:

- Bicycling – paved trails
- Bicycling – mountain biking, single track
- Bicycling – winter/fat tire
- Camping – tent
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Fishing – from shore
- Harvesting berries, mushrooms, etc.
- Hiking, walking and running on trails
- Swimming
- Wildlife/bird watching

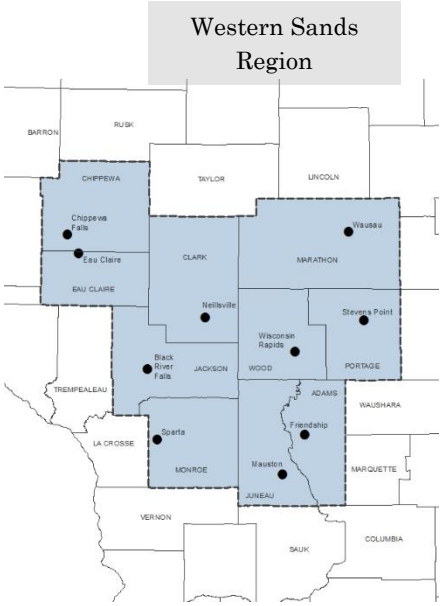
STATE FORESTRY PROPERTIES

- **Hiking/walking/running loop trails** of varying lengths.
- **Cross-country ski trails** could be established.
- **Mountain biking trails** that expand existing opportunities.
- **Picnic areas** and **wildlife viewing areas** could be developed in areas not interrupting forestry operations.
- **Primitive camping**, allowing visitors to escape and surround themselves with the natural world.

STATE WILDLIFE AND FISHERY AREAS

- **Hiking/walking/running loop trails** of varying lengths.
- **Cross-country ski trails** could be established and/or expanded on existing trails.
- **Primitive camping**, allowing visitors to escape and surround themselves with the natural world.
- Walk-in **access to waterways** for canoe/kayak users could be developed.

WESTERN SANDS REGION



The diverse landscape of the Western Sands Region provides outdoor recreation for those looking for a mix of developed recreation facilities. Much of what recreationists look for can all be found here—regional trail networks for various forms of trail use, large properties for migratory bird and big game hunting, state and county park properties with camping, picnic areas and hiking trails, as well as waterways for boating and canoe/kayak use.

Although the region is rich in current opportunities, many needs were expressed by the nearly 1,000 public input participants. The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Western Sands Region. A brief summary is provided here.

STATE PARKS, FORESTS AND RECREATION AREAS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- **Mountain biking** trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- **Cross-country ski trails** could be established and/or expanded.
- **Equestrian trails** that either connect a network and/or are loop trails contained wholly in the property.
- **Developed camping**, including adding electrified sites to significant portions of campgrounds.
- **Primitive camping** to serve long-distance trail users and/or isolated sites in larger properties for wilderness-type camping for hunting, hiking and canoeing/kayaking.
- **Picnic areas** and **wildlife viewing areas** could be developed to meet the demand of day-users.
- Walk-in **access to waterways** for canoe/kayak users could be developed.

A number and diversity of recreation needs were identified by the public, including:

- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Camping—rustic/quiet campgrounds.
- Horseback riding trails

STATE TRAILS

- **Hiking/walking/running loop trails** of varying lengths.
- **Cross-country ski trails** could be established and/or expanded on existing trails.
- **Primitive camping** to enable trail users to take multi-day trips.
- **Picnic areas** could be developed or expanded at trailhead areas.

STATE WILDLIFE AND FISHERY AREAS

- **Hiking/walking/running loop trails** of varying lengths.
- **Mountain biking trails** that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- **Equestrian trails** that either connect a network and/or are loop trails contained wholly in the property.
- **Cross-country ski trails** could be established and/or expanded on existing trails.
- **Primitive camping** to serve long-distance trail users and/or isolated sites in larger properties for wilderness-type camping for hunting, hiking and canoeing/kayaking.
- **Picnic areas** and **wildlife viewing areas** could be developed to meet the demand of day-users.
- Walk-in **access to waterways** for canoe/kayak users could be developed.

Top activities that ROA input form respondents participate in include:

- Bicycling – surfaced trails
- Bicycling – mountain biking, single track
- Camping – tent
- Camping – RV/pop-up
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Hiking, walking, and running on trails
- Swimming
- Wildlife/bird watching

LOWER LAKE MICHIGAN COASTAL REGION

With an assortment of public conservation lands, the largest being the Kettle Moraine State Forest, the Lower Lake Michigan Coastal Region is a frequently visited recreation destination, largely due to its proximity to urban centers such as Madison, Milwaukee, and Chicago.

Although the region is rich in current opportunities, several needs were expressed by the 1,700 public input participants. The department believes there are opportunities to meet some of the desired recreational experiences on some of the properties it manages in the Lower Lake Michigan Coastal Region. A brief summary is provided here.

Lower Lake Michigan Coastal Region

STATE PARKS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to urban areas would likely be most popular.
- **Paved bicycle trails** that expand the existing network linking to the existing urban trail network and to campgrounds.
- **Primitive camping** to connect visitors to the myriad of lakes and rivers in the region.
- **Picnicking areas** for visitors to gather, recharge and enjoy a day in the park.

STATE TRAILS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to urban areas would likely be most popular.
- **Paved bicycle trails** that expand the existing network linking to the existing urban trail network and to campgrounds.
- **Cross-country skiing** to allow visitors to continue their trail adventures through the winter.

A number and diversity of recreation needs were identified by the public, including:

- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Camping – rustic/quiet campgrounds
- Public shore access to lakes and streams

STATE FORESTS

- **Paved bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking trails** that expand existing opportunities and create new destinations. These trails could be single-track, constructed trails of varying difficulties (potentially including skills areas).
- **Cross-country skiing** to allow visitors to continue their trail adventures through the winter.
- **Canoeing** and **kayaking** with improved walk-in trails to access waterbodies.
- **Lake fishing opportunities** with **improved boat access** and disabled accessible fishing sites.

STATE WILDLIFE AND FISHERY AREAS

- **Hiking/walking/running loop trails** of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- **Cross-country skiing** to allow visitors to continue their trail adventures through the winter.
- **Canoeing** and **kayaking** with improved walk-in trails to access waterbodies.
- **Lake fishing opportunities** with **improved boat access** and disabled accessible fishing sites.

Top activities that ROA input form respondents participate in include:

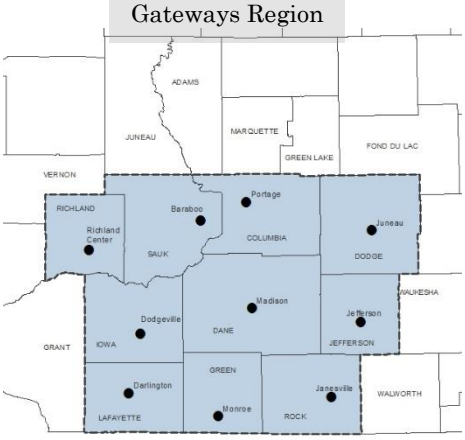
- Bicycling – surfaced trails
- Bicycling – mountain biking, single track
- Camping – tent
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Fishing – from shore
- Hiking, walking and running on trails
- Swimming
- Wildlife/bird watching

SOUTHERN GATEWAYS REGION

Home to the state's most popular park, Devil's Lake State Park, the Southern Gateways Region well known for a variety of recreational opportunities. Concentrated urban centers have driven demand for recreational opportunities, including the prominent demand for both motorized and non-motorized trails in the area.

The department believes there are opportunities to meet many of the recreational experiences desired by the 3,700 public input on some of the properties it manages in the Southern Gateways Region. A brief summary is provided here.

Southern Gateways Region



STATE PARKS

- **Hiking/walking/running loop trails** of varying lengths.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking** to expand existing opportunities and create new destinations.
- **Canoeing/kayaking** with improved walk-in trails and access to waterbodies.
- Lake fishing from shore or pier, by adding **improved boat access sites** such as ramps for trailered boats.
- **Swimming in lakes and rivers** that are accommodated by beaches, changing rooms and other amenities.
- **Primitive camping** to allow visitors to take a break from the hustle and bustle of everyday life.

A number and diversity of recreation needs were identified by the public, including:

- Trails for motorized recreation
- Hiking/walking/running trails
- Bicycle trails – both paved and natural surface
- Camping – rustic/quiet campgrounds

STATE TRAILS

- **Hiking/walking/running loop trails** of varying lengths.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking** to expand existing opportunities and create new destinations.
- **Developed camping**, including adding electrified sites.
- **Primitive camping** to allow visitors to take a break on their trail adventures.

Top activities that ROA input form respondents participate in include:

- ATV/UTV Riding
- Bicycling – surfaced trails
- Bicycling – mountain biking, single track
- Camping – tent
- Canoeing/kayaking
- Cross-country skiing/snowshoeing
- Fishing – from a boat, canoe or kayak
- Fishing – from shore
- Hiking, walking and running on trails
- Swimming
- Snowmobiling

STATE RECREATION AREAS

- **Hiking/walking/running loop trails** of varying lengths.
- A future **motorized recreation area** is being sought to accommodate various motorized recreation, including ATV/UTV riding, off-highway motorcycling and four-wheel drive vehicle riding.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking** to expand existing opportunities and create new destinations.
- **Canoeing/kayaking** with improved walk-in trails and access to waterbodies.
- Improved **boat access sites** such as ramps for trailered boats for motorboating and lake fishing.
- **Primitive camping** to allow visitors to get away from the urban noise.

STATE WILDLIFE AREAS

- **Hiking/walking/running loop trails** of varying lengths.
- **Surfaced bicycle trails** that expand the existing network linking cities and villages and campgrounds.
- **Mountain biking** to expand existing opportunities and create new destinations.
- **Canoeing/kayaking** with improved walk-in trails and access to waterbodies.
- Improved **boat access sites** such as ramps for trailered boats for motorboating and lake fishing.
- **Swimming in lakes and rivers** that are accommodated by beaches, changing rooms and other amenities.
- **Primitive camping** to allow visitors to make hunting and fishing trips more adventurous.

II. INTRODUCTION

DESCRIPTION AND PURPOSE OF THE RECREATION OPPORTUNITIES ANALYSIS

The Wisconsin Department of Natural Resources' mission includes providing a healthy, sustainable environment in which a full range of outdoor opportunities may be enjoyed. To that end, the department completed the Recreation Opportunities Analysis (ROA), a study to better understand:

- Existing outdoor recreation opportunities.
- Unmet demand for outdoor recreation opportunities.
- Which department-managed properties may be well-suited to address unmet demand.

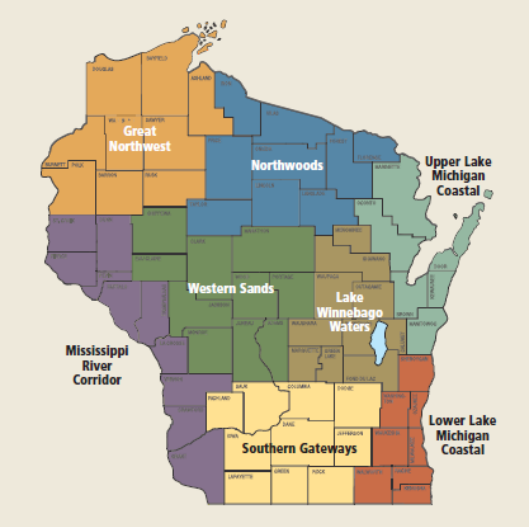
The department owns and manages over 1.6 million acres of land on behalf of Wisconsin's citizens. These lands provide a wide range of recreation opportunities and a diversity of habitats throughout the state. These properties' ecological and recreation resources are managed according to management plans that are periodically updated. The department refers to these plans as "master plans." The information generated in the ROA will be used to assist the department in effectively managing properties to meet evolving needs and opportunities. Specifically, the department will use the results of the ROA to:

- Inform master planning processes for DNR-managed properties to ensure that our staff and financial resources are focused on providing the appropriate recreational opportunities in the appropriate places.
- Meet the requirements of state law (s. 23.116, Wis. Stats.) that directs the DNR to inventory, map, and determine which DNR roads are open to the public for use by motorized vehicles.

The goals of the Recreation Opportunities Analysis are to:

- Ensure that department resources are focused on providing desired recreational opportunities in the most appropriate places.
- Identify future recreational needs in each planning region and the department properties that are best suited to meet these demands.
- Provide information on the full spectrum of outdoor recreation in each region to the department's master planning process and provide information and guidance that enables the master planning process to identify which roads on department-managed properties should be open to motorized vehicles, in order to meet the requirements of new state law.
- Use the best available information to identify existing recreation opportunities and future needs in each region of the state.
- Ensure there is ample opportunity for public and stakeholder input.

Regions of the Recreation Opportunities Analysis



One of the first steps in the ROA process was to determine the right scale to gather and analyze information about recreation opportunities and needs. The department chose to use the same eight regions that were identified in the Wisconsin 2005-2010 Statewide Comprehensive Outdoor Recreation Plan (SCORP). The regions are collections of counties that share similarities in their landscape features, tourism influences, and demographic characteristics. These eight regions were also recently used as the framework to gather data on residents' participation in outdoor recreation for the update to Wisconsin's SCORP.

Statewide Stakeholder Team

The ROA describes and evaluates the existing recreation opportunities and needs in each of the eight regions across the state. To ensure that it successfully identifies these opportunities and needs, the department invited a collection of representatives from statewide recreation groups to provide guidance, information, and advice to the department as it proceeds through the development of the eight regional summaries. The members of this group, known as the Statewide Stakeholder Team, are listed in Appendix 4.

This group assisted the department in developing statewide recreation goals for the ROA, identifying characteristics and criteria that make for satisfying experiences, assessing compatibility between and among participants in different activities, and developing principles for successfully integrating recreation opportunities.

The Statewide Stakeholder Team helped create the following goals for use in the Recreation Opportunities Analysis. These goals are intended to establish a broad framework and context for the department as it seeks to understand current and future recreation needs and how best to meet them. The department seeks to continue working with other recreation providers and advocacy groups to help meet these goals.

1. Provide residents and visitors with a diverse range of high-quality outdoor recreation opportunities.
   a. Provide quality recreation opportunities in all regions of the state.
   b. Coordinate and integrate recreation opportunities across different levels of government and private enterprises to enhance participants' experiences.
   c. Combine recreation activities if they can coexist with tolerable conflict and where management costs are reduced.
   d. Separate recreation activities in time or space where needed to improve participants' experiences and minimize conflicts.
2. Provide recreation opportunities that are tailored to local conditions and supported by the public.
   a. Leverage the unique qualities, features, and existing infrastructure in different regions of the state.
   b. Ensure that recreation opportunities are provided that are consistent with demand and are supported by regional residents.
3. Increase Wisconsin residents' participation in outdoor recreation activities.
   a. Broaden the diversity of Wisconsin residents participating in outdoor recreation by providing high-quality opportunities for groups that have historically had limited access (e.g., low-income, disabled, elderly, and inner-city residents).
   b. Increase the breadth of recreation activities in which individuals participate as a means to both educate residents about the issues and benefits associated with different activities and identify ways to improve compatibility among recreational uses of public properties.

   c. Describe the health and wellness benefits that participants receive, as well as the associated savings in health care costs that accrue to individuals and society.
   d. Promote the economic benefits that accrue to local communities and the state from residents and visitors participating in outdoor recreation.
4. Develop adequate and stable funding sources for managing recreation facilities and lands.
   a. Broaden the funding sources that support property and facility management, including visitors to public lands regardless of the activities in which they participate.
   b. Develop creative techniques to fund different aspects of recreation facility and land management, including developing partnerships with non-profit organizations, advocacy groups, local business interests and private enterprises, and others.
   c. Balance funding between users of public lands and general revenue sources.

The Statewide Stakeholder Team also helped develop a set of principles to guide cooperative efforts to meet recreation needs throughout the state. These guiding principles are:

1. Respect each other – we're all in this together.
2. Remember, it's public land – be tolerant of others.
3. Be willing to understand other's interests and needs.
4. It's not possible to have everything for everyone, everywhere.
5. Maximize shared recreation use at an acceptable experience level.
6. Look for ways to minimize the impact of your activity on others.
7. Increase all communication efforts by all to help notify and educate.
8. Be part of the solution!

Activities included in the Recreation Opportunities Analysis

The intent of the ROA is to analyze opportunities for the spectrum of outdoor recreation, with a focus on those activities that department lands currently provide opportunities or potentially could provide opportunities for under the right circumstances.

Based on input from the Statewide Stakeholder Team, the 44 outdoor recreation activities listed at right are included in this analysis. This list does not limit the activities considered in the department's master planning process. Brief factsheets for these activities, including descriptions, facilities or conditions needed for satisfying experiences, and participation information, are included in Appendix 1.

There are several other outdoor recreation activities that occasionally occur on department properties, yet are not identified here for consideration in the ROA. However, the SCORP does include a statewide perspective on these activities in its analysis. Some of those activities not included in the ROA are alpine skiing, disc golf, dog parks, golf, playgrounds and a variety of outdoor games. In instances like golf and alpine skiing, concessionaires (vendor or business that sells a product or service) manage and operate the lands where these facilities are located. These arrangements are typically handled through lease agreements or contracts with the department. While these unique situations create popular destinations for people, these activities were determined to not be key components for department properties for the purpose for the regionally-focused ROA. Lastly, as mentioned above, them not being included in the list to the right does not limit their consideration in a property's master planning process.

Recreation activities included in the ROA

Upland, warm-weather activities

Non-motorized trail activities

- Bicycling - bicycle touring/road riding
- Bicycling - mountain biking/off-road biking
- Hiking, walking, trail running, backpacking
- Horse cart driving
- Horseback riding

Motorized trail activities

- ATV/UTV riding
- 4-wheel vehicle driving
- Off-highway motorcycle riding

Other activities

- Bird or wildlife watching
- Camping - developed (modern)
- Camping - primitive
- Dog training
- Dog trialing
- Dog walking
- Gather mushrooms, berries, etc.
- Geocaching
- Hunting - big game
- Hunting - migratory birds
- Hunting - small game
- Hunting - turkey
- Nature photography
- Participating in nature-based education programs
- Picnicking
- Rock climbing
- Target shooting - archery
- Target shooting - firearms
- Trapping

Winter activities

- Bicycling - fat tire/snow biking
- Cross country skiing
- Dog sledding/skijoring
- Fishing - ice fishing
- Snowmobiling
- Snowshoeing

Water activities

- Canoeing or kayaking
- Fishing - lake fishing from a boat, canoe, or kayak
- Fishing - lake fishing from shore or a pier
- Fishing - river fishing from a boat, canoe, or kayak
- Fishing - stream or river fishing from shore or wading
- Motorboating (including waterskiing/tubing, riding personal watercraft)
- Sailing, windsurfing, rowing, stand-up paddling
- Scuba diving/snorkeling
- Swimming in lakes and rivers
- Visiting a beach, beach walking
- Whitewater rafting

RECREATION PARTICIPATION AND FREQUENCY BY WISCONSIN RESIDENTS

The department gathered recreation participation and frequency data across the state as part of the update to the Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP). A survey was administered in 2016 using two techniques designed to complement each other; a hardcopy survey mailed to 6,400 random mailing addresses distributed across eight regions (800 surveys per region) and an online survey sent to panelists recruited by a third-party firm to represent the state adult population. The adjusted response rate for the postal survey was 46% and the department capped the online panelists at 1,000 responses.

Wisconsin residents' participation and frequency was assessed in sixty-five different outdoor activities, which include many that are not part of the ROA nor for which the department provides opportunities. The SCORP is, by design, a state plan covering issues of interest to a wide variety of public and private recreation providers. As such, it addresses a wider range of outdoor activities than those occurring on department-managed lands.

The top thirty activities for participation and frequency identified in the SCORP survey are seen in the tables below. The frequency values listed are mean scores of ordinal responses from 1 to 5, representing participation over the last 12 months as follows: 1 = 0 days, 2 = 1-2 days, 3 = 3-9 days, 4 = 10-29 days, and 5 = 30+ days. Thus, a mean score of 1 indicates no participation or zero days. Higher averages (closer to five) indicate activities in which residents participate frequently. **It is important to remember that average scores that are presented for recreation frequency are <u>not</u> measures of average days of participation**.

Recreation activities with the highest <u>participation</u> rates by Wisconsin residents.

Recreation Activity	Participation Rate (%)
Walking/running on sidewalks/roads	81
Picnicking/tailgating/cookout	74
Driving for pleasure	73
Attending outdoor festival or music event	69
Hiking/walking/running on trails	68
Visit a beach/beach walking	65
Attending outdoor sporting event	64
Visiting a historic site	57
Bird/wildlife watching at home	55
Swimming in lakes/ponds/rivers	54
Visiting a nature center	52
Bicycling on roads	48
Taking kids to playground	47
Motor boating (including pontoon boats)	45
Lake fishing from shore or a pier	40
Bird/wildlife watching away from home	39
Lake fishing from a boat/canoe/kayak	37
Nature photography	37
Swimming in outdoor community pools	36
Bicycling on rail trails/developed trails	34
Canoeing or kayaking	34
Golf	32
Tent camping	32
Walking/running dog on trails	32
Gathering berries, mushrooms, etc.	31
Target firearms shooting outdoors	29
Ice fishing	23
Visiting a dog park	23
Hunting big game on private land	21
RV/Pop-up camping	21

Recreation activities with the highest <u>frequency</u> rates by Wisconsin residents.

Recreation Activity	Participation Frequency
Walking/running on sidewalks/roads	3.54
Driving for pleasure	2.88
Hiking/walking/running on trails	2.62
Bird/wildlife watching at home	2.60
Picnicking/tailgating/cookout	2.60
Visit a beach/beach walking	2.32
Attending outdoor sporting event	2.24
Bicycling on roads	2.23
Attending outdoor festival or music event	2.19
Swimming in lakes/ponds/rivers	2.14
Taking kids to playground	2.13
Motor boating (including pontoon boats)	1.96
Visiting a historic site	1.89
Bird/wildlife watching away from home	1.85
Lake fishing from a boat/canoe/kayak	1.82
Visiting a nature center	1.81
Lake fishing from shore or a pier	1.80
Bicycling on rail trails/developed trails	1.78
Nature photography	1.77
Walking/running dog on trails	1.77
Swimming in outdoor community pools	1.70
Golf	1.68
Canoeing or kayaking	1.65
Target firearms shooting outdoors	1.61
Tent camping	1.55
Gathering berries, mushrooms, etc.	1.53
Visiting a dog park	1.50
Hunting big game on <u>private</u> land	1.49
Ice fishing	1.47
Target archery outdoors	1.45

COMPATIBILITY WITHIN AND BETWEEN RECREATION ACTIVITIES

A key component of successfully integrating different recreation activities at a property requires understanding how participants in the wide range of activities that occur on public lands in Wisconsin interact with each other. Many factors are part of how people view compatibility and how they react when they feel they have been disturbed or inconvenienced.

As described in the 2005-2010 Statewide Comprehensive Outdoor Recreation Plan,[1] people pursuing recreation activities can sometimes conflict with others engaged in the same activity or people engaged in other activities. For example, hunters pursuing the same game in the same place can conflict with each other. Similarly, horseback riders can conflict with, and be adversely impacted by, bicyclists using the same trail.

People participating in different recreation activities can have asymmetric impacts on each other. Asymmetric impacts occur when participants in one activity disrupt participants in another activity more than they are disrupted by that activity. An example of an asymmetric impact is the interaction between anglers and water-skiers using the same part of a lake; the water-skier may be affected to a small degree by the angler, but the angler may be substantially impacted by the water-skier.

Compatibility is often influenced by the volume of use and interactions. When use levels are low, there are often few, if any, direct interactions. In situations where use levels are low, even participants in activities that typically are not compatible can enjoy satisfying experiences in the same place at the same time. Many people in these situations, although they may feel disturbed for brief times during interactions, overall still have positive experiences. When use levels rise high enough, interactions can become unacceptable to users.

Finally, compatibility can be influenced simply by the tolerance level of participants. When people approach interactions with a perspective of tolerance, it is easier to not be upset by interactions with others. It is also easier to appreciate efforts that others may take to reduce their potential impacts (such as reducing their speed on a trail or moving to a different stretch of a stream for fishing). People that participate in a diversity of activities and understand the needs, limitations, and desired experiences of many outdoor enthusiasts are often more tolerant of multiple activities occurring in the same property or place.

A table of compatibility that was developed by the Statewide Stakeholder Team can be found in Appendix 2.

GATHERING INFORMATION ON EXISTING RECREATION OPPORTUNITIES

The department maintains a comprehensive geographically-referenced database of lands owned by federal, state, and county governments that are open to the public for outdoor recreation. These lands provide recreational opportunities ranging from “wilderness” settings without trails or other recreation amenities to highly developed campgrounds with flush toilets and hot showers. This database contains information on conservation and recreation lands in Wisconsin owned by all federal agencies, the State (DNR and the Board of Commissioners of Public Land), and lands owned by counties that are enrolled in the County Forest program.

In addition to this information, the department collected data on existing recreation facilities (e.g., campgrounds, motorized and non-motorized trails, and boat launches) from various sources for the ROA. This inventory of existing facilities is not designed to be comprehensive or complete but rather is intended to provide a general overview of the opportunities available and the gaps that may exist. The accuracy of the data provided, especially for the trails, is continuing to be assessed. Tallying existing recreation facilities is helpful in understanding the relative supply across different regions of the state, but what residents want more of, and in what parts of the state, is most relevant in assessing the adequacy of existing facilities to meet demand.

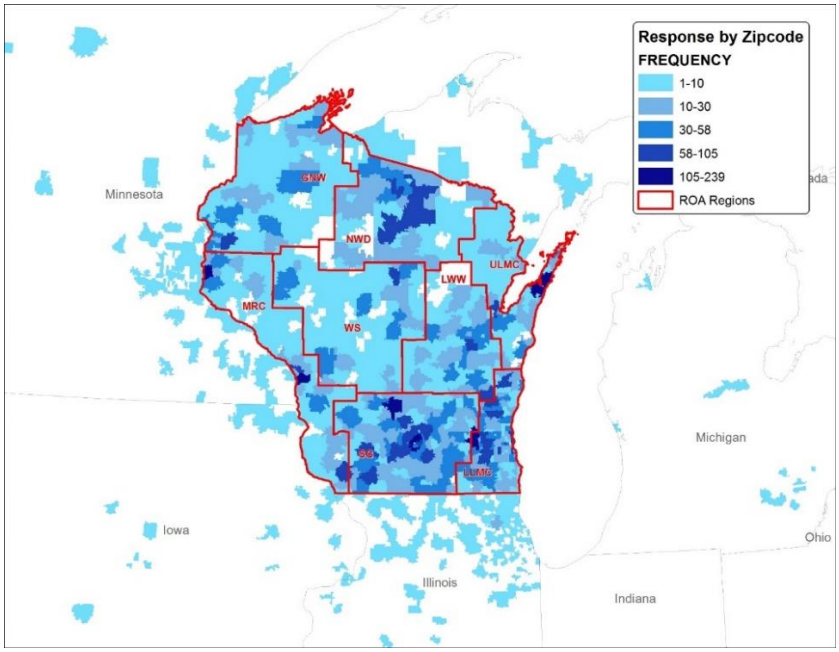
[1] See http://dnr.wi.gov/topic/parks/planning/scorp/pdfs/wis_2005-10_scorp_complete.pdf

GATHERING PUBLIC INPUT

A central tenant of the ROA process is to gather information and perspectives from the public on the places they enjoy visiting and the recreation opportunities and experiences they would like more of in each region of the state. The department developed a public involvement process for the ROA that incorporated: (1) informing the public about their opportunities to be involved in different steps of the process, (2) multiple methods and venues to collect public input, and (3) development of maps and materials to initiate public input.

The department received many comments from people interested in a wide range of outdoor activities on the recreational opportunities - existing and desired - in each region. Input received supporting particular points of view are not counted as votes with the "winning" viewpoint selected. Rather, the department's approach to analyzing the input received is to carefully read through all the comments and material presented to find common ideas and issues. The department's goal is to identify the range of public reactions and perspectives, the reasoning behind these stances, and the general themes. If someone advocates for a particular recreational activity, the department is interested in knowing why. What motivates that perspective? Conversely, what is behind an opposition to a recreational use; what is the root of the concern?

The department received information from the public in various ways. In addition to the face-to-face communication at open-house meetings, an online questionnaire was available to obtain some key pieces of information needed to complete the analysis. Across the state, there were over 15,100 respondents to the request for public input. While most people providing input reside in Wisconsin, there were several who participated from across the United States. Of those who provided their location of residence, the map below shows their distribution and frequency in and around Wisconsin.



EXISTING RECREATION PLANNING EFFORTS AND HOW THEY RELATE TO THE ROA

STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN (SCORP)

States are required to complete SCORPs every five years to be eligible to participate in the Land and Water Conservation Fund (LWCF) State Assistance Program. SCORPs evaluate outdoor recreation trends and issues of statewide importance and set forth ideas about recreation's future role in the state. There are several required elements for SCORPs, including identifying priorities for applying LWCF funds. The department is currently developing the next iteration of the Wisconsin SCORP which will cover the period from 2017 to 2022.

While SCORPs bring together a range of information on outdoor recreation in Wisconsin, they are not intended to provide guidance at a site or project level, nor do they attempt to address all the issues facing the state's recreation delivery system. Rather, SCORPs identify general outdoor recreation participation patterns and trends, issues and opportunities, and provide recommendations for future steps. Collaborative planning at local and regional scales, ongoing research on issues affecting recreation supply and demand, and cooperative implementation of policies and programs by governments, businesses, health care providers, community organizations, and others will continue to be essential in complementing the priorities described in the SCORP in order to meet the full spectrum of our future outdoor recreation needs.

The ROA will be incorporated into the broader SCORP effort. The ROA results will comprise a critical component of the description of recreation supply in each region of the state and future needs. These needs can also help inform future funding priorities for LWCF in Wisconsin.

The Land and Water Conservation Fund (LWCF)

The LWCF was enacted by Congress in 1965 "to strengthen the health and vitality of the citizens of the United States" through the acquisition and development of outdoor recreation resources and facilities.

Using revenues primarily from offshore oil and gas leases, the intent of the LWCF is to provide funds for the acquisition and development of public lands to meet the outdoor recreation needs of all Americans. Generally, the funds that are available are divided between the "federal side" and the "state side" of the program. The federal land management agencies (National Park Service, National Forest Service, Bureau of Land Management, and the Fish & Wildlife Service) use the federal-side funds to acquire critical lands.

The state side, which is administered by the National Park Service, provides matching grants to state, local and tribal governments to create and expand parks, develop recreation facilities, and further recreation plans. Funds are distributed to every U.S. state and territory using a formula that primarily is based on population.

DNR PROPERTY PLANNING

The department develops management plans (known as "master plans") for the properties that it owns and manages. A master plan establishes the level and type of public uses permitted at a property. The plan describes the authorized resource management along with the amount and type of facility development. It also acts as a blueprint for the property, providing for consistent, long term management, regardless of personnel changes. The planning process is described in Administrative Code NR 44.

The ROA identifies department-managed properties that appear potentially well-suited to help meet existing gaps in recreation opportunities. Many partner groups and land-owning agencies at all levels of government have important roles in meeting future recreation needs. In many cases the department may not be able to provide, or may not be the best entity to provide, certain recreation experiences. The recommendations offered in the ROA inform the master planning process in the context of relevant ecological landscape master plans. Considering the ecosystem management opportunities, recreation opportunities, and partner relationships with nearby public land managers will help focus and distribute compatible management strategies among department program lands.

The department is required to determine which roads on properties it manages will be open to motorized vehicles. Decisions related to determining which roads are open to which types of vehicles will continue to be integrated into the property master planning process.

a) Planning for motorized access on department-managed lands

State law (s. 23.116, Wis. Stats.) directs the department to inventory, map, and determine which roads on department -managed lands are open to the public for use by motorized vehicles. The department maintains a network of approximately 1,800 miles of roads for public use on properties it manages throughout the state. In addition, about 2,600 miles of service roads are maintained that provide access by department staff managing properties. Service roads are typically maintained to a lower standard than those open to the public.

These roads vary in their surfaces (from paved to gravel to native soils), width, permanence, and the nature of public access (open, seasonally open, closed). The department has completed mapping all the roads it maintains along with associated attribute data. Some characteristics of the roads that the department maintains are shown in the charts at right.

Department-managed roads open to the public are legally considered to be "highways of the state" and are subject to the same rules and regulations as other public roads. Wisconsin law states that only registered street-legal vehicles (those with head and brake lights, turn signals, and other safety features) are allowed on public roads, unless the controlling authority allows use by other vehicles (ATVs, UTVs, or off-highway motorcycles) under existing state laws that allow such designation. When public roads are designated for use also by recreational motorized vehicles, they are typically known as routes. About 120 miles of roads on department-managed lands allow ATV use and are classified as ATV routes.

Increasingly, town governments are opening some or all town roads to vehicles such as ATVs and UTVs. In limited situations, some counties are also allowing these vehicles on county roads. As a result, there are more opportunities to use department-managed roads to connect larger regional networks of motorized recreational vehicles.

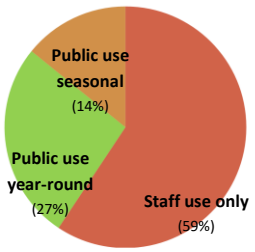
The department developed guidance in December 2015 for evaluating and determining when it is appropriate to integrate motorized use on department roads.[2] Two key goals of the guidance are to provide opportunities for motorized access: (1) within department properties where it is appropriate, intended and publicly supported and (2) across department properties that provide critical linkages in larger regional trail networks.

When determining which roads are appropriate to open to different types of motorized vehicle access (e.g., street-legal vehicles, ATVs, UTVs, and/or off-road motorcycles), the guidance recognizes the following factors:

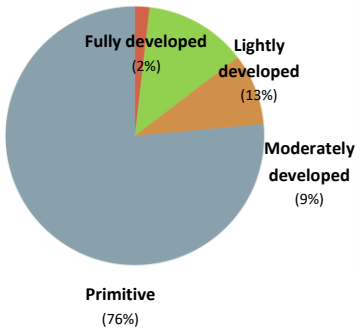
- Seasons of the year and under what developed conditions
- Environmental factors
- Input from the public and partner groups
- The public's desire to access and enjoy department lands using appropriate motorized or non-motorized means.

Characteristics of DNR-managed roads
(4,380 miles)

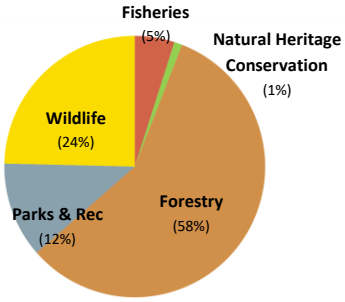
Current public and staff roads:



Development level of roads:



DNR roads by Program:



b) Relationship between the ROA and motorized access

The ROA study will provide region-based information useful in determining which roads should be open for different types of motorized vehicles and uses. This information will include social demands and

[2] See http://dnr.wi.gov/news/input/documents/guidance/RoadGuidanceFinal.pdf

perspectives as well as existing opportunities and their geographic context. The selection of roads on department-managed properties to be open for motorized access will be determined during the master planning process.

National scenic trail planning

There are two federally designated National Scenic Trails in Wisconsin—the North Country Trail and the Ice Age Trail. Additionally, the Ice Age Trail is designated as a State Scenic Trail. These trails are paths, designated for foot travel only. In limited cases, other long-standing recreational uses like biking and snowmobiling uses coincide with hiking on parts of these trails, mostly along rail-to-trail corridors. The purpose of the Ice Age and North Country Trails is to enable people to experience the unique scenic and cultural values of the state. The Ice Age Trail follows the extent of ancient glaciers, showcasing spectacular examples of geology related to glaciation in Wisconsin. The North Country Trail meanders through the variety of northern landscapes, linking scenic, natural, historic and cultural areas in seven states from New York to North Dakota.

The Ice Age and North Country National Scenic Trails are successful due in part to the partnerships between the department, National Park Service, local units of government, and the respective non-profit organizations associated with each trail—principally, the Ice Age Trail Alliance and North Country Trail Association. These “Trail Partners” work together to identify trail planning corridors, select specific properties (public or private) on which to locate the trail, and secure land rights from willing sellers. The Ice Age Trail Alliance and the North Country Trail Association each contribute private funding and enlist the help of thousands of volunteers to build, maintain and manage segments of the trails.

The Ice Age Trail and North Country Trail each span multiple regions of this ROA study. Planning for these long, linear trails varies somewhat from the typical property planning completed by the department. The reason for this variation is that the trails traverse many types of property ownership that the department does not control. These include private lands, county and local government lands, federal lands as well as other state lands. All land rights acquired for the Ice Age and North Country Trails are only from willing landowners—no one is forced to accommodate the trails. In cases where the trail has not yet been established, trail users walk along public roads to make connections to the next established section of trail. The trail corridor plan is prepared jointly by the department and the National Park Service.

Federal lands planning

Multiple branches of the federal government, including the National Park Service, U.S. Forest Service, U.S. Fish & Wildlife Service and the U.S. Army Corps of Engineers, own and manage public lands that are open to outdoor recreation. In their respective planning processes, outdoor recreation is a component to their plans where it is appropriate. Federal lands planning processes typically include public participation processes prior to finalizing land management plans.

County and Local recreation planning

Many counties across the state have undertaken some form of planning for outdoor recreation. Those with county forests typically plan for a range of outdoor opportunities. Counties, townships and municipalities with parks and trails generally need to have recreation plans in place in order to compete for grants that fund recreation infrastructure developments and improvements.

Activity specific planning

Over the years, different agencies, groups, and organizations have undertaken planning projects focused on specific recreation activities. Examples include plans developed by the Wisconsin Department of Transportation, Wisconsin Horse Council, Wisconsin Bike Fed, and others.

IDENTIFYING OPPORTUNITIES ON DEPARTMENT-MANAGED PROPERTIES TO MEET DEMANDS

The ROA provides the department an assessment of its current recreation offerings in different regions of the state and identifies situations where adjustments or enhancements in recreation management goals may be considered. However, there are some caveats. First, department-managed lands are just one potential solution to address gaps in existing recreation needs. Other public lands, non-profit organizations, and private businesses can also play important roles in meeting these needs. Indeed, these partners may be able to provide superior experiences for some needs and thus it may not be appropriate for the department to address some needs on properties it manages. Second, the department simply may not manage any lands in the region that would provide satisfying experiences for people wanting certain recreation opportunities. Third, in addition to the named properties familiar to most residents, the department manages many parcels scattered throughout the state. Although most of these are relatively small, they do provide opportunities to support some types of recreation or provide links in larger regional motorized and non-motorized trail networks.

The ROA is designed to analyze existing recreation opportunities in each region of the state, identify important future needs, and determine the department-managed lands that appear potentially well-suited to meet these demands. **To be clear, no changes to approved recreational uses on department properties will be immediately implemented as a result of the ROA.** The actual recreation uses and supporting infrastructure that occur at these properties (and where they will be located) will be determined and approved through the department's master planning process. The planning process will take into account properties identified in the ROA that appear well-suited for certain recreational uses, then further investigate the feasibility of that use on the property. If this investigation confirms a use's merit on the property, alternatives including these uses will be developed for which the public can review and provide feedback to the department. Only after the department completes the planning process and the Natural Resources Board approves the plan, will new recreational uses be allowed on department properties.

Many factors go into determining which department properties may present opportunities to add or enhance recreation offerings. These factors include:

- Statutory restrictions and requirements

  The department is authorized to acquire and manage lands under specific legislative direction for specific conservation and recreation purposes. These authorities are described in Wis. Stat. Chapters 23, 27 and 28, and NR 1, Wis. Adm. Code.

  In most cases, these authorities designate primary purposes for property types, but allow a wide range of recreation activities so long as these uses do not substantially detract from the primary purposes for which the property was acquired. Almost all department owned lands are open to public fishing, hunting, trapping, and hiking.

  Additionally, Wisconsin Administrative Code NR 1.51 provides direction on the management of State Wildlife Areas. This guidance states that "wildlife habitat needs and public hunting objectives shall receive major consideration in management planning for wildlife areas; however fishery, forestry, wild resource and outdoor recreational objectives will be accommodated when they are compatible and do not detract significantly from the primary objective".

- Funding sources and associated restrictions

  Based on public interests and demands, the state has been purchasing conservation and recreation lands for over 100 years. In some cases, the funding sources used to pay for acquisitions come with restrictions. For example, many fish and wildlife properties purchased in the 1940s through the 1960s used federal money generated from excise taxes on firearms and ammunition, fishing rods and tackle, and other hunting and fishing-related

equipment. Federal guidelines require that lands acquired using these funds be used for hunting and fishing. Secondary recreational uses of federal funded parcels of land may be allowed only if these secondary uses do not interfere with the authorized purpose of the grant, as determined by the DNR and in accordance with state laws, federal authorizing legislation, and 2 CFR 200.

- Existing uses

  Most department-managed properties have long histories and established use and visitation patterns. Maintaining the high-quality experience of existing uses is important and the department seeks to maintain and enhance these experiences. Equally important is ensuring that the department understands and adapts to the evolving social requests and needs. Just as it is imperative to avoid attempting to provide a full spectrum of recreation opportunities on each property, it is also critical to look at the department's entire portfolio of properties in the region and identify those places where it is most appropriate to meet today's and tomorrow's recreation needs. In some cases, this may require the department to stop providing some opportunities at a property and instead provide it elsewhere. Or, it may be appropriate to include a new use at a property because it is well-suited to provide a high-quality experience, even if doing so will result in some existing uses being somewhat diminished.

- Physical and social attributes

  Many portions of department-managed properties are not well suited for some types of public use. Over 30% of department-managed properties are classified as wetland; other areas have steep slopes, rock outcroppings, and other features that limit their suitability to support recreation facilities.

  Similarly, there are many portions of department-managed properties that are designed to provide specific settings or conditions where many types of recreation would be inappropriate. For example, high-quality ecological sites or areas intended to provide remote character would be inappropriate to provide many types of recreation. Also, existing recreational patterns, notably high use areas such as campgrounds, require compatible settings and surrounding uses.

- Landscape context – opportunities elsewhere in the region, connections

  Each property's setting or landscape context plays an important role in determining practical and appropriate recreation activities to provide. Existing and planned opportunities at other nearby properties can influence the need for additional opportunities at department properties. Nearby opportunities can also create options to use department lands to connect or link regional networks. Surrounding land uses, population distribution, transportation networks, and other factors also influence opportunities to incorporate different activities on department-managed lands.

- Social needs and requests

  The desire by stakeholders, such as local residents, to add or enhance recreation opportunities, either for their use or to meet the needs of visitors to the region, are critical components of determining appropriate recreation offerings at department-managed properties. Outdoor recreation, provided by the department and others, is a key economic benefit for many communities.

GROUPING OPPORTUNITIES FOR POTENTIAL FUTURE RECREATION

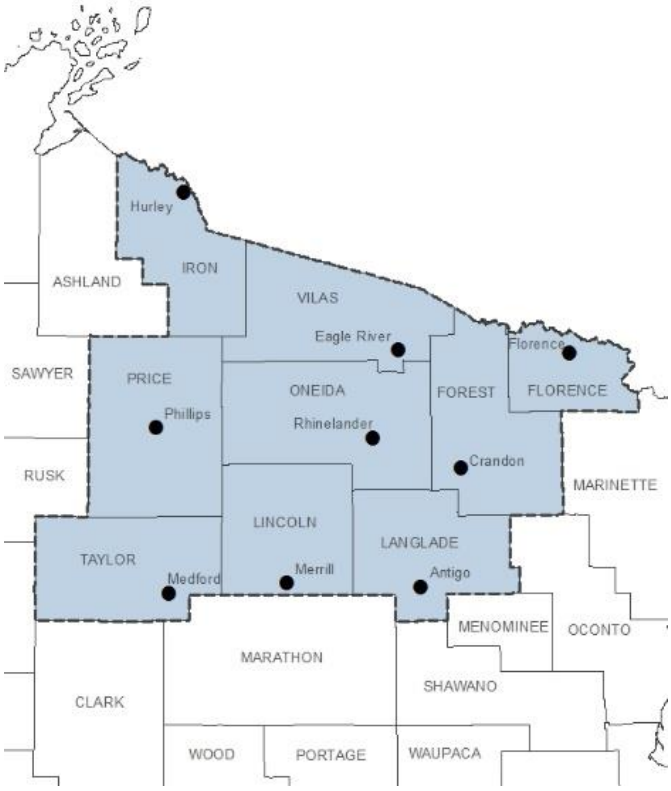
This analysis is a study of potential opportunities for outdoor recreation. **There is no priority or value measured for any one type of recreation activity by the department.** This study simply looks at what is available, what might be missing, and where future opportunities might be considering the landscape.

For each region of the state, the department sorted recreation activities into "High," "Medium", and "Low" groupings. These groupings were determined using the public input received during the public input opportunity, information obtained from the surveys conducted in preparation for the next edition of the State Comprehensive Outdoor Recreation Plan (SCORP)[3], and results from previous SCORP planning efforts. The department also considered the region's landscape and its capability meet the needs of particular recreation activities.

The "High" grouping represents the activities where there appears to be the most unmet demand alongside a likelihood to meet the demand. For the purposes of the ROA, only activities listed in the "High" grouping were provided recommendations of potential department properties that might be able to address needs. Those activities in the "Medium" and "Low" groupings still have potential to be addressed in the regions, just possibly to a lesser degree. While the results of the ROA are not intended to limit consideration of particular activities on certain lands, they are intended to inform and streamline the department's master planning process. By identifying the department-managed properties that are potentially well-suited to meet recreation needs, the results of the ROA will allow department staff and the public to focus on the subset of recreation opportunities needed in the region that the property can meaningfully address.

[3] The questions for the SCORP surveys were focused on what people thought about outdoor recreation only in their home county. In contrast, people participating in the ROA input process could provide their thoughts about recreation in any region of the state by their own choosing.

Recreation Opportunities Analysis



NORTHWOODS REGION

1. Northwoods Region

Background

Landscape Setting

The Northwoods Region is located in the north-central part of the state and encompasses Florence, Forest, Iron, Langlade, Lincoln, Oneida, Price, Taylor, and Vilas counties (Map A). The region is composed primarily of the North Central Forest and Northern Highlands ecological landscapes. Studded with thousands of mostly small kettle lakes, this area epitomizes for many residents the image of "up north."

In the center of this region is an enormous concentration of lakes resulting from the pitted outwash plain left by glaciers and is believed to be the third highest concentration of lakes in the world. The area's other key characteristic is its forests (Map B2). The vast northern hardwood forests that support a variety of wildlife, including many that need large blocks of habitat to survive like elk, wolves, bear, bobcats, and pine martens. Several large wetlands, small creeks, rivers, and small kettle lakes occur throughout. Many large wetlands are associated with the kettle lakes and streams. This type of landscape offers opportunities to manage large blocks of forest land for species adapted to predominantly un-fragmented landscapes.

Many of the state's major rivers, such as the Flambeau, Wisconsin, Wolf, Peshtigo, and Brule-Menominee rivers, originate in the Northwoods Region. The exceptional water quality and aquatic diversity of these rivers is a result of the heavily forested landscape.

Local Economy

Tourism is an important—and growing—segment of the region's economy. This is due, in large part, to the increasing numbers of visitors from southern Wisconsin and Illinois who make use of the Northwoods environment. With its numerous high-quality lakes and rivers, the region supports a large number of water-based recreation opportunities. In addition, the abundance of public lands—predominantly national, state, and county forests—provide visitors with the ability to find "wilderness" experiences. The influx of visitors, along with a growing population of baby boomers retiring to the region, supports a significant portion of local businesses resulting from the ample outdoor recreation opportunities.

Land use in the uplands is largely oriented towards timber and pulp production. This area has enough public land to manage a broad scale "shifting mosaic" of forests—that is, forests at a variety of successional stages, with different age structures and species compositions, in different patch sizes. This diversity provides a firm foundation for the timber industry for generations to come.

There is only a limited amount of agriculture in the area, mainly small farms. Some of the wetlands in this area are used for cranberry production. In the southern-most areas of the region, agriculture is more abundant where more suitable and fertile soils exist.

Recreation Uses and Participation

Given the thousands of lakes, streams, and flowages here, it is not surprising that many boaters, paddlers, and fishing enthusiasts are attracted from around the Midwest. For example, the 220,000-acre Northern Highland-American Legion State Forest offers a variety of recreation opportunities, now drawing over 2 million visitors a year to swim, hike, camp, boat, fish, or just watch the sunset across a lake. In addition to the water features in the region, the large amount of public land helps to make the region a very popular vacation and outdoor recreation destination. The uplands draw hunters, wildlife watchers, snowmobile and ATV riders, off road bikers, skiers, and horseback riders. Additional opportunities for backpacking, canoe camping, and rustic tent camping in the more remote, large blocks of public land could be pursued. Trails of many types are in demand here. Long distance and single day "loop" trails, both on rail corridors that connect small towns, as well as trails in more challenging and varied terrain.

Recreation participation rates for Wisconsin residents as a whole were presented on page 14 of the Introduction. Participation rates of Northwoods Region residents are generally similar to participation rates of the state's overall population. The table at right lists the activities that residents of the nine-counties comprising the Northwoods Region participate in more or less frequently than the state average.

Activities that residents of the Northwoods Region participate in at <u>higher</u> rates than the state average:

- 4-WD vehicle driving on trails/routes
- ATV/UTV riding on trails/routes
- Cross-country skiing
- Driving for pleasure
- Fishing - ice
- Fishing - lake, from a boat/canoe/kayak
- Fishing - lake, from shore or a pier
- Fishing - river, from a boat/canoe/kayak
- Hunting - big game on <u>private</u> land
- Hunting - big game on <u>public</u> land
- Hunting - small game on <u>private</u> land
- Hunting - small game on <u>public</u> land
- Motor boating (including pontoon boats)
- Snowmobiling
- Snowshoeing
- Stream/river fishing from shore/wading
- Target firearms shooting outdoors

Activities that residents of the Northwoods Region participate in at <u>lower</u> rates than the state average:

- Attending outdoor festival or music event
- Attending outdoor sporting event
- Bicycling on roads
- Swimming in outdoor community pools
- Visiting a dog park
- Visiting a nature center

EXISTING RECREATION SUPPLY IN THE NORTHWOODS REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Northwoods Region has the largest amount of public land (2,180,000 acres) of any of the eight planning regions in Wisconsin and the highest percentage of land in public ownership (39%) (Map B1). This has enabled not only a broad spectrum of existing opportunities, but it also allows opportunities to accommodate activities that require large land bases. This section briefly describes the public conservation and recreation lands in the Northwoods Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The National Forest Service owns and manages just over 800,000 acres in the Northwoods Region as part of the Chequamegon-Nicolet National Forest (CNNF). The CNNF is managed for multiple uses including forest production, wildlife habitat, outdoor recreation, water quality and fisheries habitat, and wilderness areas.

No other federal agencies own public recreation land in the region.

b) State

The Department of Natural Resources owns 480,000 acres and holds public access easements on 135,000 acres in the Northwoods Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Council Grounds State Park that include intensive recreation settings with developed campgrounds, swimming beaches, and picnic sites. Several parts of the Northern Highland American Legion State Forest also support intensive use areas.

At the other end of the spectrum are properties specifically acquired to protect high-quality native plant communities and rare species. Although these types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching, and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

The State Board of Commissioners of Public Land owns about 67,000 acres in the region. These lands are scattered throughout the region in tracts typically several hundred acres or smaller in size. The BCPL manages its lands primarily for forest products. Many of the BCPL lands are isolated or contain wetlands and generally have limited recreation potential.

c) County

The nine counties in the region have enrolled a total of 688,000 acres as part of the County Forest program. These lands provide a variety of benefits including forest products, fisheries and wildlife habitat, many types of outdoor recreation, and water quality protection. County Forests range in size from Iron County's 172,000 aces to Forest County's 12,000 acres. The County Forests in the region are heavily used by local residents

and visitors from outside the region for a variety of motorized and non-motorized trail activities, hunting and fishing, and other recreation pursuits.

Many counties also manage parks – sometimes nested within the County Forests, sometimes separate properties – that provide campgrounds, boat launches and other types of infrastructure to support recreation.

d) Other

Many cities, villages and townships in the Northwoods Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their easy proximity to many citizens, although these properties tend to be small they are typically well used. In addition, several school forests in the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A more detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Forest Legacy program easements

Approximately 125,000 acres in the region are part of the Forest Legacy program, which is designed to identify and protect environmentally important private forestlands threatened with conversion to non-forest uses (such as subdivision for residential or commercial development). To help maintain the integrity and traditional uses of private forestlands, the Forest Legacy Program promotes the use of conservation easements.

b) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs varies considerably across the Northwoods Region. Approximately 570,000 acres in the region are currently enrolled in these programs. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire.

c) Land trusts

Three land trusts operate exclusively in the Northwoods Region: Northwoods Land Trust, Northeast Wisconsin Land Trust, and North Central Conservancy Trust. These non-profit conservation organizations have protected over 10,000 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

d) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 4,433 miles of snowmobile trail in the Northwoods region, of which 73% (3,249 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Northwoods. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the nine counties of the region.

The Northwoods Region contains many large public land holdings, notably the Chequamegon-Nicolet National Forest and the nine County Forests. These properties provide a wide range of high-quality recreation opportunities. What follows are examples of infrastructure in the Northwoods Region that support a variety of recreation activities.

a) Northern Highland American Legion State Forest:

- Bike trails: 50+ miles paved, 50+ miles off road and mountain bike
- Cross-country skiing: 65+ miles groomed trails
- Hiking and nature trails
- Horseback riding on open forest roads
- 18 campgrounds, 1000+ campsites
- 8 picnic/day use areas
- 9 swimming beaches
- 100+ boat access sites
- 3 shooting ranges
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

b) Turtle-Flambeau Scenic Waters Area and Willow Flowage Scenic Waters Area

- Water access campgrounds
- Snowmobile and ATV trails
- Hiking, cross country skiing and snowshoeing
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

c) State Wildlife and Fishery Areas

- Hunting, fishing and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

d) Chequamegon-Nicolet National Forest

- 490+ miles of non-motorized trails
  - 20 ski trails
  - 49 hiking trails
  - 4 horse trails
  - 56 hunter walking trails
  - 6 bike trail loops
- Three motorized trail networks
  - Flambeau
  - Perkinstown
  - Dead Horse Run
- 500+ miles of snowmobile trails
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

e) County Forests (selected examples)

- Florence: 150+ miles of ATV/UTV trails
- Forest: 50+ miles state-funded ATV trails
- Iron: 25+ miles cross-county ski trails, 12+ miles of the North Country Trail, 100+ miles of year-round ATV/UTV trails
- Langlade: 40 miles bike trails, 100 miles of ATV/UTV trails
- Lincoln: 20+ miles equestrian trails
- Oneida: 35 miles cross-country ski trails, 200 miles woodland trails open to motorized recreation
- Price: 50+ miles hunter walking trails, 75+ miles ATV trails
- Taylor: 65 miles of the Ice Age Trail
- Vilas: 90 miles of hunting, hiking and skiing trails, 100+ miles preferred ATV/UTV system

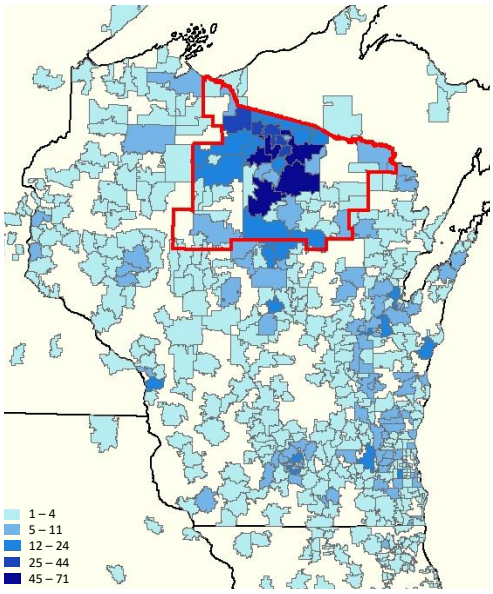
PUBLIC INPUT ON RECREATION NEEDS IN THE NORTHWOODS REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted three public open house meetings in Arbor Vitae, Park Falls, and Antigo on April 25, 26, and 27, 2017, respectively. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (and what attributes drew them to these properties), and what additional opportunities they wished were available in the Northwoods Region.

In addition to these open houses, the department posted an online public input form on its web page. A downloadable version was available for people who preferred to print, fill out, and send in the form. The public input period ran from April 10 to May 6. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[4]

Number of input forms submitted, by zip code



The department received comments in the following formats:

- 2,553 online public input forms
- 109 paper copies of the public input form
- 17 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map at right shows their distribution and frequency. As can be seen, the primary residence of many people who provided input is within the nine-county Northwoods Region. As can also be seen, many respondents live outside the region (about 60%). Undoubtedly, this reflects the large number of seasonal homes and the extent to which the region is a destination for vacationers. It also likely reflects the efforts of groups and organizations encouraging their members throughout the state and Midwest to complete the input form.

As is clear from the number and variety of the comments received, the Northwoods Region plays an important role in the state's outdoor recreation system. The region has drawn vacationers since the state's earliest days and has been a family destination for generations. There is a keen interest by many permanent and seasonal residents to

[4] The public input form was available for anyone to complete and about 2,650 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning, and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 2,650 respondents compare to the population of the nine-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

maintain the existing "feel" of the region. The department received comments, perspectives and ideas on the following topics.

Participation in outdoor recreation

Not surprisingly, respondents to the public input form participate in many outdoor recreation activities. Popular activities that were listed are seen in the table at right. These results are similar to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table at right were the most popular activities that the SCORP survey indicated residents in the Northwoods Region participate in. As can be seen, the activities that respondents to the ROA input form participate in are similar to the results of the random sample of Northwoods Region residents generated by the SCORP survey.

The three activities noted by the SCORP survey that were not among the popular activities identified by ROA respondents are: target firearm shooting, hunting big game and hunting turkey, waterfowl and small game. For reasons that are unclear, the department did not receive input in the Northwoods ROA from as many hunters as could have been expected, given the large number of people that hunt in the Northwoods Region and the importance that big-game hunting plays in the region's social framework and economy.

Popular recreation activities in which respondents participated

ATV/UTV riding
Bicycling – paved trails
Bicycling – mountain biking, single track
Camping – tent
Canoeing/kayaking
Cross-country skiing/ snowshoeing
Fishing – from a boat, canoe or kayak
Fishing – from shore
Fishing – ice fishing
Harvesting berries, mushrooms, etc.
Hiking, walking, running on trails
Motorboating
Snowmobiling
Swimming
Wildlife/bird watching

Properties that people visit

With almost 40% of the Northwoods Region in public ownership, opportunities to participate in a range of outdoor activities abound. Of the people that submitted the input form, almost two-thirds had visited the Chequamegon-Nicolet National Forest in the last three years; making it the most frequently visited property among this group. The nine County Forests in the region were also very popular among respondents. The Northern Highland-American Legion State Forest, the largest state-owned property in Wisconsin, is also a popular destination with about two in five respondents having visited the property in the last three years.

Factors important in determining favorite places to visit

Of the people providing input, the majority (64%) selected the quality of trails as one of the top three most important factors in determining their favorite property to visit. This is expected, given that many respondents noted their participation in a variety of motorized and non-motorized trail activities. In decreasing order, the next five most important factors are: (1) the desire to be in a quiet place, (2) good maps, signs, or information about the property, (3) the quality of the habitat, (4) the likelihood of seeing or harvesting fish and/or wildlife, and (5) the anticipation that the property will not be crowded. Although uncrowded scenarios and quiet experiences are somewhat different, they both speak to the desire of many respondents to seek out places that provide a respite from the noise and distractions of daily life. This wish was also articulated in many of the written comments received.

Additional outdoor recreation opportunities needed

Nearly three-quarters of respondents believe that more recreational opportunities are needed in the Northwoods Region. Of the additional opportunities desired by respondents, four out of the top five choices selected were trail-related. Again, this speaks to the respondent's participation in a variety of trail activities. The opportunity that was most frequently selected as needed in the Northwoods Region was more trails for motorized recreation, which was selected by almost half of respondents.

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities.

The public input received as part of the ROA showed a similar pattern in the Northwoods Region. For example, slightly more than half (53%) of mountain bikers believe there is a need for more mountain biking trails in the Northwoods. Similarly, 60% of horseback riders think there is a need for more equestrian trails in the region. Although only 38% of people who participate in hiking, walking, or running on trails in the region believe there is a need for more trails, given the large number of people that participate in those activities, the need for more hiking, walking, or running trails was the second most frequently noted need in the region.

Top 10 most frequently identified recreation opportunities needed in the Northwoods Region, based on public input gathered during the ROA process

Activity	# of responses
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	883
More hiking/walking/running trails	684
More natural surface (dirt) bicycling trails	509
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	493
More paved bicycling trails	422
Larger populations of big game species (deer, bear)	394
More public shore access to lakes & streams	352
More developed campgrounds (electric hook-ups, flush toilets, showers)	319
Larger populations of turkey, waterfowl, small game species	263
More lands open to public hunting	257

The group that most frequently noted a need for more opportunities in the region was people who participate in motorized recreation. About 80% of respondents that participate in either ATV/UTV or off-road motorcycle riding believe more trails for motorized recreation are needed in the Northwoods Region. Of the people who believe that more motorized recreation trails are needed in the Northwoods, 95% participate in either ATV/UTV or off-road motorcycle riding. This is consistent with SCORP survey results that show a significantly higher need for motorized recreation trails in the northern and western parts of the state.

For respondents who participate in big game hunting in the Northwoods Region, substantially more believe that larger populations of big game species (e.g., deer and bear) are needed, rather than more lands open to public hunting (40% to 24%). For hunters as a group, their top selection for future needs was more trails for motorized recreation.

Department-managed roads and motorized access

Of the topics and activities that the department sought comments on as part of the ROA, none garnered more interest than the future use of department roads in the Northwoods Region. Over 1,800 miles of roads exist on department roads in the Northwoods Region, most of which are active or former logging roads maintained for different levels and types of use.

About one-third (580 miles) of these roads are open to the public to drive “street-legal vehicles” (this includes cars, pick-up trucks, SUVs, motorcycles, and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles, and bicycles. Several local units of government in the Northwoods Region have authorized some types of motorized recreational vehicles on designated local roads.

The department sought public feedback on potentially opening up none, some, or all department roads that are currently open to “street-legal” vehicles in the Northwoods Region to motorized recreation vehicles.[5] Responses were about evenly split between these three choices with about 34% supporting opening all roads, 30% supporting opening some roads for some purposes, and 36% supporting keeping roads closed to motorized recreational use. Of the respondents in favor of opening some roads, about 1/3rd supported opening roads during the fall hunting season (September 1 to December 31) while about 2/3rd supported opening roads that would enable connections to regional motorized trail networks.

[5] For purposes of the ROA, “recreational vehicles” includes off highway vehicles, ATVs, UTVs, and off highway motorcycles.

The support or opposition to opening department-managed roads that are currently open to “street-legal” vehicles in the Northwoods Region to motorized recreation vehicles was correlated with the activities in which people participate.

From the comments submitted on the input forms it is clear that many respondents felt strongly for or against opening department-managed roads to motorized recreational uses. Of the people opposed to opening up roads, many stated concerns about noise, dust, impacts to wildlife, and damage to areas that can occur when vehicles don’t stay on designated routes. And for some respondents, the reason they live in or visit the region is the large expanses of undeveloped forests and quiet setting. For them, providing additional opportunities for motorized recreation contradicts the reason they are drawn to the area. Concern was also expressed that incorporating more motorized uses in the Northwoods Region would drive away “silent sport” enthusiasts.

A number of people in favor of opening up roads stated a desire to simply be able to use the same roads that are open to “street-legal” vehicles. Many supporters of opening forest roads to motorized recreational vehicles noted that the impacts from recreational vehicles were not any greater (and possibly less) than pick-up trucks or SUVs. In addition, some commenters expressed interest in attracting more motorized recreationists to the region as a way to enhance the local economy.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers, and streams
- public shooting ranges
- local parks and playgrounds.

Respondents living in the nine counties in the Northwoods Region identified the following activities at a substantially higher rate than the state average:

- public boat launches
- trails for motorized recreation
- hunting opportunities.

Northwoods residents identified two activities considerably less frequently than the state average:

- ball fields
- local parks and playgrounds.

FUTURE RECREATION NEEDS IN THE NORTHWOODS REGION

The Northwoods Region has an abundance of existing opportunities for most types of outdoor recreation, as evidenced in part by the large number of visitors the region receives each year. These opportunities are related to the large public land ownership in the region. Even with the large existing supply of opportunities the public identified a number of future recreation needs. The public also expressed strong support to leverage existing opportunities to provide better and more recreational experiences for residents and visitors.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (April 10 to May 6, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Northwoods Region - High	Future recreation needs in the Northwoods Region - Medium	Future recreation needs in the Northwoods Region - Low
ATV/UTV riding	Bicycling - fat tire/snow biking	Dog sledding/skijoring
Bicycling - bicycle touring/road riding	Bird or wildlife watching	Dog training
Bicycling - mountain biking/off-road biking	Cross country skiing	Dog trialing
Camping - developed	Fishing - ice fishing	Dog walking
Camping - primitive	Horseback riding	Fishing - river fishing from a boat, canoe, or kayak
Canoeing or kayaking	Hunting - migratory birds	Gather mushrooms, berries, etc.
Fishing - lake fishing from a boat, canoe, or kayak	Hunting - small game	Geocaching
Fishing - lake fishing from shore or a pier	Hunting - turkey	Horse cart driving
Fishing - stream or river fishing from shore or wading	Motorboating (waterski/tubing, personal watercraft)	Picnicking
Four-wheel vehicle driving	Nature photography	Rock climbing
Hiking, walking, trail running, backpacking	Sailing, windsurfing, rowing, stand-up paddling	Scuba diving/snorkeling
Hunting - big game	Swimming in lakes and rivers	Snowshoeing
Off-highway motorcycle riding	Target shooting - archery	Trapping
Participating in nature-based education programs	Target shooting - firearms	Visiting a beach, beach walking
Snowmobiling		Whitewater rafting

Opportunities to meet future recreation needs in the Northwoods Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Northwoods Region to meet a variety of ecological and recreation goals. These properties provide a range of settings and experiences – from developed sites with flush toilets and hot showers to remote places that provide wilderness settings. At some properties in the Northwoods, most notably the NHAL State Forest, a wealth of recreation opportunities is currently provided. At other properties, recreation plays a secondary role in their purpose.

Applying the regional needs listed above, the department evaluated the properties it manages in the Northwoods Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be "good fits" to provide different activities will be used by the department to help focus the department's work developing and updating property master plans. A description of opportunities to meet recreation needs in the Northwoods Region (on department-managed lands) follows.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, some of these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential "good fits" in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Western Sands Region, cooperatively managed trails include:

- Nicolet State Trail
- Wolf River State Trail

Non-motorized trail recreation

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Northwoods. From hiking and biking in the summer to cross-country skiing in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

The construction of paved biking trails through the NHAL State Forest, a cooperative project between the department and the local communities, has become a significant draw for visitors and residents of all ages. Linking cities and villages to each other and to campgrounds has helped create a new experience for campers and has increased economic activity in the area. Department staff observations suggest that about half of campers at the NHAL State Forest campgrounds linked to this trail system now bring bikes with them.

Participation in mountain biking has also grown recently in the region and demand exists for trails suitable for a variety of skill levels. As opposed to recreational bicycling, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. Mountain biking trails are constructed, narrow trails less than two feet wide.

Several department properties, including the NHAL State Forest and several of the larger State Wildlife Areas that have sizeable amounts of uplands, provide excellent opportunities to expand existing bicycle trail networks or create new ones. Opportunities also exist to connect bicycle trails on department properties with adjoining public properties and bicycle routes.

Hiking, walking and running on trails in the region remains very popular activities. Many opportunities exist on department properties throughout the region. Trails near population centers are likely to be most frequently used.

Reflecting the amount of snow the region receives, the long winter season, and the quality of the trails, the region has long been a draw for cross-country skiing. Most skiing now occurs on groomed trails. If other areas of the state receive less snow in the future, the Northwoods Region may draw even more cross-country skiers. There are many opportunities on department properties to expand groomed trail networks or create new ones.

The following table lists current and potential future opportunities for non-motorized trail activities

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/road riding	Northern Highland American Legion State Forest	Bearskin State Trail Little Rice Wildlife Area Public access sites on lakes and rivers Turtle Flambeau Scenic Waters Area Upper Wolf River Fishery Area	Pine Popple Wild Rivers Pershing Wildlife Area Powell Marsh Wildlife Area	
Bicycling - mountain biking/off-road biking	Menard Island Resource Area Northern Highland American Legion State Forest Upper Wolf River Fishery Area Willow Flowage Scenic Waters Area	Bearskin State Trail Bog Brook Wildlife Area Cranberry Lake Fishery Area Woodboro Lakes Wildlife Area	Ackley Wildlife Area Bill Cross Wildlife Area Conover Rearing Station Hay Creek-Hoffman Lake Wildlife Area Ice Age Trail property Kimberly Clark Wildlife Area Mercer Lake Fishery Area New Wood Wildlife Area Niebauer Springs Fishery Area Peters Marsh Wildlife Area Rib River Fishery Area Spread Eagle Barrens State Natural Area Spring Creek Wildlife Area Tamarack Rearing Station Thunder Lake Wildlife Area Turtle Flambeau Scenic Waters Area	
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			

MOTORIZED TRAIL RECREATION

The department primarily provides two types of motorized access in the Northwoods Region: (1) access for street-legal vehicles on over 580 miles of roads it maintains for public use (most of which are access roads for logging operations and are surface with native soils) and (2) trails and routes for ATV/UTVs and snowmobiles.

The department conducts frequent forestry operations throughout the region. Following the harvest of trees from a site, the department typically leaves the logging access roads open to the public for a couple of years (in many cases there is public interest in harvesting firewood from the residual tree branches). In situations where there are sensitive resources or other factors that suggest continued public access on the road is not compatible with long-term goals, these logging roads will be closed. In other cases, where there are no compelling reasons to close the road to continued public use by street-legal vehicles, they will remain open. Many visitors to the Northwoods Region use these roads to access portions of department-managed properties to engage in hunting, fishing, berry picking, and a variety of other activities including pleasure driving.

The department does not believe there is public interest or a need to close substantial portions of the existing open roads to meet broad-based ecological or recreational needs. There may be a need to close stretches of the existing open road network on department lands due to specific situations. These instances will be identified and addressed in subsequent master planning processes.

There is considerable interest in also using the network of open forest roads for ATV/UTV and off highway motorcycle use, both as a riding experience and to enable connections of the larger regional network of routes. More and more towns are allowing ATV/UTVs on their local roads and, as such, there are increasing opportunities to make connections across department-managed lands to help facilitate this network.

Based on public input received during the development of the Northwoods ROA, there appears to be diverse opinions on the desirability of providing more ATV/UTV access on the roads that the department maintains for street-legal vehicles. While many people support providing some access for recreational motorized vehicles on roads open to street-legal vehicles, there is also vocal opposition to this use.

The department recognizes that motorized recreational uses, particularly those that occur in warm-weather months, are a contentious issue. The department currently allows ATV/UTVs to be ridden on some roads on some properties in the Northwoods Region. The department's experience is that this use can disrupt other users of the properties, but typically not in a manner or to an extent that it noticeably affects visitation patterns or drives non-motorized users away. It is also the department's experience that some illegal use occurs (most often in the form of riders leaving designated routes) but that these instances tend to be relatively minor (if ongoing) issues that can be successfully addressed through education and monitoring by clubs, and enforcement.

Given the size, location, and distribution of the department-owned properties in the region, it seems reasonable that some motorized recreational use, both to make connections and to provide access to portions of the larger properties during the fall hunting season, can be incorporated at some or many of the properties listed in the table beginning on page 25. It is the department's expectation that motorized recreational use can be established or expanded at properties in ways that minimize adverse impacts to neighbors, sensitive places and resources, existing recreational use patterns, and other considerations. The specific properties and portions of properties for motorized recreational use will be determined in the property master planning process.

a) ATV/UTV riding

The department maintains both ATV/UTV trails and routes (roads that are open to both street-legal vehicles and ATV/UTVs) on some properties in the Northwoods Region. There is a growing demand for riding opportunities that has resulted in an increasing number of towns allowing ATV/UTVs on local roads by designating them as routes. The increased number of opportunities has in turn helped create increased demand.

Most ATV/UTV riders prefer trails or routes that are winding and narrower rather than straight and wide. However, local roads (even if they are straight and wide) that provide a connection from one desirable setting to another is generally considered an acceptable riding experience.

The department believes there are three potential options for ATV/UTV riding on properties it manages in the Northwoods Region. First, there is an opportunity to provide connections to the regional network of trails and routes using a combination of existing local (town) roads and department-managed roads. Opening town roads that pass through department properties to ATV/UTV use will require the town governments to authorize this use. Of the department-managed roads, there are opportunities to use both those that are currently open to street-legal vehicles and those currently closed to public use. Given the wet nature of many seasonally-open roads (these are mostly in wet areas that are only open during the winter when the ground is frozen, typically for snowmobiling), it appears there are only limited stretches where these roads could provide ATV/UTV riding opportunities.

Second, an opportunity exists to provide ATV/UTV riders with access to department-managed roads during the fall hunting season (generally September 1 through January 31) that are already open to street-legal vehicles. This would enable these riders to access areas of the property where visitors currently can drive their pick-up trucks, SUVs, and other vehicles.

A third option would be to allow ATV/UTV access to all or most roads currently open to street-legal vehicles and to identify and sign preferred routes of travel. This would concentrate riding on a subset of routes while also allowing riders the flexibility to access or explore many parts of department-managed lands. This may be problematic where department roads connect to roads not under the authority of the department and not already open to ATV/UTV use.

b) Off-highway motorcycle riding

There are two types of off-highway motorcycles – those that are street-legal (that is, they are licensed, plated, and have required safety features such as brake lights, rearview mirror, and turn signals) and those that are not. Street-legal motorcycles that are also designed for off-road use are commonly called dual-sport motorcycles. These motorcycles are currently allowed on all public roads on department properties. Off-highway motorcycles that are not licensed and street-legal (typically these motorcycles are lighter weight, have high ground clearance, and knobby tires) are not currently allowed on department roads.

Although preferred riding experiences are narrow, winding trails that meander through the forest, primitive roads (2-tracks) can provide high-quality rides. As with ATV/UTVs, routes (even wide and straight) are acceptable ways to connect higher-quality riding experiences.

Since dual-sport motorcycles are already allowed on all open department roads, to provide increased riding opportunities would require opening more roads to street-legal vehicles or to open them just to motorcycles. Identifying and signing preferred routes of travel may both concentrate use in the most appropriate corridors while also encouraging more use.

c) Off-highway vehicle driving

Off-highway, four-wheel drive vehicle drivers prefer a variety of experiences. Some like to climb and descend technically challenging hills that test their maneuverability and driving skills. Others like to drive on hilly, winding primitive roads exploring the forests and countryside. Of course, many drivers enjoy both types of experiences. Some four-wheel drive trucks are street-legal (that is, they have license plates and all the required safety features) while others are not. Four-wheel drive vehicles that are not street-legal are not allowed on public roads.

d) Snowmobiling

Snowmobiling occurs extensively on department-managed lands. Although there may be some opportunities to expand, the most common need is simply to ensure that the trails on department properties are aligned with those of the broader regional network.

The following table lists current and potential future opportunities for motorized trail activities.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
ATV/UTV riding	Willow Flowage Scenic Waters Area	Alta Springs Fishery Area Bog Brook Wildlife Area Eau Claire River Fishery Area Evergreen River Fishery Area Little Rice Wildlife Area Pine Popple Wild Rivers Prairie River Fishery Area Rabes Lake Fishery Area Spread Eagle Barrens State Natural Area Underwood Wildlife Area Upper Wolf River Fishery Area Woodboro Lakes Wildlife Area Woods Flowage Fishery Area	Bearskin State Trail Menard Island Resource Area Northern Highland American Legion State Forest Public access sites on lakes and rivers Turtle Flambeau Scenic Waters Area	Big Rib River Fishery Area Spring Lake Fishery Area
4-WD vehicle driving		Bog Brook Wildlife Area Hay Creek-Hoffman Lake Wildlife Area Kimberly Clark Wildlife Area Northern Highland American Legion State Forest Pine Popple Wild Rivers Powell Marsh Wildlife Area Spring Creek Wildlife Area Underwood Wildlife Area Upper Wolf River Fishery Area Woodboro Lakes Wildlife Area	Bearskin State Trail	Spread Eagle Barrens State Natural Area Willow Flowage Scenic Waters Area
Off-highway motorcycle riding	Willow Flowage Scenic Waters Area	Pine Popple Wild Rivers Upper Wolf River Fishery Area	Bearskin State Trail Northern Highland American Legion State Forest	Spread Eagle Barrens State Natural Area
Snowmobiling	Hundreds of miles of snowmobile trail, maintained by local clubs, cross department lands as part of the extensive network of trails in the region. Although there are some opportunities to expand the existing network of trails, generally the existing trails on department lands meets the existing demand.			

OTHER FORMS OF RECREATION

In addition to trail-based activities, there is considerable demand for many other types of outdoor recreation in the Northwoods Region, including camping, hunting and fishing, and a variety of types of boating.

Camping was one of the area's early draws and remains one of the region's most popular activities. Camping has evolved over the years and there has been a shift in demand both for more developed and rustic experiences. The department currently provides a range of camping opportunities from primitive, isolated sites with only a fire ring and box latrine to densely grouped campgrounds with flush toilets and hot showers. The only camp sites with electric hook-ups on department properties within the Northwoods Region are located at Council Grounds State Park.

Although many of the department's campgrounds are full on summer weekends, most are only partially at capacity during the week and in the spring and fall. Many campers now bring gasoline generators to provide electricity for their stay. There is potential on department properties to provide more camping opportunities with electric hook-ups to meet the growing demand. Converting some entire campgrounds (or significant portions) to provide electric hook-ups would likely be most cost-effective for the department and would likely allow the campgrounds to operate at a higher capacity over longer periods of the year.

Providing electricity at some campgrounds would also relieve the need for campers to run generators and thus could provide an opportunity to expand the quiet experiences that other campers' desire. There are also opportunities on several department properties to create new or expand existing rustic or primitive campsites or camping experiences.

Given the abundance of lakes, streams and rivers in the region, fishing and boating have long been among the most popular outdoor activities here. Although there are many existing boat launches (both sites that accommodate trailers with motorboats as well as carry-in access for canoes and kayaks) there are several opportunities for additional access sites on underserved lakes on department properties to meet the demand.

Big game hunting is a popular activity in the Northwoods Region and an important contributor to the local economy in the fall when most other visitors have left. An abundance of land open to the public for hunting in the region already exists, but there are opportunities to provide easier access into more remote areas for big-game hunters.

The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed (modern)	Northern Highland American Legion State Forest	Spread Eagle Barrens State Natural Area	Hay Creek-Hoffman Lake Wildlife Area Ice Age Trail property Kimberly Clark Wildlife Area Menard Island Resource Area Mercer Lake Springs Fishery Area Tamarack Rearing Station Upper Wolf River Fishery Area	
Camping – rustic	Northern Highland American Legion State Forest Willow Flowage Scenic Waters Area	Ackley Wildlife Area New Wood Wildlife Area Peters Marsh Wildlife Area Pine Popple Wild Rivers Turtle Flambeau Scenic Waters Area Woodboro Lakes Wildlife Area	Bill Cross Wildlife Area Hay Creek-Hoffman Lake Wildlife Area Ice Age Trail property Kimberly Clark Wildlife Area Menard Island Resource Area Mercer Lake Springs Fishery Area Pershing Wildlife Area Spring Creek Wildlife Area Tamarack Rearing Station Underwood Wildlife Area Upper Wolf River Fishery Area	
Hunting - big game	Big game hunting is allowed on all department properties outside of designated use areas (e.g., campgrounds, picnic areas, parking lots, and some designated trails). Since hunting occurs through department lands, there are not opportunities to expand the places where this activity can occur. There are, however, ways that the department can provide easier access into remote areas and can encourage more people to participate in hunting on department-managed lands in the Northwoods Region. There is an abundance of land open to the public for big game hunting.			
Participating in nature-based education programs	A few department properties in the Northwoods Region host formal nature-based education programs. Generally, there are opportunities for Friends groups, education institutions or others to expand or add nature-based programs on the larger department properties.			
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. There are potentially many opportunities to add more walk-in trails to access waterbodies with canoes or kayaks.			

Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. Some of the larger properties with many or large waterbodies, such as the NHAL State Forest and the flowages, have many places to launch a trailered boat. On other lakes and rivers, the department has acquired small properties to support boat launches. The properties with potential to add more improved boat access sites (ramps for trailered boats) include: Crystal Springs Rearing Station, Menard Island Resource Area, Mercer lake Springs Fishery Area, NHAL State Forest, Powell Marsh Wildlife Area, Turtle Flambeau Scenic Waters Area, Upper Wolf River Fishery Area, and Willow Flowage Scenic Waters Area
Fishing - lake fishing from shore or a pier	All department lands with lakes are open to shore fishing and as such there are not opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access.
Fishing - stream or river fishing from shore or wading	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels.

SUMMARY OF THE NORTHWOODS REGION ROA

With a wealth of public conservation lands, the Northwoods Region has been an outdoor recreation destination for generations of families dating back to Wisconsin's earliest days. A wide range of recreation opportunities are currently provided in the region, from quiet wilderness areas and no-motor lakes to modern campgrounds with hot showers to developed mountain biking trails and thousands of miles of snowmobile trails.

Although the region is rich in current opportunities, a number of needs were expressed by residents. Topping the list of needs are: trails for motorized recreational vehicles, trails for hiking, walking and running, trails for bicycling, and rustic camping. Although there was strong demand for these facilities, there was also vocal opposition to some of these, notably motorized recreation. At heart, much of the opposition to allowing motorized recreation, bicycle trails, and other forms of recreation was based on a desire to "keep things the way they are."

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Northwoods Region. In particular, the department believes the following properties and property groups are well-suited to provide the identified needs in the region:

NORTHERN HIGHLAND AMERICAN LEGION STATE FOREST

- Paved bicycle trails that expand the existing network linking cities and villages and campgrounds and provide modest length loop riding opportunities (3 to 15 miles).
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- ATV/UTV riding on forest roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks and to provide access during the fall hunting season.
- Off-highway motorcycle riding on forest roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks.
- Developed camping, including adding electrified sites to some campgrounds or significant portions of campgrounds.
- Primitive camping, including prohibiting use of generators at some campgrounds to provide quiet settings.
- Group campgrounds.
- A limited number of additional boat launches at strategic locations to facilitate access to key waters.

STATE WILDLIFE AREAS, FISHERY AREAS, REARING STATIONS, AND NATURAL AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Some limited opportunities to provide mountain biking trails (single-track, constructed trails of varying difficulties) on some of the larger properties with upland habitats.
- ATV/UTV riding and motorcycle riding on existing open roads (and potentially staff management roads) that connect regional trail/route networks.
- Some limited opportunities to provide primitive and rustic camping opportunities, along with potentially a few more developed sites.
- Additional boat launches at strategic locations to facilitate access to key waters.

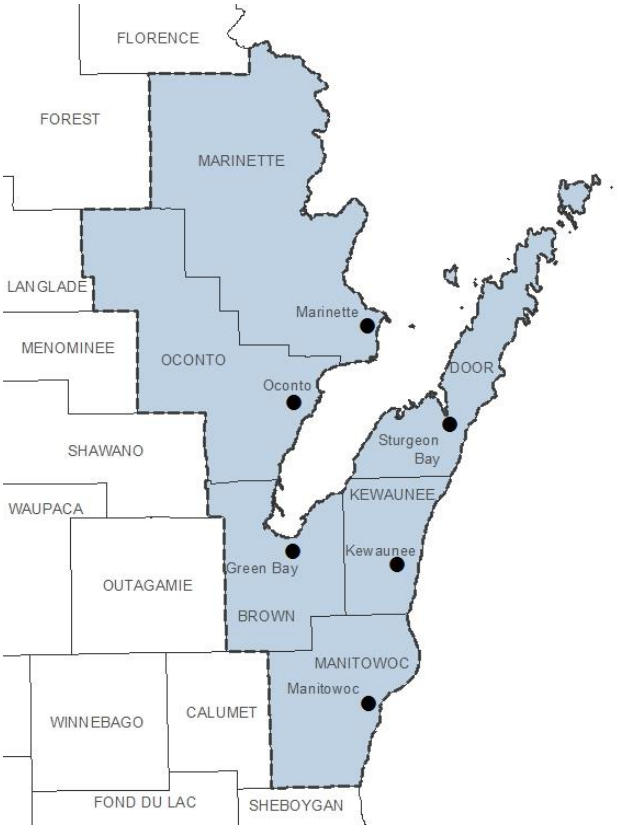
Flowages (Scenic Waters Areas)

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- ATV/UTV riding and motorcycle riding on existing open roads (and potentially service roads) that connect regional trail/route networks.
- Some limited opportunities to provide mountain biking trails (narrow single-track, constructed trails of varying difficulties).
- Opportunities to provide more primitive and rustic camping opportunities.

State Parks and Trails

- There are opportunities on all three state trails in the Northwoods Region to allow or expand ATV/UTV riding and motorcycle riding opportunities to help connect regional trail/route networks. However, it must be noted that, with the exception of the Bearskin State Trail, all State Trails in the Northwoods Region are cooperatively managed with the respective counties. Allowed uses on these trails are determined by the counties and not the department.
- Some options to add to the existing camping and bicycling opportunities at Council Grounds State Park.

Recreation Opportunities Analysis



UPPER LAKE MICHIGAN COASTAL REGION

2. Upper Lake Michigan Coastal Region

Background

Landscape Setting

The Upper Lake Michigan Coastal Region is in the northeast part of the state and encompasses Brown, Door, Kewaunee, Manitowoc, Marinette and Oconto counties. The region is heavily influenced by its association with Lake Michigan, with each of the region's six counties containing some portion of the lake's shoreline. Although many residents and visitors to the region use Lake Michigan for their recreational pursuits, other water resources such as the Menomonie, Peshtigo and Pike Rivers also attract recreationists with their abundant fishing and paddling opportunities. Many large rivers, notably the Menominee, Peshtigo and Oconto play a critical role in maintaining the fishery of the Bay. This area also supports an exceptional concentration of high quality rivers and streams, most of which harbor outstanding trout fisheries.

In the northern portion of the region, the landscape is characterized by glaciated topography with sandy, well-drained soils as well as steep outcropping bedrock knolls. Around Green Bay there are large coastal marshes and embayments, conifer swamps, and the Niagara Escarpment. The topography south of Green Bay is a combination of gently rolling hills interspersed with large flat wetlands. East of the Escarpment, the land gradually slopes towards Lake Michigan.

Local Economy

Recreation and tourism play large roles in the local economy. Of particular note, Door County contains over 250 miles of picturesque shoreline—more than any other county in the United States—and 10 historic lighthouses, features that attract many tourists and seasonal residents. The collection of state and local parks here is a testament to the scenic value. Peninsula State Park, located along the beautiful shores of Green Bay, is one of the most popular state parks in Wisconsin with over 1.2 million visitors each year.

The major land use in the northern part of the region is forest commodity production, primarily for pulp. Very little agriculture occurs there with most of the crop acres in hay. Looking southward, some agriculture is present, although fewer acres of less productive land is no longer farmed. Much of this land is rapidly converting to suburban development. In the southern reaches of the region, agriculture is the most prevalent land use, particularly dairy farming.

Urban resources also affect the Upper Lake Michigan Coastal Region. Green Bay, the region's urban center, influences much of its surrounding area with its suburban growth and cultural resources. Growing health care and manufacturing industries play significant roles in the regional economy.

Recreation Uses and Participation

Lake Michigan, its shoreline and tributaries are the foundation of much of the recreation in this part of the state. Given the tremendous views that large waterbodies provide, the shoreline along Lake Michigan and Green Bay is exceedingly popular for many different types of active and passive recreation. The lake and the bay are very popular for boating, fishing and sailing in the summer. Snowmobiling, cross-country skiing and ice fishing draw visitors in the winter.

The Menominee, Peshtigo, and Pike Rivers are very popular for paddling and fishing, drawing thousands of visitors each year. The Roaring Rapids section of the Peshtigo is regarded to be the finest whitewater canoeing and kayaking water in the Midwest. Fishing on the many high-quality trout streams that feed into the major rivers is very popular. Numerous waterfalls and rapids occur throughout the northern part the region and are part of the aesthetic draw of the area.

With over 500,000 acres of county, state and national forests in this region, there is ample opportunity for a variety of recreation pursuits. Hunting (particularly for grouse and deer), fishing, bird watching and hiking are popular activities here. State-owned lands along the west shore of Green Bay provide popular hunting opportunities, however, their significant amounts of wetlands limit the variety of recreation activities that can be accommodated.

Activities that residents of the Upper Lake Michigan Coastal Region participate in at <u>higher</u> rates than the state average:

- Hunting – migratory birds
- Hunting – small game
- Hunting – turkey
- Trapping

Recreation participation rates for Wisconsin residents statewide are presented on page 14 of the Introduction. Participation rates of Upper Lake Michigan Coastal Region residents are consistent with the state average or within a few percentage points in variation. Notable differences to the state average are shown in the box to the right.

EXISTING RECREATION SUPPLY IN THE UPPER LAKE MICHIGAN COASTAL REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Upper Lake Michigan Coastal Region has approximately 596,000 acres of public land available for outdoor recreation. Along with the opportunities available in and around Lake Michigan, the large public land blocks to the north provide ample space to accommodate a wide variety of activities. This section briefly describes the public conservation and recreation lands in the Upper Lake Michigan Coastal Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The National Forest Service owns and manages just over 140,000 acres in the Upper Lake Michigan Coastal Region as part of the Chequamegon-Nicolet National Forest (CNNF). The CNNF is managed for multiple uses including forest production, wildlife habitat, outdoor recreation, water quality and fisheries habitat and wilderness areas. The US Fish & Wildlife Service manages some small properties in the region.

b) State

The Department of Natural Resources owns 110,000 acres and holds public access easements on 19,000 acres in the Upper Lake Michigan Coastal Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Peninsula State Park that include intensive recreation settings with developed campgrounds, miles of trails, a nature center and picnic sites. Peninsula, along with the other state parks, draw over 2 million visitors each year. In addition, properties like Peshtigo River State Forest and Menomonie River State Recreation Area provide a variety of remote wilderness opportunities.

At the other end of the spectrum are properties like Bailey's Harbor State Natural Area, lands specifically acquired to protect high-quality native plant communities and rare species. Although these types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

The State Board of Commissioners of Public Land owns about 3,500 acres in the region. These lands are scattered throughout the region in tracts typically several hundred acres or smaller in size. The BCPL manages its lands primarily for forest products. Many of the BCPL lands are isolated or contain wetlands and generally have limited recreation potential.

c) County

Two of the counties in the region (Marinette and Oconto) have enrolled a total of 273,000 acres as part of the County Forest program. These lands provide a variety of benefits including forest products, fisheries and wildlife habitat, many types of outdoor recreation, and water quality protection. The Marinette County Forest is the second-largest in the state at almost 230,000 acres and is used by local residents and visitors from outside the region for a variety of trail activities, hunting and fishing, and other recreation pursuits. Most of these counties manage parks that provide campgrounds, boat launches and other types of infrastructure to support recreation.

d) Other

Many cities, villages and towns in the Upper Lake Michigan Coastal Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their easy proximity to many citizens, although these properties tend to be small they are typically well used. Most public accesses to Lake Michigan are at capacity during peak fishing periods on the weekends. In addition, several school forests in the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Forest Legacy program easements

Approximately 14,500 acres in Marinette County are part of the Forest Legacy program, which is designed to identify and protect environmentally important private forestlands threatened with conversion to non-forest uses (such as subdivision for residential or commercial development). To help maintain the integrity and traditional uses of private forestlands, the Forest Legacy Program promotes the use of conservation easements.

b) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs is mostly in Marinette County with the remaining acreage spread across the rest of the counties in the Upper Lake Michigan Coastal Region. Approximately 40,000 acres in the region are currently enrolled in these programs. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire.

c) Land trusts

These land trusts operate in the Upper Lake Michigan Coastal Region: Door County Land Trust, The Ridges Sanctuary, Inc., Glacial Lakes Conservancy, Baird Creek Preservation Foundation, Northeast Wisconsin Land Trust, and The Conservation Fund. These non-profit conservation organizations have protected over 6,400 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

d) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. 2014 funds are administered and provided by U.S. Department of Agriculture NRCS. To date, there are over 1,400 acres available in the Upper Lake Michigan Coastal Region.

e) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 2,132 miles of snowmobile trail in the Upper Lake Michigan Coastal region, of which 82% (1,745 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Upper Lake Michigan Coastal Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the six counties of the region.

The Upper Lake Michigan Coastal Region contains many large public land holdings, notably the Chequamegon-Nicolet National Forest and the two County Forests. These properties provide a wide range of high-quality recreation opportunities. What follows are examples of infrastructure in the Upper Lake Michigan Coastal Region that support a variety of recreation activities.

a) Peninsula State Park:

- 20+ off-road and mountain biking trails
- 16+ miles groomed cross-country skiing trails
- Hiking and nature trails
- 5 campgrounds, 470 campsites
- Picnic/day use areas
- Swimming beach and boat access site
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching, scenic viewing opportunities

b) Potawatomi State Park

- Off-road bicycle trails
- Groomed cross-country skiing trails
- Hiking and nature trails and observation tower
- Family and group camping opportunities and picnic areas
- Access site on Green Bay for boating, canoeing, kayaking, fishing, SCUBA diving and water skiing
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching, scenic viewing opportunities

c) Governor Thompson State Park – Peshtigo River State Forest

- Water access, remote and family campgrounds
- Boating and canoe/kayak opportunities
- Swimming beaches
- 20+ miles snowmobile trails
- Hiking, cross country skiing and snowshoeing
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

d) Point Beach State Forest

- Indoor group camp and family campground
- Swimming beaches
- Paved bike trail
- Hiking, cross country skiing, and snowshoeing
- Nature center and reservable shelters
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

e) State Wildlife and Fishery Areas

- Hunting, fishing and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

f) Chequamegon-Nicolet National Forest

- Horse and cross-country ski trails
- Bike trail loops
- ATV and snowmobile trails
- Hiking and hunter walking trails
- Hunting, fishing, and trapping opportunities
- Nature study, photography, wildlife watching opportunities

g) Marinette County Forest

- 200+ miles of ATV/UTV and snowmobile trails
- 20+ miles of cross-country ski trails
- Hiking and hunter walking trails
- 230,000+ acres for hunting, trapping, nature study, photography, wildlife watching opportunities
- Several waterway access points for boating, canoeing and kayaking

PUBLIC INPUT ON RECREATION NEEDS IN THE UPPER LAKE MICHIGAN COASTAL REGION

INPUT GATHERED AS PART OF THE ROA

The department hosted two public open house meetings, in Sturgeon Bay and Crivitz, on August 22 and 23, 2017, respectively. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Upper Lake Michigan Coastal Region.

In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out and send in the form. The public input period ran from August 3 to September 8, 2017. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[6]

The department received comments in the following formats:

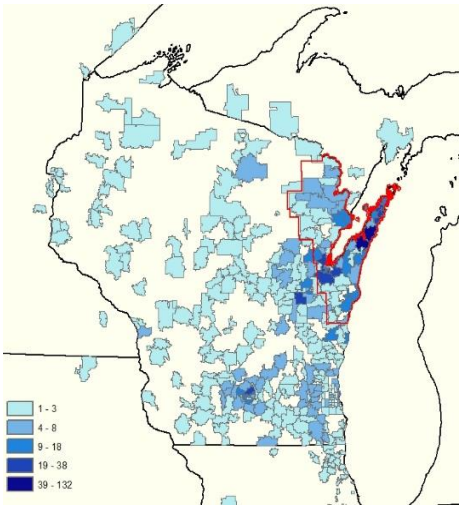
- 1,469 online public input forms
- 88 paper copies of the public input form
- 14 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

[6] The public input form was available for anyone to complete and about 1,500 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active, interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 1,500 respondents compare to the population of the six-county region or the state as a whole) and therefore no way the results can be generalized with an associated error margin to a larger population.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map at right shows their distribution and frequency. As can be seen, the primary residence of many people who provided input is within the six-county Upper Lake Michigan Coastal Region. As can also be seen, many respondents live outside the region (53% of respondents). Undoubtedly, this reflects the large number of seasonal homes and the extent to which the region is a destination for vacationers. It also likely reflects the efforts of groups and organizations encouraging their members throughout the state and Midwest to complete the input form.

Number of input forms submitted, by zip code



As is clear from the number and variety of the comments received, the Upper Lake Michigan Coastal Region plays an important role in the state's outdoor recreation system. The region, particularly the Door Peninsula, has drawn vacationers since the state's earliest days and has been a family destination for generations. The department received comments, perspectives and ideas on the following topics.

Participation in outdoor recreation

Respondents to the public input opportunity participate in many outdoor recreation activities. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table at right were the most popular activities that the SCORP survey indicated residents in the Upper Lake Michigan Coastal Region participate in. As can be seen, the activities that respondents to the ROA input form participate in vary from the results of the random sample of Upper Lake Michigan Coastal Region residents generated by the SCORP survey.

Popular recreation activities in which respondents to the ROA input form participate

- **Bicycling – paved trails**
- Bicycling – mountain biking, single track
- Camping – tent
- Camping – RV/pop-up
- Canoeing/kayaking
- Cross-country skiing/ snowshoeing
- **Fishing – from a boat, canoe or kayak**
- **Hiking, walking, running on trails**
- Horseback riding
- **Swimming**
- **Wildlife/bird watching**

Properties that people visit

Almost 20% of the Upper Lake Michigan Coastal Region is in public ownership. Some of the state parks in the region are among the most visited state-owned properties in Wisconsin. Indeed, almost two-thirds of the people who provided input had visited at least one of the state parks and almost 10% had visited all five parks in the last three years. Of the people that submitted information through the public input opportunity, almost half had walked the Ice Age Trail and 40% had visited the Chequamegon-Nicolet National Forest in the last three years. Other popular properties include the state trails (Ahnapee, Nicolet, Fox River, Mountain Bay, and Devils River), the state forests (Point Beach and Peshtigo), and the county forests (Marinette and Oconto).

Factors important in determining favorite places to visit

Of the people providing input, the majority (69%) selected (1) the quality of trails as one of the top four most important factors in determining their favorite property to visit. This is expected, given that many respondents noted their participation in a variety of motorized and non-motorized trail activities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) good maps, signs or information about the property, and (4) the quality of the habitat.

Additional outdoor recreation opportunities needed

Nearly ninety percent of respondents believe that more recreational opportunities are needed in the Upper Lake Michigan Coastal Region. Of the additional opportunities desired by respondents, the top four choices selected were trail-related. Again, this speaks to the respondent's participation in a variety of trail activities. The opportunity that was most frequently selected as needed in the Upper Lake Michigan Coastal Region was more trails for hiking, walking or running, which was selected by more than one-third of respondents.

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities. The public input received as part of the ROA showed a similar pattern in the Upper Lake Michigan Coastal Region. For example, a strong majority (80%) of people who ride horses believe there is a need for more equestrian trails in the Upper Lake Michigan Coastal Region. Similarly, about two-thirds of mountain bikers and fat-tire bike riders think there is a need for more natural surface trails in the region. More shore access to lakes and streams and more rustic camping opportunities were widely supported across recreation pursuits. The largest need cited by people was for more hiking/walking/running trails.

Top 10 most frequently identified recreation opportunities needed in the Upper Lake Michigan Coastal Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	416
More horseback trails	378
More paved bicycling trails	363
More natural surface (dirt) bicycling trails	346
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	286
More public shore access to lakes & streams	226
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	220
More developed campgrounds (electric hook-ups, flush toilets, showers)	185
More wildlife watching decks or platforms	130
More local parks and playgrounds	98

For respondents who participate in big game hunting in the Upper Lake Michigan Coastal Region, slightly more believe that more lands open to public hunting are needed, rather than larger populations of big game species (e.g., deer and bear). For hunters as a group, their top selection for future needs was more trails for motorized recreation.

Department-managed roads and motorized access

Nearly 170 miles of department roads exist on department properties in the Upper Lake Michigan Coastal Region, most of which are active or former logging roads Generally, these roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. About one-third (65 miles) of these roads are open to the public to drive "street-legal vehicles" (this includes cars, pick-up trucks, SUVs, motorcycles, and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles. Some local units of government in Marinette and Oconto counties have authorized some types of motorized recreational vehicles on designated local roads.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to "street-legal" vehicles in the Upper Lake Michigan Coastal Region to motorized recreation vehicles.[7] About 40% of people that provided responses believed that all DNR roads should remain closed to motorized recreational vehicles. Of the 60% that supported allowing motorized recreational vehicles on DNR roads, most thought that this access should be on a subset of roads that connect larger regional motorized recreation networks. In addition, 30% of these respondents supporting opening roads thought opening should occur to provide access during the fall hunting season (Sept1 to Dec 31). There were notable differences in responses based on area of residence in the

[7] For purposes of the ROA, "recreational vehicles" includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

region. For people who provided input that live in Door County, about four times as many people thought that all DNR roads should be closed to motorized recreation vehicles as thought all roads should be open. For residents in Marinette and Oconto counties, about twice as many people who provided responses believed that all DNR roads should be open to motorized recreation vehicles than thought these roads should be closed.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- local parks and playgrounds

Respondents living in the six counties in the Upper Lake Michigan Coastal Region identified the following activity at a higher rate than the state average:

- public shore access to lakes, rivers and streams

Upper Lake Michigan Coastal Region residents identified four activities less frequently than the state average:

- bicycling trails
- ball fields
- outdoor courts for tennis, handball and basketball
- local parks and playgrounds.

Future recreation needs in the Upper Lake Michigan Coastal Region

The Upper Lake Michigan Coastal Region has many existing opportunities for outdoor recreation found at state parks and trails. The region, particularly Door County, draws millions of visitors each year. Visitors are drawn to campgrounds because of the scenery and the water-related activities available nearby. Lake Michigan and Green Bay play a significant role in the region's tourism economy. Future and current partnerships between public land managers and non-profit recreation groups has great potential to offer more areas for developed recreation. The wilderness areas to the north have the potential to support all sorts of recreation opportunities for activities that depend on large blocks of public land. Even with the existing supply of opportunities available in the region, the public identified several future recreational needs. The public also expressed strong support to leverage existing opportunities to provide better and more recreational experiences for residents and visitors.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (August 3 to September 8, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Upper Lake Michigan Coastal Region – High	Future recreation needs in the Upper Lake Michigan Coastal Region - Medium	Future recreation needs in the Upper Lake Michigan Coastal Region - Low
Bicycling - bicycle touring/road riding	ATV/UTV riding	Bicycling - fat tire/snow biking
Bicycling - mountain biking/off-road biking	Cross country skiing	Dog sledding/skijoring
Bird or wildlife watching	Dog walking	Dog training
Camping - developed	Four-wheel vehicle driving	Dog trialing
Camping - primitive	Hunting - big game	Fishing - ice fishing
Canoeing or kayaking	Hunting - small game	Gather mushrooms, berries, etc.
Fishing - lake fishing from a boat, canoe or kayak	Hunting - turkey	Geocaching
Fishing - lake fishing from shore or a pier	Nature photography	Horse cart driving
Fishing - river fishing from a boat, canoe or kayak	Off-highway motorcycle riding	Hunting - migratory birds
Fishing - stream or river fishing from shore or wading	Participating in nature-based education programs	Rock climbing
Hiking, walking, trail running or backpacking	Picnicking	Scuba diving/snorkeling
Horseback riding	Sailing, windsurfing, rowing, stand-up paddling	Snowshoeing
Motorboating (waterski/tubing, personal watercraft)	Snowmobiling	Trapping
Visiting a beach, beach walking	Swimming in lakes and rivers	Whitewater rafting
	Target shooting - archery	
	Target shooting - firearms	

Opportunities to meet future recreation needs in the Upper Lake Michigan Coastal Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Upper Lake Michigan Coastal Region to meet a variety of ecological and recreation goals. These properties provide a range of settings and experiences – from developed sites with flush toilets and hot showers to remote places that provide wilderness settings. At some properties in the region, a wealth of recreation opportunities is currently provided; at other properties, recreation plays a secondary role in their purpose.

Applying the regional needs listed above, the department evaluated the properties it manages in the Upper Lake Michigan Coastal Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be “good fits” to provide different activities will be used to help focus the department’s work developing and updating property master plans. A description of opportunities to meet recreation needs in the Upper Lake Michigan Coastal Region (on department-managed lands) follows.

NON-MOTORIZED TRAIL RECREATION

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Upper Lake Michigan Coastal Region. From hiking and biking in the summer to cross-country skiing in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

Participation in mountain biking has grown recently in the region and demand exists for trails suitable for a variety of skill levels. As opposed to recreational bicycle touring, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. Mountain biking trails are constructed, narrow trails less than two feet wide.

Hiking, walking, and running on trails in the region remain very popular activities. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers are likely to be most frequently used. Linking cities and villages to each other and to state and local parks will continue to create new experiences and increase economic activity in the area.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential "good fits" in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Upper Lake Michigan Coastal Region, cooperatively managed trails include:

- Oconto River State Trail
- Ahnapee State Trail
- Devil's River State Trail
- Fox River State Trail
- Mountain-Bay State Trail
- Nicolet State Trail

Horseback riding is in demand in the region and opportunities potentially exist to develop trails on department properties that link to other riding opportunities on adjacent lands.

The following table lists current and potential future opportunities for non-motorized trail activities

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/ road riding	Peninsula State Park Peshtigo River State Forest	Copper Culture Mounds State Park Governor Thompson State Park Point Beach State Forest Whitefish Dunes State Park Potawatomi State Park Newport State Park	Green Bay West Shores Wildlife Area Menominee River State Park and Recreation Area	Dunbar Barrens Kiel Marsh Wildlife Area Rock Island State Park

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - mountain biking/off-road biking	Peshtigo River State Forest Point Beach State Forest	Green Bay West Shores Wildlife Area Copper Culture Mounds State Park Governor Thompson State Park Peninsula State Park Point Beach State Forest Potawatomi State Park Newport State Park Whitefish Dunes State Park	Dunbar Barrens Menominee River State Park and Recreation Area	Amberg Wildlife Area Lake Noquebay Wildlife Area Town Corner Wildlife Area Rock Island State Park
Horseback riding	Point Beach State Forest Peshtigo River State Forest	Two Creeks State Park Fischer Creek Recreation Area	Menominee River State Park and Recreation Area	Dunbar Barrens Amberg Wildlife Area Green Bay West Shores Wildlife Area Town Corner Wildlife Area Whitefish Dunes State Park Peninsula State Park Potawatomi State Park Governor Thompson State Park
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			

OTHER FORMS OF RECREATION

In addition to trail-based activities, there is considerable demand for many other types of outdoor recreation in the Upper Lake Michigan Coastal Region, including camping, fishing and a variety of types of boating.

Camping was one of the area's early draws and remains one of the region's most popular activities due to the state parks in Door County and the wilderness opportunities. Camping has evolved over the years and there has been a shift in demand both for more developed and rustic experiences. The department currently provides a range of camping opportunities from primitive, isolated sites with only a fire ring and box latrine to densely grouped campgrounds with flush toilets and hot showers. Although many of the department's campgrounds are full on summer weekends, most are only partially at capacity during the week and in the spring and fall.

Given Lake Michigan, Green Bay, and the abundance of streams and rivers in the region, fishing and boating have long been among the most popular outdoor activities here. Although there are many existing boat launches (both sites that accommodate trailers with motorboats as well as carry-in access for canoes and kayaks) there are several opportunities for additional access sites on underserved waterways on department properties to meet the demand.

The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed	Menominee River State Park and Recreation Area Peshtigo River State Forest Point Beach State Forest Potawatomi State Park	Peninsula State Park	Heritage Hill State Park Whitefish Dunes State Park	Copper Culture State Park Dunbar Barrens
Camping – primitive	Menominee River State Park and Recreation Area Governor Thompson State Park Peshtigo River State Forest Newport State Park	State Ice Age Trail Areas Rock Island State Park	Heritage Hill State Park Whitefish Dunes State Park Wausaukee Timber Demonstration Forest	Point Beach State Forest Dunbar Barrens Potawatomi State Park Peninsula State Park Point Beach State Forest Copper Culture State Park
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. There are potentially many opportunities to add more walk-in trails to access waterbodies with canoes or kayaks.			
Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. The properties with potential to add more improved boat access sites (ramps for trailered boats) include: Reibolts Creek Public Access Green Bay West Shores Wildlife Area Collins Marsh Wildlife Area Point Beach State Forest Governor Thompson State Park Montana Lake Fishery Area			
Fishing - lake fishing from shore or a pier	All department lands with lakes are open to shore fishing and as such there are not opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access.			
Fishing - stream or river fishing from shore or wading	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels.			

SUMMARY OF THE UPPER LAKE MICHIGAN COASTAL REGION ROA

With a diversity of public conservation lands, the Upper Lake Michigan Coastal Region has been an outdoor recreation destination for those looking for a mix of developed recreation facilities, Great Lakes scenery, and remote excursions. A wide range of recreation opportunities are currently provided in the region, from quiet wilderness areas to modern campgrounds with hot showers to developed mountain biking trails and miles and miles of snowmobile trails.

Although the region is rich in current opportunities, a few needs were expressed by residents. Topping the list of needs are: hiking, walking and running trails, horseback riding, and bicycle touring and mountain biking trails.

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Upper Lake Michigan Coastal Region. In general, the department believes the following property groups are well-suited to provide the identified needs in the region:

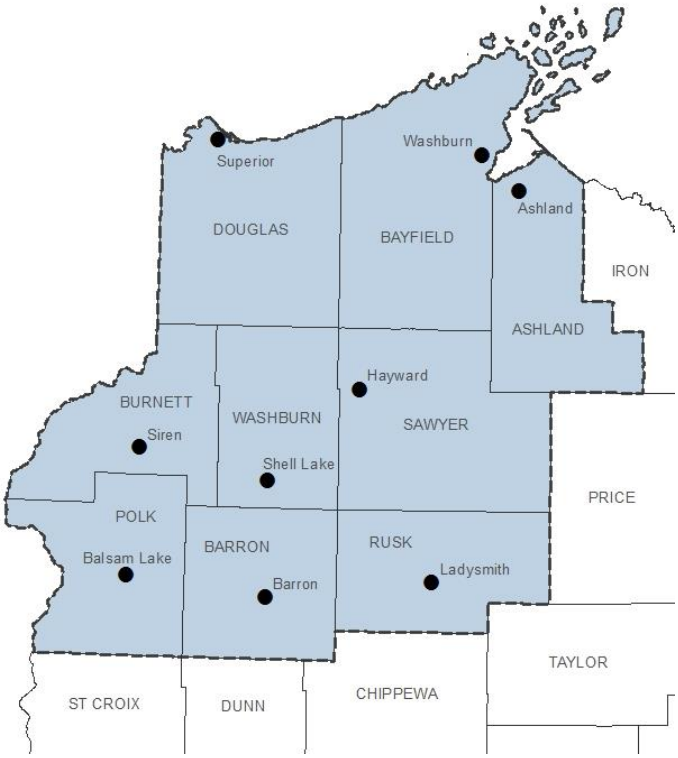
STATE PARKS AND FOREST

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Developed camping, including adding electrified sites to some campgrounds or significant portions of campgrounds.
- Primitive camping, particularly at the large parks.
- Equestrian trails that either connect a network and/or are loop trails contained wholly in the property.
- Walk-in trails to expand access to waterbodies with canoes or kayaks.
- Developed boat access sites to provide access to Lake Michigan and Green Bay.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking trails that expand existing opportunities and create new destinations. These would be single-track, constructed trails of varying difficulties, including potentially “technical” skills areas.
- Primitive camping that would serve the hunter, wilderness adventurer and water recreationist.
- Walk-in trails to expand access to waterbodies with canoes or kayaks

Recreation Opportunities Analysis



GREAT NORTHWEST REGION

3. Great Northwest Region

Background

Landscape Setting

The Great Northwest Region is in the northwestern part of the state and is comprised of Ashland, Barron, Bayfield, Burnett, Douglas, Polk, Rusk, Sawyer and Washburn counties. The region has an abundance of natural resources such as Lake Superior, the Namekagon River, the St. Croix River and the Chequamegon National Forest.

The region is made up of five different ecological landscapes, all with unique characteristics. Along Lake Superior's south shore is a coastal plain that contains many small rivers and streams. Immediately south of Superior is an isolated part of the state that harbors extensive, unbroken forests within which are imbedded several very large undisturbed peatlands. To the west, waterfalls, cliffs, glades and rock-walled gorges are found within the St. Croix Valley. The eastern half of this region is composed of vast northern hardwood forests that support a variety of wildlife, including many that need large blocks of habitat to survive. Many large wetlands, small creeks, rivers and small kettle lakes occur. The exceptional water quality and aquatic diversity of the lakes and rivers here is a result of the heavily forested landscape. Polk and Barron counties represent the northern extent of predominantly agricultural land use. Remaining forests there tend to occur as fragments and small kettle lakes are common.

Several high-quality streams originate in this region, some draining north to Lake Superior, others flowing south to the St. Croix River, one of the state's ecological and recreational jewels. Other significant resource areas include the Apostle Island National Lakeshore, Chequamegon National Forest, and the Bois Brule, Chippewa, White, Onion, Flambeau and Namekagon Rivers.

Local Economy

The variety in landscapes allows this region to support a plethora of outdoor recreation opportunities, making tourism a large and growing industry. These opportunities have drawn many to the region from the Twin Cities and surrounding suburban areas, as well as visitors from within Wisconsin. The influx of visitors is placing increasing pressure on the region's recreational resources. Seasonal home development, particularly along river and lakeshore areas, has increased dramatically within the Great Northwest.

The major land use in the north is forestry products with recreation and tourism becoming a larger part of the economy. Agriculture becomes more of a factor in the local economy in the south and west portions of the region where soils are more fertile and suitable for tilling.

Recreation Use and Participation

With the large amount of public land in this area, the region is a very popular vacation and outdoor recreation destination. With county, state and federal lands combined, there are over 2 million acres of public recreation lands. The uplands draw hunters, wildlife watchers, snowmobile and ATV riders, off road bikers, skiers, and horseback riders, among others. The rivers, streams, lakes and flowages attract anglers, boaters, kayakers and canoeists from throughout the Midwest. This is one of the best areas in the state to provide a diverse set of long distance and loop trails for both motorized and nonmotorized forms of recreation.

Lake Superior and its shoreline draw visitors from throughout North America. The Apostle Islands National Lakeshore features pristine stretches of sand beach, spectacular sea caves, remnant old-growth forests, and the largest collection of lighthouses anywhere in the National Park system. Under the right winter conditions, the ice caves that develop attract visitors from all over the world. With a series of primitive campsites scattered throughout

the islands, the area offers a boating and paddling experience unparalleled in the Midwest. Additionally, the St. Croix National Scenic Riverway is a national water trail that draws thousands of visitors annually.

Thousands of lakes and flowages in the region provide the gamut of fishing and other water sports. The many streams and rivers offer excellent fishing, particularly for trout. Several of the rivers are also popular paddling waters, notably the Bois Brule, Flambeau, Montreal and Namekagon Rivers. Chequamegon Bay hosts a very productive and diverse fishery including trout, salmon, pike, walleye, and bass.

Exceptional concentrations of migratory birds (waterbirds, songbirds, and raptors) occur at the western end of Lake Superior and attract bird watchers from across the region. Crex Meadows, in fact, is one of the Midwest's most popular wildlife watching destinations. Camping and hiking are popular in the several state and local parks situated along the string of waterfalls that run along the escarpment of Lake Superior. The North Country Trail passes through many of these parks.

Recreation participation rates for Wisconsin residents statewide are presented on page 14 of the Introduction. Many participation rates of the Great Northwest Region vary somewhat to the participation rates of the state's overall population. The box to the right lists the activities that residents of the nine counties comprising the Great Northwest Region participate in more, or less, frequently than the state average.

Activities that residents of the Great Northwest Region participate in at <u>higher</u> rates than the state average:

- 4WD driving
- ATV/UTV riding
- Bird/wildlife watching
- Cross-country skiing/ snowshoeing
- Fishing – lake from a boat, canoe or kayak
- Fishing – ice fishing
- Harvesting berries/mushrooms, etc.
- Hunting – big game
- Hunting – migratory bird
- Hunting – small game
- Motorboating including pontoons
- Target shooting - firearms
- Target shooting - archery
- Snowmobiling
- Trapping

Activities that residents of the Great Northwest Region participate in at <u>lower</u> rates than the state average:

- Swimming in community pools
- Visiting a dog park

EXISTING RECREATION SUPPLY IN THE GREAT NORTHWEST REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Great Northwest Region has the 2nd-most public land available for outdoor recreation at approximately 2,000,000 acres. A variety of opportunities are available in and around Lake Superior as well as the large public land blocks. This section briefly describes the public conservation and recreation lands in the Great Northwest Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The National Forest Service owns and manages just over 580,000 acres in the Great Northwest Region as part of the Chequamegon-Nicolet National Forest (CNNF). The CNNF is managed for multiple uses including forest production, wildlife habitat, outdoor recreation, water quality and fisheries habitat and wilderness areas.

The US Fish & Wildlife Service manages some small properties for prairie habitat restoration, wildlife refuge and waterfowl production.

The National Park Service owns and manages almost 18,000 acres between two properties. The Apostle Island National Lakeshore features pristine stretches of sand beach, spectacular sea caves, remnant old-growth forests, and the largest collection of lighthouses anywhere in the National Park system. The St. Croix National Scenic Riverway is a national water trail that stretches 200 miles on the Namekagon and St. Croix Rivers, beginning in Cable.

b) State

The Department of Natural Resources owns 426,000 acres in the Great Northwest Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Interstate Park that include intensive recreation settings with developed campgrounds, miles of trails, nature center and picnic sites. Crex Meadows attracts over 100,000 visitors each year and provides a range of outdoor recreation opportunities in a largely non-developed setting. In addition, properties like Brule River State Forest and Flambeau River State Forest provide fishing and a variety of remote wilderness opportunities.

At the other end of the spectrum are properties like Bibon Swamp State Natural Area, lands specifically acquired to protect high-quality native plant communities and rare species. Although these types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

The State Board of Commissioners of Public Land owns about 4,700 acres in the region. These lands are scattered throughout the region in tracts typically several hundred acres or smaller in size. The BCPL manages its lands primarily for forest products. Many of the BCPL lands are isolated or contain wetlands and generally have limited recreation potential.

c) County

The Great Northwest Region has the largest collection of acreage in the County Forest Program, enrolling over 991,000 acres across the nine counties. These lands provide a variety of benefits including forest products, fisheries and wildlife habitat, many types of outdoor recreation, and water quality protection. The Douglas County Forest, the largest in the state at over 280,000 acres, is used by residents and visitors from outside the region for a variety of trail activities, camping, hunting and fishing, and other recreation pursuits.

Most of these counties manage parks that provide campgrounds, boat launches, and other types of infrastructure to support recreation.

d) Other

Many cities, villages, and towns in the Great Northwest Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their easy proximity to many citizens, although these properties tend to be small they are typically well used. In addition, several school forests in the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Forest Legacy program easements

Lands in Douglas and Sawyer counties totaling approximately 93,500 acres are part of the Forest Legacy program, which is designed to identify and protect environmentally important private forestlands threatened with conversion to non-forest uses (such as subdivision for residential or commercial development). To help maintain the integrity and traditional uses of private forestlands, the Forest Legacy Program promotes the use of conservation easements.

b) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs is spread across the counties in the Great Northwest Region. Almost 412,000 acres in the region are currently enrolled in these programs. Because these programs

use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire. MFL-closed land is not open for public use.

c) Land trusts

These land trusts operate in the Great Northwest Region: Couderay Waters Regional Land Trust, Standing Cedars Community Land Conservancy, Star Prairie Land Preservation Trust, The Prairie Enthusiasts, Bayfield Regional Conservancy, Madeline Island Wilderness Preserve, Deer Lake Conservancy, West Wisconsin Land Trust, and The Conservation Fund. These non-profit conservation organizations have protected over 2,200 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

d) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. 2014 funds are administered and provided by U.S. Department of Agriculture NRCS. To date, there are over 2,600 acres available in the Great Northwest Region.

f) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 3,547 miles of snowmobile trail in the Great Northwest region, of which 78% (2,773 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Great Northwest Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the nine counties of the region.

The Great Northwest Region contains many large public land holdings, notably the Chequamegon-Nicolet National Forest, three state forests and the nine County Forests. These properties provide a wide range of high-quality recreation opportunities. What follows are a few examples of infrastructure in the Great Northwest Region that support a variety of recreation activities.

a) Copper Falls State Park:

- Off road and mountain bike trails
- 20+ miles groomed cross-country skiing trails
- Hiking and nature trails, plus a segment of the North Country Trail
- Family, group and backpack camping
- 5 picnic/day use areas and observation tower
- Swimming beach and boat access site
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching, scenic viewing opportunities

b) Pattison State Park

- 5+ miles of groomed cross-country skiing trails
- Hiking and nature trails and waterfalls
- Family and backpack camping opportunities
- Swimming and picnic areas
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching, scenic viewing opportunities

c) State Wildlife and Fishery Areas

- Hunting, fishing and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

d) Brule River State Forest

- Premier trout fishing
- 16+ miles of cross country ski trails
- 60 miles of hunter walking trails and segment of the North Country Trail
- 10 canoe landings and 44 miles of water trail
- Hiking/snowshoe trails and horseback riding on forest roads
- Hunting, fishing and trapping opportunities
- Nature study, photography, picnic areas and wildlife watching opportunities

e) Governor Knowles State Forest

- 40 miles of hiking trails and backpack camping
- 32+ miles winter ATV and snowmobile trails
- 9 miles groomed cross-country skiing
- 40+ miles of horseback riding trails and campground
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

f) Flambeau River State Forest

- 77 miles of class I-V whitewater rapids with riverside campsites
- Remote and family campgrounds
- Boating and canoe/kayak opportunities
- Swimming beaches and picnic areas
- 14+ miles of groomed cross-country skiing and mountain biking trails
- 38+ miles of ATV trails and 55+ miles of snowmobile trails
- Hiking, cross country skiing and snowshoeing
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

g) Crex Meadows Wildlife Area

- Education and visitor center
- Auto tour wildlife watching opportunities
- Hiking, cross country skiing and snowshoeing
- Hunting, fishing and trapping opportunities
- Nature study, photography, edibles gathering

h) State and National Land and Water Trails

- 14 miles of groomed cross-country skiing
- 60+ miles of surfaced biking trails
- 200 miles of ATV and 255 miles of snowmobile trails
- 300+ miles of hiking on Ice Age and North Country State and National Scenic Trails
- 400 miles of Lake Superior Water Trail
- 200 miles of St. Croix National Scenic Riverway water trail

i) Chequamegon-Nicolet National Forest

- 23+ mile horse trail and campground
- 3 bike trail loops including the CAMBA Trail
- 140 miles of ATV trail and campground
- 8 cross country ski trails
- 9 campgrounds
- Hiking and hunter walking trails
- Hunting, fishing and trapping opportunities
- Nature study, photography, wildlife watching opportunities

j) County Forests (selected examples)

- Ashland: 20 miles of non-motorized trail, boat access sites, primitive camping
- Barron: 7 boat access sites, firearm range, horse trail and campground
- Bayfield: 44 miles of dog sledding, 52 miles ATV, 31 miles of cross-country ski trails
- Burnett: 52 miles ATV and 300 miles of snowmobile trails, horseback riding on forest roads
- Douglas: 10 miles of ski, 14 miles of horse, 100 miles ATV and 300 miles of snowmobile trails
- Polk: primitive camping and hiking, biking and horseback riding on forest roads
- Rusk: 332 miles of snowmobile, 24 miles ATV and 20 miles of ski trails, 21 boat access sites
- Sawyer: 32 miles of bike trails, 130+ ATV and snowmobile trails, primitive camping
- Washburn: 30+ miles of horse trails, 103 miles of ATV trails, 3 cross country ski loops, 14 miles of mountain bike trails, 11 boat access sites

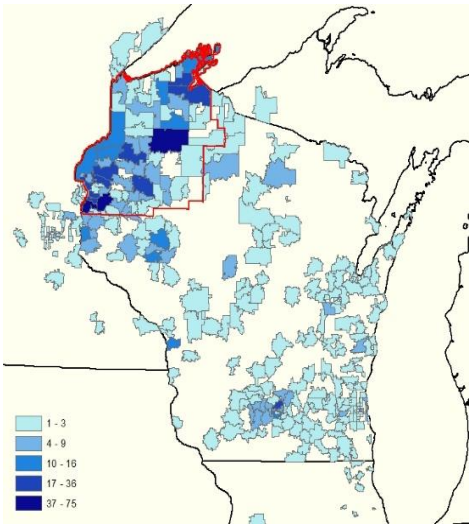
PUBLIC INPUT ON RECREATION NEEDS IN THE GREAT NORTHWEST REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted three public open house meetings, in Ashland, Siren and Ladysmith, on August 28, 29 and 30, 2017, respectively. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Great Northwest Region.

In addition to these open houses, the department posted an online public input form on its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from August 3 to September 8, 2017. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[8]

Number of input forms submitted, by zip code



The department received comments in the following formats:

- 1,313 online public input forms
- 64 paper copies of the public input form
- 15 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

[8] The public input form was available for anyone to complete and over 1,300 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 1,300 respondents compare to the population of the nine-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map on the previous page shows their distribution and frequency. As can be seen, the primary residence of many people who provided input is within the nine-county Great Northwest Region. Almost 20% of the respondents identified themselves as living in Polk County. As can also be seen, many respondents live outside the region (55% of respondents). Almost 10% of respondents live out of state, mostly from Minnesota. Certainly, this reflects the large number of seasonal homes and the extent to which the region is a destination for vacationers. It also likely reflects the efforts of groups and organizations encouraging their members throughout the state and Midwest to complete the input form.

As is clear from the number and variety of the comments received, the Great Northwest Region plays an important role in the state's outdoor recreation system. Large blocks of public land and numerous lakes and waterways has attracted outdoor enthusiasts for generations. The region has drawn vacationers from the Minneapolis-St. Paul Metro Area for years since the transportation system provides quality access to the area. The region has also historically been a popular destination for fall hunting seasons, where at one time, hunting camps (also known as "deer camps") were very popular in the state's early days. The department received comments, perspectives and ideas on the following topics.

Participation in outdoor recreation

Respondents to the public input form participate in many outdoor recreation activities. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table at right were the most popular activities that the SCORP survey indicated residents in the Great Northwest Region participate in. As can be seen, the activities that respondents to the ROA input form participate in resemble the results of the random sample of Great Northwest Region residents generated by the SCORP survey.

Popular recreation activities in which respondents to the ROA input form participate

- **Bicycling – paved trails**
- Bicycling – mountain biking, single track
- Bicycling – winter/fat tire
- **Camping – tent**
- **Canoeing/kayaking**
- Cross-country skiing/ snowshoeing
- **Fishing – from a boat, canoe or kayak**
- **Fishing – from shore**
- **Harvesting berries, mushrooms, etc.**
- **Hiking, walking, running on trails**
- **Swimming**
- **Wildlife/bird watching**

Properties that people visit

Over 40% of the Great Northwest Region is in public ownership, most of any of the regions in this analysis. With the abundance of public lands to recreate on, there is no shortage of places to go. The most popular state parks among people who provided input were Interstate and Copper Falls State Parks. The Gandy Dancer State Trail and Amnicon Falls State Park were almost as popular destinations. Of the people that submitted information through the public input form, over half had walked the Ice Age Trail and visited the Chequamegon-Nicolet National Forest in the last three years. Almost as many people reported visiting the Apostle Islands and the St. Croix National Scenic Riverway. Other popular properties include Crex Meadows, the Chippewa Flowage, Brule River State Forest and the Bayfield County Forest.

Factors important in determining favorite places to visit

Of the people providing input, the majority (72%) selected (1) the quality of trails as one of the top four most important factors in determining their favorite property to visit. This is expected, given that many respondents noted their participation in a variety of motorized and non-motorized trail activities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) the quality of the habitat, and (4) good maps, signs or information about the property.

Additional outdoor recreation opportunities needed

Over eighty percent of respondents believe that more recreational opportunities are needed in the Great Northwest Region. Of the additional opportunities desired by respondents, the top three choices selected were trail-related. Again, this speaks to the respondent's participation in a variety of trail activities. Trails for motorized recreation is less of a need compared to other parts of the state because of the robust ATV/UTV network through off-road trails and road routes with over 4,500 miles available. The opportunity that was most frequently selected as needed in the Great Northwest Region was more trails for hiking, walking, or running, which was selected by more than one-third of respondents.

Top 10 most frequently identified recreation opportunities needed in the Great Northwest Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	637
More paved bicycling trails	503
More natural surface (dirt) bicycling trails	496
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	355
More public shore access to lakes & streams	225
More local parks and playgrounds	197
More developed campgrounds (electric hook-ups, flush toilets, showers)	167
More wildlife watching decks or platforms	154
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	151
More horseback trails	134

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities. The public input received as part of the ROA showed a similar pattern in the Great Northwest Region. For example, a majority (60%) of people who ride single track mountain bike believe there is a need for more mountain biking trails in the Great Northwest Region. Considering those who identified themselves as ATV/UTV riders, about half thought that there was need for more motorized recreation trails. Similarly, those who ride bike on paved trails or hike/walk/run on trails, just over half of each thought there was need for more of their respective trails. Since there were so many who responded who said they hiked/walked/ran trails (over 1,000), the largest need cited by people was for more hiking/walking/running trails. Only 20% of those who canoed/kayaked thought there was more need for water accesses.

For respondents who participate in big game hunting in the Great Northwest Region, less than 25% believe that more lands open to public hunting are needed as well as larger populations of big game species (e.g., deer and bear). For hunters as a group, their top selection for future needs was more hiking/walking/running trails followed by natural surface (dirt) bicycling trails.

Department-managed roads and motorized access

About 1,000 miles of department roads exist on department properties in the Great Northwest Region, some of which are former logging roads. Generally, these roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities.

Almost one-third (300 miles) of these roads are part of the property transportation network and open to the public to drive "street-legal vehicles" (this includes cars, pick-up trucks, SUVs, motorcycles, and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles. Many local units of government in the region have authorized some types of motorized recreational vehicles on designated local roads.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to "street-legal" vehicles in the Great Northwest Region to motorized recreation vehicles.[9] About 47% of

[9] For purposes of the ROA, "recreational vehicles" includes off highway vehicles, ATVs, UTVs, and off highway motorcycles.

people that provided responses believed that all DNR roads should remain closed to motorized recreational vehicles. Of the 48% that supported allowing motorized recreational vehicles on DNR roads, most thought that this access should be on a subset of roads that connect larger regional motorized recreation networks. In addition, 34% of these respondents supporting opening roads thought opening should occur to provide access during the fall hunting season (Sept1 to Dec 31). There were notable differences in responses based on county of residence in the region. There were more from Polk County who provided input that thought all DNR roads should be closed to motorized vehicles (160) than responses from all other counties who thought all roads should be open to motorized vehicles (144). Respondents who resided in the rest of the counties of the region were split on the question between closing all roads and opening some roads to motorized vehicles.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers, and streams
- public shooting ranges
- public campsites
- local parks and playgrounds

Respondents living in the nine counties in the Great Northwest Region identified the following activity at a higher rate than the state average:

- hunting opportunities
- outdoor courts for tennis, handball, basketball

Great Northwest Region residents identified four activities less frequently than the state average:

- ball fields
- local parks and playgrounds.
- public shore access to lakes, rivers, and streams
- public boat launches
- public shooting ranges
- public campsites

FUTURE RECREATION NEEDS IN THE GREAT NORTHWEST REGION

The Great Northwest Region has an abundance of existing opportunities for most types of outdoor recreation, as evidenced in part by the large number of visitors the region receives each year. These opportunities are related to the diversity of public land ownership in the region. The scenic value of the region alone holds great potential to draw even more visitors than it currently hosts. The region is home to two State and National Scenic Trails (Ice Age Trail and North Country Trail) as well as St. Croix National Scenic Riverway and Apostle Island National Lakeshore. Plus, year-round trail activities are a hallmark to the Great Northwest Region. Whatever the trail activity, there is a place to do it. Even with the existing supply of opportunities available in the region, the public identified several future recreational needs. The public also expressed strong support to leverage existing opportunities to provide better and more recreational experiences for residents and visitors.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (August 3 to September 8, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Great Northwest Region – High	Future recreation needs in the Great Northwest Region – Medium	Future recreation needs in the Great Northwest Region – Low
ATV/UTV riding	Cross country skiing	Bicycling - fat tire/snow biking
Bicycling - bicycle touring/road riding	Dog walking	Dog sledding/skijoring
Bicycling - mountain biking/off-road biking	Fishing - ice fishing	Dog training
Bird or wildlife watching	Fishing - river fishing from a boat, canoe or kayak	Dog trialing
Camping - developed	Gather mushrooms, berries, etc.	Geocaching
Camping - primitive	Horseback riding	Horse cart driving
Canoeing or kayaking	Hunting - migratory birds	Hunting - turkey
Fishing - lake fishing from a boat, canoe or kayak	Hunting - small game	Rock climbing
Fishing - lake fishing from shore or a pier	Nature photography	Sailing, windsurfing, rowing, stand-up paddling
Fishing - stream or river fishing from shore or wading	Participating in nature-based education programs	Scuba diving/snorkeling
Four-wheel vehicle driving	Picnicking	Target shooting - archery
Hiking, walking, trail running, backpacking	Snowmobiling	Trapping
Hunting - big game	Snowshoeing	Whitewater rafting
Motorboating (waterski/tubing, personal watercraft)	Target shooting - firearms	
Off-highway motorcycle riding	Visiting a beach, beach walking	
Swimming in lakes and rivers		

Opportunities to meet future recreation needs in the Great Northwest Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Great Northwest Region to meet a variety of ecological and recreation goals. These properties provide a range of settings and experiences – from developed sites with flush toilets and hot showers to remote places that provide wilderness settings. At some properties in the region, a wealth of recreation opportunities is currently provided; at other properties, recreation plays a secondary role in their purpose.

Applying the regional needs listed above, the department evaluated the properties it manages in the Great Northwest Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be "good fits" to provide different activities will be used to help focus the department's work developing and updating property master plans. A description of opportunities to meet recreation needs in the Great Northwest Region (on department-managed lands) follows.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, many of these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partners conduct planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential "good fits" in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Great Northwest Region, cooperatively managed trails include:

- Cattail State Trail
- Gandy Dancer State Trail
- Saunders State Trail
- Stower Seven Lakes State Trail
- Tuscobia State Trail (Sawyer County only)
- Wild Rivers State Trail

Non-motorized trail recreation

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Great Northwest Region. From hiking the national scenic trails in the summer to cross country skiing in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

Several department properties have sizable amounts of uplands that could potentially provide excellent opportunities to expand existing bicycle trail networks or create new ones. Opportunities also exist to connect bicycle trails on department properties with adjoining public properties and bicycle routes on local roads and state highways.

Participation in mountain biking has grown recently in the region and demand exists for trails suitable for a variety of skill levels. As opposed to recreational bicycle touring, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. Mountain biking trails are constructed, narrow trails less than two feet wide.

Hiking, walking, and running on trails in the region remains very popular activities. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers are likely to be most frequently used.

The following table lists current and potential future opportunities for non-motorized trail activities

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/ road riding	Tuscobia State Trail (Barron, Price and Washburn counties) Governor Knowles State Forest Brule River State Forest Uhrenholdt Memorial Timber Demo Forest Clam River Fishery Area	Amsterdam Sloughs, Crex Meadows, Fish Lake, Namekagon Barrens, Douglas County and Beaver Brook Wildlife Areas Big Bay State Park Copper Falls State Park Amnicon Falls State Park Interstate Park Pattison State Park	Straight Lake State Park Chippewa Flowage Flambeau River State Forest	Hay Creek-Hoffman Lake, White River and Totagatic Lake Wildlife Areas Totogatic Wild River Yellow River, Sand Creek, Benson Creek, Beverly Lake, Grindstone Creek, McDermott Brook, McKenzie Creek, Sawyer Creek, Whalen Creek and Bean Brook Fishery Areas Sand Lake Rearing Station
Bicycling - mountain biking/off-road biking	Copper Falls State Park Governor Knowles State Forest Brule River State Forest	Amsterdam Sloughs, Crex Meadows and Fish Lake Wildlife Areas Tuscobia State Trail (Barron, Price and Washburn counties)	Hay Creek-Hoffman Lake, Totagatic Lake, McKenzie Creek and Potato Creek Wildlife Areas Big Bay, Amnicon Falls, Pattison and Straight Lake State Parks Chippewa Flowage Totogatic Wild River Flambeau River State Forest Clam River, Sand Creek, Leader Lake, McDermott Brook, Bean Brook and Sawyer Creek Fishery Areas Hauer Creek Remnant Fishery Area	White River, Loon Lake, New Auburn, Douglas County, Balsam Branch, Joel Marsh, Rice Beds Creek, Straight River, Ten Mile Creek, Washington Creek, Chief River, Kissick Swamp, Totogatic and Weirgor Springs Wildlife Areas Uhrenholdt Memorial Timber Demo Forest Engle Creek Springs, Yellow River, Benson Creek, Beverly Lake, Grindstone Creek, McKenzie Creek and White River Fishery Areas South Shore Lake Superior Fish and Wildlife Area St. Louis River Stream Bank Area Sand Lake Rearing Station Interstate Park
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			

MOTORIZED TRAIL RECREATION

The department provides two types of motorized access in the Great Northwest Region: (1) access for street-legal vehicles on about 300 miles of roads it maintains for public use and (2) trails and routes for snowmobiles and ATV/UTVs, of which there over 200 miles of rail-to-trail corridors primarily managed by counties. There are even more miles across department properties for snowmobile use.

The department does not believe there is public interest or a need to close substantial portions of the existing open roads to meet broad-based ecological or recreational needs. There may be a need to close stretches of the existing open road network on department lands due to specific situations. These instances will be identified and addressed in subsequent master planning processes.

There is public interest in using DNR forest roads – currently open to street-legal vehicles – to ATV/UTV and off highway motorcycle use, both as a riding experience and to enable connections of the larger regional network of routes. More and more towns are allowing ATV/UTVs on their local roads. In fact, the Great Northwest Region has the greatest collection of trails and road-route mileage in the state at over 4,500 miles and counting. As more and more department properties are reached through road-routes, there are increasing opportunities to make connections across department-managed lands to help facilitate this network.

The Great Northwest Region has the most opportunity available for ATV/UTV riding. However, there are few opportunities for other types of motorized access. Given the size, location, and distribution of the department-owned properties in parts of the region, it may be possible to incorporate some motorized recreational use at some properties listed in the table below. It is the department's expectation that motorized recreational use can be established in ways that minimize adverse impacts to neighbors, sensitive places and resources, existing recreational use patterns, and other considerations. The specific properties and portions of properties for motorized recreational use will be determined in the property master planning process.

a) ATV/UTV riding

There is a growing demand for riding opportunities that has resulted in an increasing number of towns allowing ATV/UTVs on local roads by designating them as routes. Most ATV/UTV riders prefer trails or routes that are winding and narrower rather than straight and wide. However, local roads (even if they are straight and wide) that provide a connection from one desirable setting to another is generally considered an acceptable riding experience.

The department believes there are potential opportunities to provide connections to the regional network of ATV/UTV trails and routes. Given the wet nature of many seasonally-open roads (these are mostly in wet areas that are only open during the winter when the ground is frozen, typically for snowmobiling), it appears there are only limited stretches where these roads could provide ATV/UTV riding opportunities.

b) Off-highway motorcycle riding

There are two types of off-highway motorcycles – those that are street-legal (that is, they are licensed, plated, and have required safety features such as brake lights, rearview mirror, and turn signals) and those that are not. Street-legal motorcycles that are also designed for off-road use are commonly called dual-sport motorcycles. These motorcycles are currently allowed on all public roads on department properties. Off-highway motorcycles that are not licensed and street-legal (typically these motorcycles are lighter weight, have high ground clearance, and knobby tires) are not currently allowed on department roads.

Although preferred riding experiences are narrow, winding trails that meander through the forest, primitive roads (2-tracks) can provide high-quality rides. As with ATV/UTVs, routes (even wide and straight) are acceptable ways to connect higher-quality riding experiences.

Since dual-sport motorcycles are already allowed on all open department roads, to provide increased riding opportunities would require opening more roads to street-legal vehicles or to establish new trails.

Identifying and signing preferred routes of travel may both concentrate use in the most appropriate corridors while also encouraging more use.

c) Off-highway vehicle driving

Off-highway, four-wheel drive vehicle drivers prefer a variety of experiences. Some like to climb and descend technically challenging hills that test their maneuverability and driving skills. Others like to drive on hilly, winding primitive roads exploring the forests and countryside. Of course, many drivers enjoy both types of experiences. Some four-wheel drive trucks are street-legal (that is, they have license plates and all the required safety features) while others are not. Four-wheel drive vehicles that are not street-legal are not allowed on public roads.

The following table lists current and potential future opportunities for motorized trail activities.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
ATV/UTV riding	Governor Knowles State Forest Flambeau River State Forest Benson Creek Fishery Area	Sawyer Creek Fishery Area Amnicon Falls State Park Amsterdam Sloughs, Crex Meadows, Fish Lake, Namekagon Barrens, Totogatic and Beaver Brook Wildlife Areas	Brule River State Forest McDermott Brook and Beverly Lake Fishery Areas Hauer Creek Remnant Fishery Area Chippewa Flowage	Hay Creek-Hoffman Lake, White River, Totagatic Lake, Douglas County, Straight River and Weirgor Springs Wildlife Areas Big Bay, Copper Falls and Pattison State Parks Totogatic Wild River Uhrenholdt Memorial Timber Demo Forest Engle Creek Springs, Yellow River, White River, Clam River, Sand Creek, Grindstone Creek, Bean Brook, McKenzie Creek and Whalen Creek Fishery Areas South Shore Lake Superior Fish and Wildlife Area Yellow Lake Statewide Habitat Area Sand Lake Rearing Station
4-WD vehicle driving	Governor Knowles State Forest	Hay Creek-Hoffman Lake, Amsterdam Sloughs, Crex Meadows, Fish Lake, Namekagon Barrens and Douglas County Wildlife Areas Brule River State Forest Flambeau River State Forest	Tuscobia State Trail (Price and Washburn counties) Chippewa Flowage Hauer Creek Remnant Fishery Area	White River, Totagatic Lake, and Straight River Wildlife Areas Uhrenholdt Memorial Timber Demo Forest Engle Creek Springs, Yellow River, White River, Clam River, Sand Creek, Benson Creek, Beverly Lake, Grindstone Creek, McDermott Brook, Bean Brook, McKenzie Creek, Sawyer Creek and Whalen Creek Fishery Areas Yellow Lake Statewide Habitat Area Sand Lake Rearing Station
Off-highway motorcycle riding	Governor Knowles State Forest	Amsterdam Sloughs, Crex Meadows, Fish Lake, and Namekagon Barrens Wildlife Areas	Tuscobia State Trail (Price and Washburn counties) Chippewa Flowage Brule River State Forest Flambeau River State Forest	Hay Creek-Hoffman Lake, White River, Totagatic Lake, Douglas County and Straight River Wildlife Areas Big Bay, Copper Falls, Amnicon Falls and Pattison State Parks Totogatic Wild River Flambeau River State Forest Uhrenholdt Memorial Timber Demo Forest Engle Creek Springs, Yellow River, White River, Clam River, Sand Creek, Benson Creek, Beverly Lake, Grindstone Creek, McDermott Brook, Bean Brook, McKenzie Creek, Sawyer Creek and Whalen Creek Fishery Areas South Shore Lake Superior Fish and Wildlife Area Yellow Lake Statewide Habitat Area Sand Lake Rearing Station

WATER RELATED RECREATION

In addition to trail-based activities, there is considerable demand for water related recreation in the Great Northwest Region, including fishing, swimming, motorboating, and canoeing or kayaking.

Lake Superior as well as the inland lakes and the large riverways that flow to the Mississippi River play a role in shaping water recreation. There are many existing boat launches as well as state ownership frontage to these waterways. Depending on the waterway, foot access for fishing may be sufficient. In other cases, primitive canoe access or developed boat landings may be what is needed for additional access.

The following table lists current and potential future opportunities for water related recreation.

Recreation Activity	
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. There are potentially many opportunities to add more walk-in trails to access waterbodies with canoes or kayaks.
Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. The properties with potential to add more improved boat access sites (ramps for trailered boats) include: • Totagatic Lake Wildlife Areas • McKenzie Creek Wildlife Area • Interstate Park • Governor Knowles State Forest • Flambeau River State Forest • Yellow Lake Statewide Habitat Area • Sand Lake Rearing Station
Fishing - lake fishing from shore or a pier	All department lands with lakes are open to shore fishing and as such there are not opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access.
Fishing - stream or river fishing from shore or wading	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels.
Swimming in lakes and rivers	All department lands with lakes or rivers are open to swimming and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand swimming opportunities through beach development or the acquisition of key parcels.
Motorboating (waterski/ tubing, personal watercraft)	The department currently maintains improved boat launches throughout the region. In some cases, these opportunities are on small lakes, many of which have slow-no wake protections in effect. Any new opportunities for higher speed boating would be dependent on these resource protection measures. The properties with potential to add more improved boat access sites (ramps for trailered boats) include: • Flambeau River State Forest • Bear Lake Fishery Area

OTHER FORMS OF RECREATION

In addition to trail-based activities, there is considerable demand for many other types of outdoor recreation in the Great Northwest Region, including camping, hunting, and wildlife viewing.

Big game hunting in the Great Northwest has been popular for generations. At the turn of the century, groups of hunters would set-up "deer camps" in the large northern forests, however, only a few of these traditional camps remain. With improvements in transportation and the expansion of vacation properties, hunting in the Great Northwest is becoming more of an individual endeavor.

Camping was one of the area's early draws and remains a popular activity. The department currently provides a range of camping opportunities from primitive, isolated sites with only a fire ring and box latrine to densely grouped campgrounds with flush toilets and hot showers. Although many of the department's campgrounds are full on summer weekends, most are only partially at capacity during the week and in the spring and fall.

The following table lists current and potential future opportunities for these other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – primitive	Copper Falls State Park Amnicon Falls State Park Pattison State Park Straight Lake State Parks North County National Scenic Trail Areas Chippewa Flowage Governor Knowles State Forest Brule River State Forest Flambeau River State Forest	Crex Meadows Wildlife Area Douglas County Wildlife Area State Ice Age Trail Areas	Hay Creek-Hoffman Lake, Totagatic Lake, Amsterdam Sloughs, Fish Lake, Namekagon Barrens, Straight River, Potato Creek, Ten Mile Creek, Washington Creek, Chief River, Kissick Swamp, Totogatic and Weirgor Springs Wildlife Areas Big Bay State Park Interstate Park Totogatic Wild River Clam River, Sand Creek, Bean Brook, Beverly Lake, Grindstone Creek, McDermott Brook, Namekagon River and Sawyer Creek Fishery Areas Hauer Creek Remnant Fishery Areas Yellow Lake Statewide Habitat Area St. Louis River Stream Bank Area	White River, Loon Lake, New Auburn, Scattered, Balsam Branch, Joel Marsh, Loon Lake, McKenzie Creek, Rice Beds Creek, Silvernail and Goose Lake Wildlife Areas Tuscobia State Trail (Barron, Price and Washburn counties) Uhrenholdt Memorial Timber Demo Forest Engle Creek Springs, Yellow River, Big Brook, White River, Parker Creek, Benson Creek, McKenzie Creek and Whalen Creek Fishery Areas South Shore Lake Superior Fish and Wildlife Area Sand Lake Rearing Station

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed	Copper Falls State Park Pattison State Park Interstate Park Governor Knowles State Forest Flambeau River State Forest Brule River State Forest	Crex Meadows Wildlife Area Big Bay State Park	Hay Creek-Hoffman Lake, Amsterdam Sloughs, Fish Lake and Namekagon Barrens Wildlife Areas Amnicon Falls State Park Straight Lake State Park Chippewa Flowage Namekagon River Fishery Area	White River, Totagatic Lake, Douglas County, Balsam Branch, Straight River and Potato Creek Wildlife Areas Engle Creek Springs, Yellow River, Clam River, Sand Creek, Bean Brook, Benson Creek, Beverly Lake, Grindstone Creek, McDermott Brook, McKenzie Creek, Sawyer Creek and Whalen Creek Fishery Areas Uhrenholdt Memorial Timber Demo Forest
Hunting - big game	Big game hunting is allowed on all department properties outside of designated use areas (e.g., campgrounds, picnic areas, parking lots, and some designated trails). Since hunting occurs through department lands, there are not opportunities to expand the places where this activity can occur. There are, however, ways that the department can provide easier access by providing hunter/walking trails, as well as, limited seasonal motorized access to remote areas. This can encourage more people to participate in hunting on department-managed lands in the Great Northwest Region.			
Bird, wildlife watching	All department properties in the Great Northwest Region are open to this activity. Some larger properties have primitive roads to access viewing opportunities while others have walking access. Generally, there are opportunities for Friends groups, education institutions or others to expand or add nature-based programs on the larger department properties.			

SUMMARY OF THE GREAT NORTHWEST REGION ROA

With a diversity of public conservation lands, the Great Northwest Region has been an outdoor recreation destination, particularly for those in the Minneapolis-St. Paul Metro Area, dating back to Wisconsin's earliest days. Hosting a diverse set of long distance and loop trails, the region is hailed for its hiking, hunting, and motorized riding opportunities to escape into the wilderness.

Although the region is rich in current opportunities, several needs were expressed by residents. Topping the list of needs are: hiking, walking, and running trails, bicycling trails, hunting, fishing, camping, boating, motorized recreation trails, and swimming.

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Great Northwest Region. In general, the department believes the following property groups are well-suited to provide the identified needs in the region:

STATE PARKS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Developed camping, including adding electrified sites to significant portions of campgrounds.
- Primitive camping to connect visitors to the myriad of lakes and rivers in the region.

STATE TRAILS

- Hiking/walking/running loop trails of varying lengths.
- Paved bicycle trails that expand the existing network linking cities and villages and campgrounds.
- ATV/UTV riding on roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks and to provide access during the fall hunting season.
- Off-highway motorcycle riding and 4WD-vehicle driving on roads open to street-legal vehicles, with identification and signage of preferred routes to concentrate use in the most appropriate corridors.

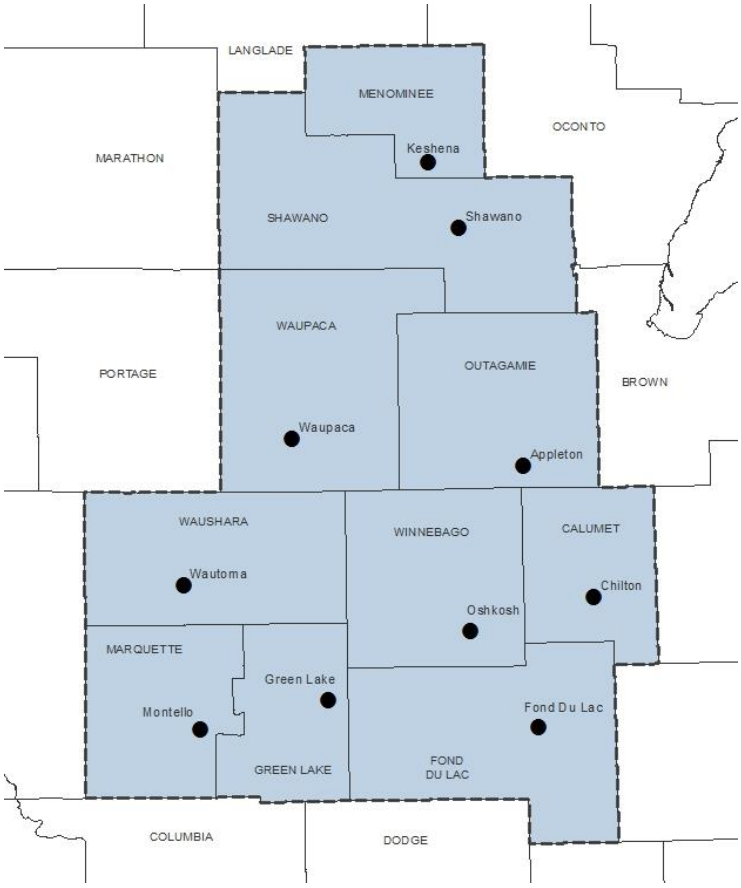
STATE FORESTS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- ATV/UTV riding to create new connections for regional trail/route networks and to provide access during the fall hunting season.
- Off-highway motorcycle riding and 4WD-vehicle driving on roads open to street-legal vehicles, with identification and signage of preferred routes to concentrate use in the most appropriate corridors.
- Developed camping, including adding electrified sites to significant portions of campgrounds.
- Primitive camping, allowing visitors to escape and surround themselves with the natural world.
- Walk-in trails to expand access to paddlers seeking a whitewater rapids or peaceful float on the river.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking trails that create a network of new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- ATV/UTV riding on roads that are already currently open to street-legal vehicles to provide linkages in regional trail/route networks and to provide access during the fall hunting season.
- Primitive camping, allowing visitors to escape and surround themselves with the natural world.

Recreation Opportunities Analysis



LAKE WINNEBAGO WATERS REGION

4. Lake Winnebago Waters Region

Background

Landscape Setting

The Lake Winnebago Waters Region is located in the east-central part of the state and encompasses Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara and Winnebago Counties. Lake Winnebago, the largest lake in the state, is a major recreational resource within the region and includes within its larger system the smaller lakes of Butte des Morts, Winneconne, Poygan and the Fox and Wolf Rivers. Because Lake Winnebago exerts such a strong influence on the region as a whole, populations have tended to concentrate around its shores. Most cities within the region are in the Fox River Valley and include the urban areas of Appleton, Oshkosh, Kaukauna, Neenah and Menasha. Urban and suburban development within the region continues to grow and extend into previously undeveloped areas and public lands.

The southern half of this region is home to some of the world's best examples of continental glacial activity. At the end of the last glacier, the western portion of the region was covered by the Green Bay lobe. Today, drumlins, eskers, kettle lakes, kames, ground and end moraines, and other glacial features are evident throughout the area. In Green Lake County, there are numerous small kettle lakes in the glacial outwash, as well as the state's deepest natural lake—Green Lake at 236 feet—and one of the state's shallowest large lakes—Lake Puckaway with 5000 acres of 5-foot depth. There are a number of streams that flow southeasterly out of cold springs in the moraine. This cold spring area is largely forested, with large blocks of maple, birch, aspen, and hemlock dotting the landscape. The Menominee Indian Reservation also hosts some of the region's large intact forests. Towards the eastern end of the landscape, the topography is a combination of gently rolling hills interspersed with large flat wetlands.

Local Economy

The major land use in the Lake Winnebago Waters Region is agriculture, followed by forest land. The central portion of the region is characterized by soils that are mostly silt loams, but there are also areas of clay soils and sandy soils that support agricultural production. Most of the tillable land is intensively farmed, with dairying and cash-cropping of grains and vegetables as the predominant types of agriculture.

The Lake Winnebago Waters Region is characteristically rural, dotted with a few urban centers, namely the Fox River Valley. The top employment sectors include manufacturing, trade transportation and utilities, professional and business services, government, education and health services, and leisure and hospitality.

Recreation Uses and Participation

The unique Lake Winnebago Pool system provides for a water-based recreational hub in the region. Its proximity to urban centers further contributes to high recreational demand. With over 70 boat access sites on the Fox River System and Lake Winnebago, the most popular water-based recreational pursuits include boating of any type, swimming in lakes and streams, and freshwater fishing. In the southwestern portion of the landscape, some of the larger lakes provide the region's key fishing areas. Both Green Lake and Lake Puckaway are very productive and between them contain nearly all species of game fish and panfish found in Wisconsin. Lake Puckaway and Grand River Marsh provide excellent waterfowl hunting opportunities. Larger streams and rivers are used for canoeing and kayaking. Coldwater streams, such as the Mecan River and others also draw in anglers from throughout Wisconsin.

To the east, the Fox River remains a very popular boating and fishing location for residents along the Fox River Valley. To the west, the Wolf River Watershed is a popular recreation destination that has great potential for off-

road biking, cross country skiing, nature study, horseback riding, fishing and hunting. Coldwater streams also draw in anglers from throughout Wisconsin.

In addition to lakes and streams, a variety of terrain and cover types accommodate a wide range of land based recreation activities. Historically, activities with the highest demand in the Lake Winnebago Waters Region compared to other regions include bicycling, primitive camping and horseback riding, among others. Another high demand activity is bird watching. In fact, High Cliff State Park is considered to offer some of the best birding within the state.

Recreation participation rates for Wisconsin residents as a whole were presented on page 14 of the Introduction. Participation rates of Lake Winnebago Waters Region residents are largely consistent with the state average or within a few percentage points in variation. There are no notable differences from the state average.

EXISTING RECREATION SUPPLY IN THE LAKE WINNEBAGO WATERS REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Lake Winnebago Waters Region has approximately 158,913 of public land available for outdoor recreation. This total is the second least of all the regions, however, the presence of Lake Winnebago and the Fox River are significant resources in addition to the public lands. Along with the opportunities available in and around Lake Winnebago, a variety of terrain and cover types accommodates a diversity of recreational activities. This section briefly describes the public conservation and recreation lands in the Lake Winnebago Waters Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The US Fish and Wildlife Service manages just over 6,100 acres in the Lake Winnebago Waters Region. The properties are largely used for waterfowl production, forest production, wildlife habitat, outdoor recreation, water quality, fisheries habitat, etc.

b) State

The Department of Natural Resources owns just over 152,000 acres and holds public access easements on 2,216 acres in the Lake Winnebago Waters Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Hartman Creek and High Cliff State Park provide well-developed recreation settings with developed campgrounds, miles of trails, picnic areas, swim areas and boat launches. In addition, properties like the Northern Unit of the Kettle Moraine State Forest also contribute to the extensive trail network for hiking, horseback riding, biking, skiing, snowmobiling and other activities.

At the other end of the spectrum are properties like Hortonville Bog State Natural Area, lands specifically acquired to protect high-quality native plant communities and rare species. Although these types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

c) County

Most of these counties manage parks that provide campgrounds, boat launches and other types of infrastructure to support recreation. These facilities are tailored to the specific recreation assets that are found in their county. Waupaca County, for example, maintains accesses to canoeing opportunities on their scenic rivers as well as their selection of parks. Fond du Lac County manages 14 park facilities, including boat launches, and 6 trails totaling 50 miles.

d) Other

Many cities, villages and townships in the Lake Winnebago Waters Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their proximity to many citizens, they are typically well used although these properties tend to be small. Many of these parks also provide places for athletics and dog parks, in addition to some types of outdoor recreation offered on department properties.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs is mostly in Shawano and Waushara Counties, with the remaining acreage spread across the rest of the counties in the Lake Winnebago Waters Region. Approximately 8,000 acres in the region are currently enrolled in these programs. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire.

b) Land trusts

These land trusts operate in the Lake Winnebago Waters Region: Glacial Lakes Conservancy, Northeast Wisconsin Land Trust, Green Lake Conservancy, Ice Age Trail Alliance, The Prairie Enthusiasts, Madison Audubon Society, The Conservation Fund, and North Central Conservancy Trust. These non-profit conservation organizations have protected over 1,400 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

c) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping, and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. The 2014 funds are administered and provided by U.S. Department of Agriculture NRCS. To date, there are over 700 acres available in the region.

d) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 2852 miles of snowmobile trail in the Lake Winnebago Waters region, of which 91% (2587 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Lake Winnebago Waters Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the ten counties of the region.

The Lake Winnebago Waters Region contains the Lake Winnebago network, providing a wide-range of high-quality recreation opportunities. These properties provide a wide range of high-quality recreation opportunities. What follows are a few examples of infrastructure in the Lake Winnebago Waters Region that support a variety of recreation activities.

a) Hartman Creek State Park:

- 108 campsites
- Picnic/day use areas
- Boat access site, 300-foot beach and swimming area
- Hiking, biking and horseback riding trails

b) High Cliff State Park

- 120 campsites
- Picnic/day use areas
- 4 boat launches
- A 40-foot observation tower
- Snowshoeing, fat-tire biking and snowmobiling opportunities
- Hiking, biking and horseback riding trails

c) Navarino Wildlife Area

- Wildlife observation and photography
- Wild edibles/gathering
- Hiking
- Snowshoeing and cross-country skiing
- Deer, turkey and small game hunting
- Fishing – Wolf River
- Snowmobiling trail

d) Mecan River Fishery Area

- Trout fishing
- Canoeing
- Gathering wild edibles
- Hiking
- Wildlife observation and photography
- Snowshoeing and cross-country skiing
- Deer, turkey, and small game hunting

e) State Rail-to-Trails

- Hiking, biking, in-line skating, horseback riding and snowmobiling opportunities
    - Eisenbahn State Trail
    - Friendship State Trail
    - Mascoutin Valley State Trail
    - Mountain-Bay State Trail
    - Newton Blackmour State Trail
    - Tomorrow River State Trail
    - Wild Goose State Trail
    - Wiouwash State Trail

f) State Wildlife, Fishery and Natural Areas

- Hunting, fishing and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

PUBLIC INPUT ON RECREATION NEEDS IN THE LAKE WINNEBAGO WATERS REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted four public open house meetings, in Eau Claire, Stevens Point, Onalaska, and Appleton between October 23 and November 1, 2017. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Lake Winnebago Waters Region.

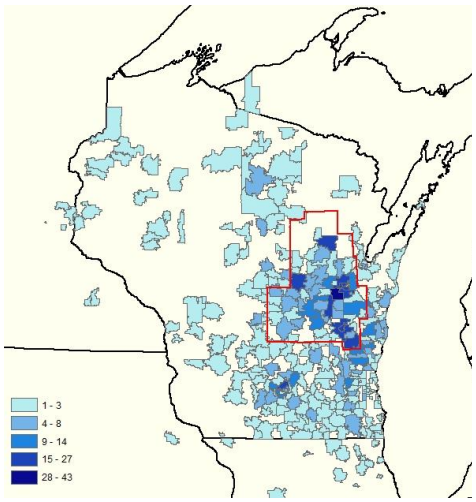
In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from October 6 to November 17, 2017. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[10]

The department received comments in the following formats:

- 1,101 online public input forms
- 103 paper/email copies of the public input form
- 1 letter

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

Number of input forms submitted, by zip code



Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map at right shows their distribution and frequency. Most respondents were from the greater Fox River Valley area, particularly the urban centers. There were also a fair number of respondents from the general southwestern part of the state, likely reflecting the interest in the Lake Winnebago area as well as the efforts of groups and organizations encouraging their members throughout the state and Midwest to complete the input form.

The Lake Winnebago Waters Region plays an important role in the state's outdoor recreation system, especially fishing and other water-related activities. The department received comments, perspectives and ideas on other activities and issues. Trail-related activities continue to be an important consideration to experience and enjoy the outdoors.

Participation in outdoor recreation

Respondents to the public input opportunity participate in many outdoor recreation activities. Many of which can be done close to home. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table on the next page were the most popular activities that the Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey indicated residents in the Lake Winnebago Waters Region participate in. As can be seen, the activities that respondents to the ROA input form participate in vary from the results of the random sample of Lake Winnebago Waters Region residents generated by the SCORP survey.

[10] The public input form was available for anyone to complete and about 1,200 forms were received. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular, or active, interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the respondents compare to the population of the ten-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

Properties that people visit

Despite only a small portion of the property in the Lake Winnebago Waters Region, the most popular property is the Kettle Moraine State Forest Northern Unit. Over 60% of respondents indicated that they have visited the property in the last three years, most of these respondents participate in hiking, walking and running on trails. The next most popular activities within the Kettle Moraine North Forest include bicycling on surfaced trails and horseback riding. Folks who visit the property identified the quality of trails among the top three factors in determining favorite places to visit.

Although there are only two state parks, they are popular to the respondents to the questionnaire. High Cliff State Park and Hartman Creek State Park listed as the top third and fourth most visited properties in the region. Over 700 respondents have visited at least one state park, and 333 people who have visited both state parks in the Lake Winnebago Waters Region.

Popular recreation activities in which respondents to the ROA input form participate

ATV/UTV riding

Bicycling on surfaced roads

Camping – tent

Camping – RV/pop-up

Canoeing/kayaking

Cross-country skiing/ snowshoeing

Fishing – from a boat, canoe or kayak

Hiking, walking, running on trails

Horseback riding

Wildlife/bird watching

Other popular destinations include the Ice Age Trail, Fox River State Trail, Wild Goose State Trail, Wiouwash State Trail, and various local parks and forests in Winnebago, Waupaca and Fond du Lac counties.

Factors important in determining favorite places to visit

Of the people providing input, over 70% selected (1) the quality of trails as one of the top four most important factors in determining their favorite property to visit. The connections to trails continues to be a main driver for recreationists' experience. Besides the trails within properties, there are also several regional trails that connect communities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) good maps, signs or information about the property, and (4) the quality of the habitat.

Among those who selected quality of the trail, over 50% of respondents participate in hiking, walking, and running on trails. Over a third indicated that they participated in bicycling on surfaced trails. These responses suggest that quality of trails is not only the most popular factor in determining favorite places to visit in the Lake Winnebago Waters Region. For those who selected quality of the trails, the majority participate in trail-related activities. This suggests a connection between the activities that individuals participate in and the factors that are important in determining favorite places to visit.

Similarly, of those who desire to be in a quiet place, most respondents indicate that they participate in hiking, walking, and running on trails. The majority of those who indicated a desire to be in a quiet place also visited the Ice Age Trail, Kettle Moraine State Forest Northern Unit and High Cliff State Park.

Additional outdoor recreation opportunities needed

Over 75% of respondents believe that more recreational opportunities are needed in the Lake Winnebago Waters Region. Of the additional opportunities desired by respondents, the top four choices selected were trail-related. Again, this speaks to the respondent's participation in a variety of trail activities. The opportunity that was most frequently selected as needed in the Lake Winnebago Waters Region was more trails for hiking, walking or running, which was selected by more than one quarter of respondents.

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities.

There is a similar correlation in results from ROA participants. Among horseback riders, the most commonly cited need was for more horse trails, selected by over 80% of respondents. The next highest need selected by 20% of horseback riders was for more developed campgrounds. Among ATV/UTV riders, there was also a similar correlation. Over 80% of ATV/UTV riders indicated a need for more trails for motorized recreation, with the next most popular need identified as more developed campgrounds only selected by 16% of those who ride ATV/UTV's.

The correlation is not as strong in other groups of participants, including those who bike on surfaced trails as well as canoe and kayakers. In both groups, the most cited need was for more hiking/walking/running trails, as indicated by almost 50% of cyclists and 45% of canoe and kayakers. The second most popular need identified for those who bike on surfaced trails was a need for more paved bicycling trails (38%).

Top 10 most frequently identified recreation opportunities needed in the Lake Winnebago Waters Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	351
More horse trails	304
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	278
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	195
More paved bicycling trails	188
More natural surface (dirt) bicycling trails	170
More public shore access to lakes & streams	170
More developed campgrounds (electric hook-ups, flush toilets, showers)	162
More local parks and playgrounds	98
More wildlife watching decks or platforms	91

Overall, the largest need indicated is for more hiking/walking/running trails (30%), followed by a need for more horse trails (25%), and more trails for motorized recreation (23%). Of those who identified a need for more hiking/walking/running trails, 90% participate in hiking, walking and running on trails, followed by 63% participation in bicycling on surfaced trails, and 59% participation in canoeing/kayaking. Key needs identified in the "other" category include four-wheel drive vehicle and horse-related (camping, trails, amenities) opportunities.

Department-managed roads and motorized access

Over 293 miles of department roads exist on department properties in the Lake Winnebago Waters Region. Generally, these roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. About 24 miles of these roads are open to the public to drive "street-legal vehicles" (this includes cars, pick-up trucks, SUVs, motorcycles and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles. Some local units of government in Marquette, Shawano and Waushara counties have authorized some types of motorized recreational vehicles on designated local roads.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to "street-legal" vehicles in the Lake Winnebago Waters Region to motorized recreation vehicles.[11]

Most participants shared their input regarding road closure and opening. Of these participants, 40% supported all roads on DNR properties remaining closed to motorized recreation, whereas 31% supported some roads on DNR properties remaining closed to motorized recreation, and 22% supported all roads on DNR properties being opened to motorized recreation vehicles year-round.

Of those that support all roads on DNR properties being opened to motorized recreation, 14% live in Winnebago county, 11% in Fond du Lac, and 10% in Outagamie. Most of these respondents indicate that they participate in

[11] For purposes of the ROA, "recreational vehicles" includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

ATV/UTV riding. The next most popular activities, of those who supported opening roads, are fishing from a boat, snowmobiling, and camping in an RV/pop-up.

Of those that support all roads on DNR properties remaining closed to motorized recreation, 19% live in Dane county, followed by 7% in Fond du Lac, and 6% in Outagamie and Winnebago counties. Most of these respondents indicate that they participate in hiking, walking, and running on trails. The next most popular activities, of those who support roads remaining closed, include canoeing/kayaking, cross-country skiing/snowshoeing and bicycling on surfaced trails.

Of those who indicated that some roads on DNR properties should be opened to motorized recreation vehicles for some purposes, 119 respondents support the opening of roads to provide access during the fall hunting season (September 1 to December 31). Of these respondents, most identified themselves as participating in horseback riding and hunting of big game (deer, bear). A few of respondents supporting opening roads for hunting participated in small game hunting, including turkey and waterfowl.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- local parks and playgrounds

There were no needs that respondents living in the ten counties in the Lake Winnebago Waters Region identified at a higher rate than the state average.

Lake Winnebago Waters Region residents identified the following activities, among others, less frequently than the state average:

- equestrian trails
- local parks and playgrounds
- public campsites
- public shore access to lakes, rivers streams
- trapping opportunities

FUTURE RECREATION NEEDS IN THE LAKE WINNEBAGO WATERS REGION

For the most part, existing opportunities in the Lake Winnebago Waters Region are water related activities that center mainly on Lake Winnebago and the Fox River system. However, the growing network of regional trails is becoming a staple for outdoor recreation, especially for local residents. Other types of outdoor recreation appear to be desired in the region, as indicated by the public input received for this study. Understandably, populations in the Fox River Valley will continue to seek out places where they can do their activities locally. Development of trails and park facilities as well as access to public lands and waters will continue to be a need as the population grows. Land use is more agricultural than forested which has translated into much less public lands being present than in regions to the north. This challenge will make it difficult when trying to locate properties and to develop trail or park infrastructure. Public recreation lands are typically in much smaller blocks, so the types of activities that can be accommodated are limited. Popularity of and demand for access to water-related recreation is expected to remain high in the region and should continue to be a strong consideration moving forward.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (October 6 to November 17, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Lake Winnebago Waters Region – High	Future recreation needs in the Lake Winnebago Waters Region - Medium	Future recreation needs in the Lake Winnebago Waters Region - Low
Bicycling – bicycling touring/road riding	ATV/UTV riding	Bicycling – fat tire/snow biking
Bicycling – mountain biking/off-road biking	Fishing – ice fishing	Off-highway motorcycle riding
Bird or wildlife watching	Four-wheel vehicle driving	Geocaching
Camping – developed	Gather mushrooms, berries, etc.	Snowmobiling
Camping – primitive	Horseback riding	Trapping
Canoeing or kayaking	Hunting – migratory birds	Sailing, windsurfing, rowing, stand-up paddling
Cross country skiing	Hunting – small game	Dog sledding/skijoring
Dog walking	Hunting – turkey	Dog training
Fishing – lake fishing from a boat, canoe or kayak	Snowshoeing	Dog trialing
Fishing – lake fishing from shore or a pier	Target shooting - archery	Scuba diving/snorkeling
Fishing – river fishing from a boat, canoe or kayak	Target shooting - firearms	Whitewater rafting
Fishing – stream or river fishing from shore or wading		Horse cart driving
Hiking, walking, trail running, backpacking		Rock climbing
Hunting – big game		
Motorboating (waterski/tubing, personal watercraft)		
Nature photography		
Participating in nature-based education programs		
Picnicking		
Swimming in lakes and rivers		
Visiting a beach, beach walking		

OPPORTUNITIES TO MEET FUTURE RECREATION NEEDS IN THE LAKE WINNEBAGO WATERS REGION ON DEPARTMENT-MANAGED LANDS

On behalf of Wisconsin residents, the department owns and manages properties in the Lake Winnebago Waters Region to meet a variety of ecological and recreation goals. These properties provide a range of settings and experiences – from developed sites with flush toilets and hot showers to remote places that provide wilderness settings. At some properties in the region, a variety of recreation opportunities is currently provided; at other properties, recreation plays a secondary role in their purpose.

Applying the regional needs listed above, the department evaluated the properties it manages in the Lake Winnebago Waters Coastal Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be "good fits" to provide different activities will be used to help focus the department's work developing and updating property master plans. A description of opportunities to meet recreation needs in the Lake Winnebago Waters Region (on department-managed lands) follows.

NON-MOTORIZED TRAIL RECREATION

Non-motorized trail recreation has been and continues to be a significant outdoor activity throughout the year in the Lake Winnebago Waters Region. Several "rail-to-trail" corridors have been developed over the recent decades in partnership with county governments (see box to the right). From hiking and biking in the summer to cross-country skiing in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

An extensive trail system exists throughout the region, and provides a number of opportunities for bike touring as well as mountain and off-road biking. Bicycle touring would benefit from connecting existing networks, whereas mountain biking can expand opportunities through individual properties and pockets of trails.

Hiking, walking, and running on trails in the region remain very popular activities. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers are likely to be most frequently used. Linking cities and villages to each other and to state and local parks will continue to create new experiences and increase economic activity in the area.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential "good fits" in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Lake Winnebago Waters Region, cooperatively managed trails include:

- Eisenbahn State Trail
- Friendship State Trail
- Mascoutin Valley State Trail
- Mountain-Bay State Trail
- Newton Blackmour State Trail
- Tomorrow River State Trail
- Wild Goose State Trail
- Wiouwash State Trail

The following table lists current and potential future opportunities for non-motorized trail activities.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling – bicycle touring/road riding	High Cliff State Park	Hartman Creek State Park Eldorado Wildlife Area	N/A	Glacial Habitat Restoration Area Navarino, White River Marsh, Grand River Marsh, Killsnake, Brillion and Germania Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas
Bicycling - mountain biking/off-road biking	N/A	High Cliff State Park Hartman Creek State Park	N/A	Glacial Habitat Restoration Area Killsnake, Eldorado, Brillion, Poygan Marsh, Wolf River Bottoms, Deer Creek and Greenwood Wildlife Areas White River, Little Wolf River, Willlow Creek, Pine River System and Radley Creek Fishery Areas
Cross country skiing	Navarino Wildlife Area	White River Marsh, Grand River Marsh, Poygan Marsh, Germania, Greenwood and Mukwa Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas Hartman Creek and High Cliff State Parks	Rat River, Wolf River Bottoms, Mack and Deer Creek Wildlife Areas Lower Wolf River Bottomlands Resource Area	Glacial Habitat Restoration Area Eldorado and Wolf River Wildlife Areas
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although many fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add trails designated for hiking. The properties listed below were found to have quality opportunities to add more hiking, walking, trail running, and backpacking: Grand River Marsh Wildlife Area Navarino Wildlife Area White River Marsh Wildlife Area			
Dog walking	Dog walking has similar characteristic as hiking. Dogs must be leashed on department properties except where the hunting season allows for using dogs. Nearly all department properties have opportunities to add trails designated for hiking. Properties closer to urban areas may provide better access to more people searching for dog walking opportunities.			

WATER RELATED RECREATION

There is considerable demand for water related recreation in the Lake Winnebago Waters Region, including fishing, swimming and using a variety of watercraft.

Lake Winnebago is popular for boating and fishing year-round, as are the flowages on the Fox River. There is also an abundance of tributary streams in the region to fish or to simply enjoy a day on the water. Lake Winnebago itself features 20 boat landings and has abundant populations of panfish, walleye, sturgeon and catfish. Although there are many existing boat launches that accommodate trailers with motorboats as well as carry-in access for canoes and

kayaks, there are opportunities for additional access sites on underserved waterways on department properties to help meet regional demand.

The following table lists current and potential future opportunities for water related recreation.

Recreation Activity	Recreation Opportunities
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. The following properties may have the potential to add more or better develop walk-in trails to access waterbodies with canoes or kayaks: Brillion Wildlife Area Eldorado Wildlife Area Killsnake Wildlife Area Navarino Wildlife Area Rat River Wildlife Area Rush Lake Glacial Habitat Restoration Area Wolf River Wildlife Area
Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. Many department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. There are a few department properties that would be able to help address this recreation activity. Other public land management agencies may be able to provide additional access as well. The following properties may have potential to add more improved boat access sites (ramps for trailered boats): Asylum Bay Rough Fish Station Calumet Harbor Rough Fish Station Fox River – Eureka Locks Remnant Fishery Area Rush Lake Glacial Habitat Restoration Area Waukau Carp Ponds and Creek
Fishing - river fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. Department properties connecting to rivers either already have boat accesses or have no feasible way to create more. As such, there are few department properties that would be able to address this recreation activity. Other public land management agencies may be able to provide additional access. The following properties may have potential to add more improved boat access sites: Eldorado Wildlife Area Fox River-Eureka Locks Germania Wildlife Area Grand River Marsh Wildlife Area Navarino Wildlife Area White River Marsh Wildlife Area
Fishing - lake fishing from shore or a pier	All department lands with lakes are open to shore fishing and as such there are not significant opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access. The following properties may be able to improve opportunities: Germania Wildlife Area Grand River Marsh Wildlife Area
Fishing - stream or river fishing from shore or wading	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels or to create disabled accessible fishing areas on the following properties: Eldorado Wildlife Area Germania Wildlife Area Grand River Marsh Wildlife Area Lower Wolf River Bottomlands Navarino Wildlife Area White River Marsh Wildlife Area Wolf River Wildlife Area

Motorboating (waterski/ tubing, personal watercraft)	The department currently maintains improved boat launches throughout the region. Some department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. There are a few department properties that would be able to address this recreation activity. Other public land managers may be able to provide additional access. Asylum Bay Rough Fish Station Calumet Harbor Rough Fish Station Fox River-Eureka Locks Germania Wildlife Area Grand River Marsh Wildlife Area White River Marsh Wildlife Area
Swimming in lakes and rivers	All department properties adjacent to public waters allow swimming. Many state parks and forests have beaches, changing rooms and other amenities to accommodate swimming. Because most department properties in the region have limited sites for these amenities, there are no other properties that would be able to create or expand existing swimming opportunities.
Visiting a beach, beach walking	All department properties adjacent to public waters allow access to the water, however, there may not be a designated beach area. State parks typically have beaches to accommodate demand for swimming. The following department properties may be able to either add new opportunities or expand existing opportunities for visiting a beach: High Cliff State Park

OTHER FORMS OF RECREATION

There is demand for more of the other types of outdoor recreation in the Lake Winnebago Waters Region, including camping, wildlife viewing and picnicking.

Bordering Lake Winnebago are properties such as High Cliff State Park, which provide several camping opportunities that include family campgrounds, outdoor group campsites, and an accessible cabin. Picnic areas, playgrounds, and a volleyball court are also available.

There remains opportunity for additional access sites on department properties to expand opportunities for visitors to enjoy the region's natural landscape. The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed	Hartman Creek State Park High Cliff State Park	N/A	N/A	Glacial Habitat Restoration Area Killsnake, Eldorado, Brillion, Rat River, Wolf River Bottoms, Wolf River, Mack and Deer Creek Wildlife Areas White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas Lower Wolf River Bottomlands Natural Resource Area

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – primitive	N/A	High Cliff State Park	Hartman Creek State Park	Navarino, Wolf River Bottoms, Mack, Wolf River, Deer Creek, Killsnake, Eldorado, Brillion and Rat River Wildlife Areas Glacial Habitat Restoration Area White River, Little Wolf River, Willow Creek, Pine River System and Radley Creek Fishery Areas Lower Wolf River Bottomlands Natural Resource Area
Participating in nature-based education programs	Most department properties are well positioned to be used for nature-based education programs. Some schools use these outdoor classrooms to give students "hands-on" experiences with the outdoors. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. The following department properties may have potential to add access to make nature-based education programs more successful: Asylum Bay Rough Fish Station Hartman Creek State Park High Cliff State Park Lower Wolf River Bottoms Wildlife Area Navarino Wildlife Area State Ice Age Trail Areas Waukau Carp Ponds and Creek Wild Rose Hatchery			
Picnicking	Many department properties have areas designated for picnicking, especially state parks and trails. The following properties may be well suited to develop or expand these areas: Asylum Bay Rough Fish Station Extensive Wildlife Habitat (Fond Du Lac, Green Lake, Waushara, Winnebago counties) Fox River-Eureka Locks High Cliff State Park State Ice Age Trail Areas Waukau Carp Ponds and Creek			
Bird or wildlife watching	All department properties are open to bird and wildlife watching. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. Nearly all department properties have opportunities to add at least some designated hiking trails or viewing platforms that would aide this activity.			
Nature photography	All department properties are open to nature photography. Depending upon if the target is a landscape view or a rare butterfly perched on a blade of grass, some properties may be preferred over others. Viewing platforms may assist some photography and provide better vantage points from which to capture images of wildlife.			
Hunting – big game	Nearly all department properties are open to big game hunting for at least some part of the season. State parks and trails have special regulations pertaining to when and where hunting is allowed on the property. Hunter walking trials are sometimes desired to reach different parts of the property, so adding trails could provide better opportunity for some hunters. In some cases, properties may be able to add parking to improve access for hunters,			

SUMMARY OF THE LAKE WINNEBAGO WATERS REGION ROA

The combination of the Lake Winnebago system with a growing urban population creates a recipe for growing recreational demand in the region. Water-related activities are plentiful, and simultaneously areas for potential growth. Fishing from lakes and rivers, along with canoeing and kayaking, were noted as key opportunities with potential to expand within the Lake Winnebago Waters Region.

Camping, both primitive and modern, as well as hiking on trails are both also in-demand activities in the region. Even with smaller blocks of public land compared to regions further north, there remain regional opportunities to accommodate these activities. Among survey participants, the emphasis on non-motorized recreation is further demonstrated in strong participant responses for keeping all roads on DNR properties closed to motorized recreation.

In general, the department believes the following areas provide additional opportunities for the growth of recreation opportunities in the Lake Winnebago Waters Region:

STATE PARKS

- Surfaced bicycle trails that expand the existing network linking cities, villages and campgrounds.
- Developed camping, including adding electrified sites to some campgrounds or significant portions of campgrounds.
- Primitive camping to accommodate calmer, more primitive experiences.
- Developed hiking trails and wildlife viewing platforms.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Walk-in trails to expand access to waterbodies with canoes or kayaks.
- Developed boat access sites to provide access to Lake Winnebago and its surrounding waters.
- Fishing docks and access sites to increase opportunities for fishers on streams, rivers and lakes.
- Cross-country skiing trails to support a network of trails for ambitious winter recreators.
- Developed picnic areas near parking areas.

Recreation Opportunities Analysis

MISSISSIPPI RIVER CORRIDOR REGION

5. Mississippi River Corridor Region

Background

Landscape Setting

The Mississippi River Corridor Region is located on the western edge of the state and stretches north to south across St. Croix, Dunn, Pierce, Pepin, Buffalo, Trempealeau, La Crosse, Vernon, Crawford and Grant counties. Running along the region's western border, the Lower St. Croix River and Mississippi River are key recreational resources in the region. The riverway and its backwaters are used for a variety of water-based recreational activities such as migratory bird hunting, boating and swimming. Streams feeding into the Mississippi support an excellent cold-water trout fishery. Although most public lands within the region are fishery or wildlife areas, there are also several state parks. The Great River Road, a thoroughfare that follows the Mississippi for 250 miles, connects over 50 local parks and beaches. Urban influences in St. Croix and Pierce counties also impact the region as visitors from and commuters to the nearby Twin Cities Metro Area make use of the region's recreational resources. Suburban development associated with this continues to impact recreation supply and demand.

The landscape at the northern end is a mixture of rolling hills and steeply unglaciated areas. Being just south of the "tension zone", this western prairie area is characterized by generally open, gently to moderately rolling hills with pothole lakes, ponds, wet depressions, and some of the best prairie pot holes in the state. A ribbon of forest occurs along the St. Croix River, with soils consisting of a mosaic of silty, shallow and stony alluvial sands and peats.

Moving southward, the landscape transitions to hill and valley areas that have little glacial influence; they are comprised of expansive oak forest, large undeveloped rivers with flood plain forests, cold water streams and springs, hillside prairies, oak savanna, caves, pine and hemlock relicts, and the Mississippi River Valley and blufflands. Soils are typically silt loam and sandy loams in the uplands and alluvial or terrace deposits in the valley floors. At the same time, these areas are characterized by highly eroded, unglaciated topography. Steep-sided valleys are heavily forested and often managed for hardwood production. Large, meandering rivers with broad floodplains include the Mississippi, Wisconsin, La Crosse and Kickapoo rivers. The floodplain forests associated with these riverine systems are among the largest in the Upper Midwest. Spring fed, cold-water streams that support robust brown and brook trout fisheries are also common throughout the area.

Local Economy

Moving north to south, land use across the Mississippi River Corridor Region transitions from largely agricultural to primarily forested – and shifts again in the south towards a primarily agricultural land use. Overall, the major land use in the Mississippi River Corridor Region is still agricultural, followed closely by forest. Agricultural activities, primarily dairy and beef farming, are typically confined to valley floors and ridge tops.

Although dairy farming and row crops remain the predominant agricultural uses, this area is experiencing rapid urbanization along its western fringe due to its proximity to the Twin Cities. Top employment sectors of the regional economy include education and health services, trade transportation and utilities, professional and business services, government, leisure and hospitality, and manufacturing.

Recreation Use and Participation

Given its proximity to the Twin Cities Metro Area, the Mississippi River Corridor receives steady pressure for outdoor recreation. The Mississippi River and its associated backwaters are used for a variety of activities including hunting, trapping, fishing and boating. Recreation demand from both local and out-of-town visitors is focused upon sightseeing and bird watching, while the river also provides opportunities for water based recreation such as motor boating and swimming. Boating and fishing are very popular on the St. Croix River. Several cold-water streams in the area are long-standing fishing destinations throughout the region, including the Kinnickinnic, Rush, Timber Coulee, West Fork of the Kickapoo and Big Green Rivers.

The topography and mix of forest and agricultural land make this area well suited for hunting of many types. Deer hunting is especially popular and game populations are high enough to supply plenty of opportunities. Since the huge success of wild turkey reintroduction beginning in Vernon County back in the 1970's, this region has been a hotbed for spring turkey hunting. The river is a migratory bird flyway which attracts waterfowl hunters during the fall migration as countless birds make their way south.

State parks within this landscape receive substantial use for a variety of activities, including camping, hiking, and nature observation. Willow River State Park, having the third-highest visitation rate in the state, is a popular destination for those from the Twin Cities Metro Area. Perrot State Park is very popular during the spring migration as trumpeter swans rest in the backwaters of the Mississippi River. Within the unglaciated and rugged topography to the South, there is considerable demand for more hiking, off road biking, horseback riding, cross-country skiing, and camping opportunities. Demand for trails has spurred local groups to coalesce and subsequently develop plans for community and county-wide trail networks. "Water trails" are becoming especially popular in this region. Many of the waterways are very scenic and tend to be conducive for canoeing, kayaking and "tubing". The Lower Wisconsin, Chippewa, La Crosse, Black, Apple and Kickapoo Rivers are all popular water trail destinations.

Recreation participation rates for Wisconsin residents as a whole were presented on page 14 of the Introduction. The majority of participation rates of Mississippi River Corridor Region residents are consistent with the state average or within five percentage points in variation. The differences to the state average are shown in the box to the right.

Activities that residents of the Mississippi River Corridor Region participate in at <u>higher</u> rates than the state average:

- Fishing – from a boat, canoe or kayak
- Harvesting berries/mushrooms, etc.
- Hunting – big game

EXISTING RECREATION SUPPLY IN THE MISSISSIPPI RIVER CORRIDOR REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Mississippi River Corridor Region has approximately 240,000 acres of public land available for outdoor recreation. The area has a variety of opportunities available along the Mississippi River and its tributaries that meander through the region. This section briefly describes the public conservation and recreation lands in the Mississippi River Corridor Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The U.S. Fish & Wildlife Service manages almost 99,000 acres in most counties along the Mississippi River. These properties function as areas for prairie habitat restoration, wildlife refuges and waterfowl production.

The National Park Service owns and manages over 800 acres in St. Croix county where the southern-most stretch of the St. Croix National Scenic Riverway is located. This national water trail stretches north and east on the Namekagon and St. Croix Rivers, beginning in Cable.

b) State

The Department of Natural Resources owns over 133,000 acres in the Mississippi River Corridor Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Willow River, Perrot and Wyalusing State Parks that include developed campgrounds, miles of trails, boating opportunities and picnic sites. Willow River State Park, with views of Willow Falls and the river valley, sees over 900,000 visitors each year. At the other end of the spectrum are properties like Lower Chippewa River State Natural Area, which features the largest concentration of remaining prairies and savanna in the state and was specifically acquired to protect these critical habitats and natural communities. Although these types of properties can provide some limited

recreation opportunities for low-impact activities such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

The Kickapoo Reserve Board manages the 7,200-acre Kickapoo Valley Reserve in Vernon County on behalf of the state and Ho-Chunk Nation. The Reserve offers a variety of recreation opportunities, including trails for equestrian, biking, hiking, cross-country skiing and snowshoeing, as well as access to camping, canoeing, fishing and hunting.

c) County

All of the county forests lands in the Mississippi River Corridor are within Vernon County. Over 1,800 acres of county forest provide reasonable opportunity to explore the region's rugged topography.

Beyond county forests, many of the region's counties manage parks that provide campgrounds, boat launches, and other types of infrastructure to support recreation.

d) Other

Many cities, villages, and townships in the Mississippi River Corridor Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their easy proximity to many citizens and scenic views, these properties are very well-used. In addition, several school forests in the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs is spread across the counties in the Mississippi River Corridor Region. Over 28,000 acres in the region are currently enrolled in these programs. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire. MFL-closed land is not open for public use.

b) Land trusts

The following land trusts operate in the Mississippi River Corridor Region: Mississippi Valley Conservancy, The Conservation Fund, The Prairie Enthusiasts, West Wisconsin Land Trust, Kinnickinnic River Land Trust, and Star Prairie Land Preservation Trust. These non-profit conservation organizations have protected over 9,500 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing, and other similar activities.

c) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. Funds from 2014 are administered and provided by U.S. Department of Agriculture-NRCS. To date, there are over 10,000 acres available in the Mississippi River Corridor Region.

d) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season,

which enables snowmobilers to travel throughout the network. There are 2,186 miles of snowmobile trail in the Lower Lake Michigan Coastal, of which 95% (2,082 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Mississippi River Corridor Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the ten counties of the region.

The Mississippi River Corridor contains a number of many large public land holdings, notably seven state parks, several state fish and wildlife management properties, and five federal properties. These properties provide a wide range of high-quality recreation opportunities. What follows are a few examples of infrastructure in the Mississippi River Corridor Region that support a variety of recreation activities.

a) Perrot State Park:

- 12+ miles of hiking trails
- 100+ family campsites
- Bluffs and scenic view of the Mississippi River Valley
- Nature center and picnic areas
- Groomed cross-country ski trails
- Boat landing on the Trempealeau River
- Hunting, fishing and trapping opportunities

b) Willow River State Park

- 13 miles of hiking trails
- Trails for snowshoeing and dog sledding
- 9 miles of groomed cross-country ski trails
- 150 family campsites
- Playground, swimming beach and picnic areas
- Non-motorized boating, canoeing and kayaking
- Hunting, fishing and trapping opportunities

c) Wildcat Mountain State Park

- Over 20 miles of hiking trails
- 15 miles for horseback riding, horse campground
- 45 campsites plus group camping areas
- Canoe landing access to the Kickapoo River
- Hunting, fishing and trapping opportunities
- Cross-county skiing and snowshoeing opportunities

d) Wyalusing State Park

- 14 miles of hiking trails
- Playground and picnic areas
- 100+ family campsites
- Boating and canoe/kayak opportunities
- Hiking, cross country skiing, and snowshoeing
- Hunting, fishing and trapping opportunities

e) Trempealeau National Wildlife Refuge

- Segment of Great River State Trail
- Over 8 miles of cross-country ski trails
- Interpretation centers and kiosks
- Exceptional bird watching opportunities
- Hunting, fishing and trapping opportunities
- Nature study, photography, picnic areas and wildlife watching opportunities

f) Kickapoo Valley Reserve

- Hiking, cross-country skiing, and snowshoeing opportunities
- 37 miles equestrian, 24 miles mountain bike and 8 miles fat tire bike trails
- Hunting, fishing, and trapping opportunities
- 25 primitive camping sites
- Several landings with access to the Kickapoo River

g) State Wildlife, Fishery and Natural Areas

- Hunting, fishing, and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

h) State Trails and National Water Trail

- Over 26 miles of the Chippewa River and Red Cedar State Trails for hiking, biking and snowmobiling
- Over 40 miles of the Great River and La Crosse River State Trails for hiking, biking and snowmobiling
- A portion of the 200-mile St. Croix National Scenic Riverway water trail

PUBLIC INPUT ON RECREATION NEEDS IN THE MISSISSIPPI RIVER CORRIDOR REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted four public open house meetings, in Eau Claire, Stevens Point, Onalaska and Appleton between October 23 and November 1, 2017. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Mississippi River Corridor Region.

In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from October 6 to November 17, 2017. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[12]

The department received comments in the following formats:

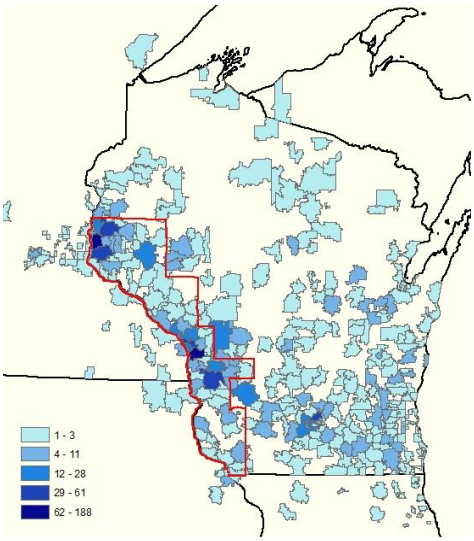
- 1,628 online public input forms
- 93 paper copies of the public input form
- 6 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

[12] The public input form was available for anyone to complete and over 1,700 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 1,700+ respondents compare to the population of the ten-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map on the right shows their distribution and frequency. As can be seen, the primary residence of many people who provided input is within the nine-county Mississippi River Corridor Region. The top three counties identified as primary residence was La Crosse (20%), St. Croix (14%) and Dane (13%) counties. Of those respondents from La Crosse County, 85% identified themselves as hikers. Similar percentages were in St. Croix and Dane counties.

Number of input forms submitted, by zip code



The Mississippi River Valley with its scenic views has attracted outdoor enthusiasts for generations. Just one example is Grandad Bluff above the City of La Crosse which has spectacular views of La Crosse, the Mississippi River valley and miles of countryside from its overlook area. From hunting to kayaking, the region offers activities for a wide range of visitors. The department received comments, perspectives and ideas on the following topics.

Participation in outdoor recreation

Respondents to the public input form participate in many outdoor recreation activities. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table at right were the most popular activities that the SCORP survey indicated residents in the Mississippi River Corridor Region participate in. The activities that respondents to the ROA input form participate in vary from the results of the random sample of Mississippi River Corridor Region residents generated by the SCORP survey.

Popular recreation activities in which respondents to the ROA input form participate

- **Bicycling – paved trails**
- Bicycling – mountain biking, single track
- Bicycling – winter/fat tire
- Camping – tent
- Canoeing/kayaking
- Cross-country skiing/ snowshoeing
- **Fishing – from a boat, canoe or kayak**
- **Fishing – from shore**
- **Harvesting berries, mushrooms, etc.**
- **Hiking, walking, running on trails**
- **Swimming**
- **Wildlife/bird watching**

Properties that people visit

A small percentage of the Mississippi River Corridor Region is in public ownership, totaling over 240,000 acres. With a few exceptions, much of public lands are generally less than 2000-acre blocks. The most popular properties among people who provided input are Wildcat Mountain, Perrot, Wyalusing, and Willow River State Parks as well as the Kickapoo Valley Reserve. The La Crosse River and Great River State Trails are popular destinations as well. Local parks, including those in La Crosse County and St. Croix County, were noted as popular places to recreate. The federal properties including the St. Croix National Scenic Reserve, Upper Mississippi River National Wildlife and Fish Refuge, and the Trempealeau National Wildlife Refuge are also frequently visited among those who participated in this public input opportunity.

Factors important in determining favorite places to visit

Of the people providing input, the majority (67%) selected (1) the quality of trails as one of the top four most important factors in determining their favorite property to visit. This is expected, given that many respondents noted their participation in a variety of motorized and non-motorized trail activities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) good maps, signs or information about the property, and (4) the quality of the habitat.

Additional outdoor recreation opportunities needed

About 77% of respondents believe that more recreational opportunities are needed in the Mississippi River Corridor Region. Of the additional opportunities desired by respondents, the top three choices selected were for non-motorized trail-related uses. For those who participated in this public input opportunity, trails for motorized recreation is less of a need than regions to the north. The opportunity that was most frequently selected as needed in the Mississippi River Corridor Region was more trails for hiking, walking or running, which was selected by nearly half of respondents.

Top 10 most frequently identified recreation opportunities needed in the Mississippi River Corridor Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	764
More natural surface (dirt) bicycling trails	558
More paved bicycling trails	446
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	409
More public shore access to lakes & streams	296
More local parks and playgrounds	230
More horseback trails	200
More wildlife watching decks or platforms	197
More developed campgrounds (electric hook-ups, flush toilets, showers)	186
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	176

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities. The public input received as part of the ROA showed a similar pattern in the Mississippi River Corridor Region. For example, 78% of those who identified themselves as horseback riders thought there was a need for more horse trails. Also, 70% of those who ride single track mountain bikes believe there is a need for more mountain biking trails in the Mississippi River Corridor Region. Lastly, two-thirds of people who identified themselves as ATV/UTV riders thought that there was need for more motorized recreation trails.

Interestingly, over 55% of those identifying themselves as canoe/kayakers desired more hiking, walking, running trails while only 25% desired more public shore access to lakes and streams. A similar pattern occurs with respondents who fish from watercraft or shore, about half identifying a need for more hiking, walking, running trails as opposed to more public access to lakes and streams.

Department-managed roads and motorized access

About 130 miles of roads exist on department properties in the Mississippi River Corridor Region. These roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. Over one-third (48 miles) of these roads are part of the property transportation network and open to the public at least part of the year to drive “street-legal vehicles” (this includes cars, pick-up trucks, SUVs, motorcycles, and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to “street-legal” vehicles in the Mississippi River Corridor Region to motorized recreation vehicles.[13] About 47% of people that provided responses believed that all DNR roads should remain closed to motorized recreational vehicles. Of the 43% that supported allowing motorized recreational vehicles on DNR roads, most thought that this access should be on a subset of roads that connect larger regional motorized recreation networks. In addition, 34% of these respondents supporting opening roads thought opening should occur to provide access during the fall hunting season (Sept 1 to Dec 31). Among those identifying themselves as big game hunters, 32% thought all roads

[13] For purposes of the ROA, “recreational vehicles” includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

should remain closed. Most of hunters who favored opening some roads to motorized use preferred that it connect to a regional motorized trail network while half preferred motorized use during the fall hunting seasons.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- public campsites
- local parks and playgrounds

Respondents living in the ten counties in the Mississippi River Corridor Region identified the following activities, among others, at a higher rate than the state average:

- equestrian trails
- trails for motorized recreation

Mississippi River Corridor residents identified the following activities, among others, less frequently than the state average:

- local parks and playgrounds
- public campsites

Future recreation needs in the Mississippi River Corridor Region

The Mississippi River Corridor Region is in a unique setting that lends itself well to various types of outdoor recreation. The many rivers draining to the Mississippi draw trout fisherman from throughout the Midwest. These same rivers also attract a growing sector of paddlers to the area while the hills and valleys are attractive to mountain bikers. The fertile soils and topography support excellent habitat for all sorts of game species, especially deer and turkey. The bluffs along the Mississippi River provide spectacular scenery as well as habitat for rare species and natural communities. These, plus the Mississippi River have the potential to provide abundant recreation opportunities for local citizens and visitors looking for adventure. Communities are already realizing how these natural resource assets could play a growing role in their local economy. These communities are partnering with local citizen groups, raising funds and developing parks, trails and accesses to waterways, attracting visitors year-round. The growth of activity-based clubs or groups also demonstrates a desire for recreationists to organize for the purpose of finding new places to develop and maintain those recreation resources.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (October 6 to November 17, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Mississippi River Corridor Region – High	**Future recreation needs in the Mississippi River Corridor Region – Medium**	**Future recreation needs in the Mississippi River Corridor Region – Low**
Bicycling - bicycle touring/road riding	ATV/UTV riding	Dog sledding/skijoring
Bicycling - mountain biking/off-road biking	Bicycling - fat tire/snow biking	Dog training
Bird or wildlife watching	Fishing - lake fishing from shore or a pier	Dog trialing
Camping - developed	Fishing - ice fishing	Geocaching
Camping - primitive	Four-wheel vehicle driving	Off-highway motorcycle riding
Canoeing or kayaking	Horseback riding	Rock climbing
Cross country skiing	Horse cart driving	Sailing, windsurfing, rowing, stand-up paddling
Dog walking	Hunting - migratory birds	Snowmobiling
Fishing - lake fishing from a boat, canoe or kayak	Hunting - small game	Scuba diving/snorkeling
Fishing - river fishing from a boat, canoe or kayak	Hunting - turkey	Whitewater rafting
Fishing - stream or river fishing from shore or wading	Motorboating (waterski/tubing, personal watercraft)	
Gather mushrooms, berries, etc.	Swimming in lakes and rivers	
Hiking, walking, trail running, backpacking	Target shooting - archery	
Hunting - big game	Target shooting - firearms	
Nature photography	Trapping	
Participating in nature-based education programs		
Picnicking		
Snowshoeing		
Visiting a beach, beach walking		

Opportunities to meet future recreation needs in the Mississippi River Corridor Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Mississippi River Corridor Region to meet a variety of ecological and recreation goals. These properties are typically influenced by the riverine nature of the region. Even so, there are a variety of types of properties that provide a range of settings and experiences.

Applying the regional needs listed above, the department evaluated the properties it manages in the Mississippi River Corridor Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be “good fits” to provide different activities will be used to help focus the department’s work developing and updating property master plans. A description of opportunities to meet recreation needs in the Mississippi River Corridor Region (on department-managed lands) follows.

NON-MOTORIZED TRAIL RECREATION

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Mississippi River Corridor Region. From hiking and biking the state trails in the summer to cross country skiing at the state parks in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

The La Crosse area has been a mountain biking magnet for years. More recently, the rolling hills of Pierce and St. Croix counties have experienced high demand for establishing more of these narrow "single-track" trails. As opposed to recreational bicycle touring, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. The steep topography and bluffs of this region provide excellent challenge for expert riders while opportunity for beginners is abundant.

Hiking, walking, and running on trails in the region remains very popular activities. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers are likely to be most frequently used.

The following table lists current and potential future opportunities for non-motorized trail activities

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/ road riding	Kinnickinnic, Nelson Dewey, Willow River and Wyalusing State Parks	Merrick, Perrot and Wildcat Mountain State Parks Chippewa River, Great River, La Crosse River and Red Cedar State Trails Dunnville Wildlife Area		Coulee Experimental Forest Coon Creek Fishery Area La Crosse Area Comprehensive Fishery Area Borst Valley, Cylon, Kickapoo, Muddy Creek, St Croix Islands, Ten Mile Creek, Tiffany and Whitman Dam Wildlife Area. Western Prairie Habitat Restoration
Bicycling - mountain biking/off-road biking	Great River State Trail	Chippewa River State Trail La Crosse River State Trail Red Cedar State Trail	Kinnickinnic, Nelson Dewey, Perrot, Willow River, Wildcat Mountain and Wyalusing State Parks Fenley and Hoffman Hills State Receration Areas Douglas Hallock Demo Forest Coulee Experimental Forest Kickapoo Wildlife Area	Merrick State Park La Crosse Area Comprehensive Fishery Area Coon Creek Fishery Area Borst Valley, Cylon, St Croix Islands, Ten Mile Creek, Tiffany and Whitman Dam Wildlife Areas Western Prairie Habitat Restoration

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Cross-country skiing	Kinnickinnic, Merrick Perrot, Wildcat Mountain, Willow River and Wyalusing State Parks Hoffman Hills State Recreation Area Red Cedar State Trail Chippewa River State Trail Coulee Experimental Forest Dunnville, Kickapoo and Muddy Creek Wildlife Areas	Great River State Trail La Crosse River State Trail La Crosse Area Comprehensive Fishery Area Coon Creek Fishery Area Hogback Prairie Lower Chippewa River, Nine Mile Island and Rush Creek State Natural Areas Cylon, St Croix Islands, Ten Mile Creek, Tiffany and Van Loon Wildlife Areas Western Prairie Habitat Restoration	Nelson Dewey State Park Fenley State Recreation Area James J Rule Timber Demo Forest	Borst Valley Wildlife Area Whitman Dam Wildlife Area
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			
Dog walking	Dog walking has similar characteristic as hiking. Dogs on department properties typically must be leashed unless the hunting season or dog training allows them to be loose. Nearly all department properties have opportunities to add trails designated for hiking. Properties closer to urban areas may provide better access to more people searching for dog walking opportunities.			
Snowshoeing	All department properties are open to snowshoeing, regardless if department properties have designated trails or not. Snowshoe use on groomed cross-country ski trails is usually not allowed.			

WATER RELATED RECREATION

In addition to trail-based activities, there is considerable demand for water related recreation in the Mississippi River Corridor Region, including fishing, visiting beaches, and canoeing or kayaking.

As the namesake for this region, the Mississippi River exerts a great influence on outdoor recreation. The river supports fishing for many types of gamefish species. The flowages and backwaters provide sufficient water for many other activities on the water.

While the Mississippi River is prominent on the landscape, the numerous tributaries and major waterways draining to the river also play a role in shaping water recreation. There are many existing boat launches as well as state ownership frontage to these waterways. Depending on the waterway, foot access for fishing may be sufficient. In other cases, primitive canoe access or developed boat landings may be what is needed for additional access.

The following table lists current and potential future opportunities for water related recreation.

Recreation Activity	
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. The following properties may have the potential to add more or better develop walk-in trails to access waterbodies with canoes or kayaks: Dunnville Wildlife Area Fenley State Recreation Area Kickapoo Wildlife Area Lake Pepin Wildlife Area Merrick State Park Muddy Creek Wildlife Area Perrot State Park Van Loon Wildlife Area Wyalusing State Park
Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. Many department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. There are a few department properties that would be able to help address this recreation activity. Other public land management agencies may be able to provide additional access as well. The following properties may have potential to add more improved boat access sites (ramps for trailered boats): Lake Pepin Wildlife Area Muddy Creek Wildlife Area
Fishing - stream or river fishing from shore or wading	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels or to create disabled accessible fishing areas on the following properties: Chippewa River State Trail Dunnville Wildlife Area Red Cedar State Trail Wyalusing State Park

Recreation Activity	
Fishing - river fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. Department properties connecting to rivers either already have boat accesses or have no feasible way to create more. As such, there are few department properties that would be able to address this recreation activity. Other public land management agencies may be able to provide additional access. The following properties may have potential to add more improved boat access sites: Dunnville Wildlife Area Merrick State Park Perrot State Park Wyalusing State Park
Visiting a beach, beach walking	All department properties adjacent to public waters allow access to the water, however, there may not be a designated beach area. State parks typically have beaches to accommodate demand for swimming. The following department properties may be able to either add new opportunities or expand existing opportunities for visiting a beach: Dunnville Wildlife Area Lake Pepin Wildlife Area Nine Mile Island State Natural Area

OTHER FORMS OF RECREATION

There appears to be demand for many other types of outdoor recreation in the Mississippi River Corridor Region, including camping, picnicking, non-consumptive outdoor activities, and big game hunting.

Camping in general is becoming more popular in this region. Being closer to the Twin Cities Metro Area, the properties in the northern reaches of this region provide access to outdoor recreation with less time required to reach their destination. Places to go for the day and picnic, or simply going for a walk to experience wildlife are also appearing to increase in popularity in the region.

The bluffs and oak forests make this region very popular for deer hunting. Similarly, department properties here see a fair amount of hunting use. There are occasions where higher hunter numbers lessen the quality of the experience on public lands, especially during the deer gun season.

The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed	Perrot, Merrick, Wildcat Mountain, Willow River and Wyalusing State Park		Kinnickinnic State Park Fenley State Recreation Area Chippewa River State Trail	Coulee Experimental Forest Coon Creek Fishery Area La Crosse Area Comprehensive Fishery Area Borst Valley, Cylon, Dunnville, Kickapoo, Muddy Creek, St Croix Islands, Tiffany, Ten Mile Creek, Van Loon and Whitman Dam Wildlife Areas Western Prairie Habitat Restoration
Camping – primitive	Nelson Dewey State Park Hoffman Hills State Recreation Area Dunnville Wildlife Area Lake Pepin Wildlife Area	Wildcat Mountain State Park Tiffany Wildlife Area Van Loon Wildlife Area	Kinnickinnic, Perrot and Willow River State Parks Fenley State Recreation Area Chippewa River State Trail Great River State Trail Coulee Experimental Forest Muddy Creek Wildlife Area Kickapoo Wildlife Area	Wyalusing State Park Lower Chippewa River State Natural Area Coon Creek Fishery Area La Crosse Area Comprehensive Fishery Area Borst Valley, Cylon, St Croix Islands, Ten Mile Creek and Whitman Dam Wildlife Areas Western Prairie Habitat Restoration

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Picnicking	Kinnickinnic, Merrick, Nelson Dewey, Perrot and Wyalusing State Parks La Crosse River State Trail Coulee Experimental Forest Dunnville Wildlife Area Muddy Creek Wildlife Area	Wildcat Mountain and Willow River State Parks Hoffman Hills State Recreation Area Red Cedar and Chippewa River State Trails Lower Chippewa River and Nine Mile Island State Natural Areas Coon Creek Fishery Area La Crosse Area Comprehensive Fishery Area Cylon, St Croix Islands, Ten Mile Creek, Tiffany and Van Loon Wildlife Areas Western Prairie Habitat Restoration	Fenley State Recreation Area Great River State Trail Champion Valley Timber Demo Forest Kickapoo Wildlife Area	Borst Valley Wildlife Area Whitman Dam Wildlife Area
Big game hunting	Nearly all department properties are open to big game hunting for at least some part of the season. State parks and trails have special regulations pertaining to when and where hunting is allowed on the property. Hunter walking trials are sometimes desired to reach different parts of the property, so adding trails could provide better opportunity for some hunters. In some cases, properties may be able to add parking to improve access for hunters,			
Bird and wildlife watching	All department properties are open to bird and wildlife watching. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. Nearly all department properties have opportunities to add at least some designated hiking trails or viewing area that would aide this activity.			
Gather mushrooms, berries, etc.	All department properties are open to gathering edibles. Depending on what the edible sought, some properties may be preferred over others. Generally, no infrastructure is needed or desired for harvesting. Some products found on state properties are not allowed to be harvested without permission.			
Nature Photography	All department properties are open to nature photography. Depending upon if the target is a landscape view or a rare butterfly perched on a blade of grass, some properties may be preferred over others. Viewing platforms may assist some photography and provide better vantage points from which to capture images of wildlife.			
Participating in nature-based education programs	Most department properties are well positioned to be used for nature-based education programs. Some schools use these outdoor classrooms to give students "hands-on" experiences with the outdoors. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. The following department properties may have potential to add access to make nature-based education programs more successful: Kinnickinnic, Merrick, Perrot, Nelson Dewey, Wildcat Mountain, Willow River and Wyalusing State Parks Coulee Experimental Forest Coon Creek Fishery Area La Crosse Area Comprehensive Fishery Area Hoffman Hills and Fenley State Recreation Areas Red Cedar, La Crosse River and Chippewa River State Trails Muddy Creek and Dunnville Wildlife Areas			

SUMMARY OF THE MISSISSIPPI RIVER CORRIDOR REGION ROA

The topography and the riverine systems make the Mississippi River Corridor Region unique and draws a variety of outdoor recreationists, particularly for those in the Minneapolis-St. Paul Metro Area. The many rivers draining to the Mississippi draw trout fisherman from throughout the Midwest. These same rivers also attract a growing sector of paddlers to the area while the hills and valleys are attractive to mountain bikers. With the high-quality habitat for game and non-game species, hunting opportunity remains high, as does wildlife viewing. Hosting a diverse set of regional linear and loop trails, the region could expand existing and create new trail areas.

Although the region is rich in current opportunities, a variety needs were expressed by residents. Topping the list of needs are: hiking, walking, and running trails, bicycling trails, cross-country skiing, hunting, fishing, camping and other non-consumptive activities.

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Mississippi River Corridor Region. In general, the department believes the following property groups are well-suited to provide the identified needs in the region:

STATE PARKS AND RECREATION AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Cross-country ski trails could be established and/or expanded on existing trails.
- Developed camping, including adding electrified sites to significant portions of campgrounds.
- Primitive camping to connect visitors to the myriad of lakes and rivers in the region.
- Picnic areas and wildlife viewing areas could be developed to meet the demand of day-users.
- Walk-in access to waterways for canoe/kayak users could be developed.

STATE TRAILS

- Hiking/walking/running loop trails of varying lengths.
- Cross-country ski trails could be established and/or expanded on existing trails.
- Paved bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Primitive camping to enable trail users to take multi-day trips.
- Picnic areas could be developed or expanded at trailhead areas.

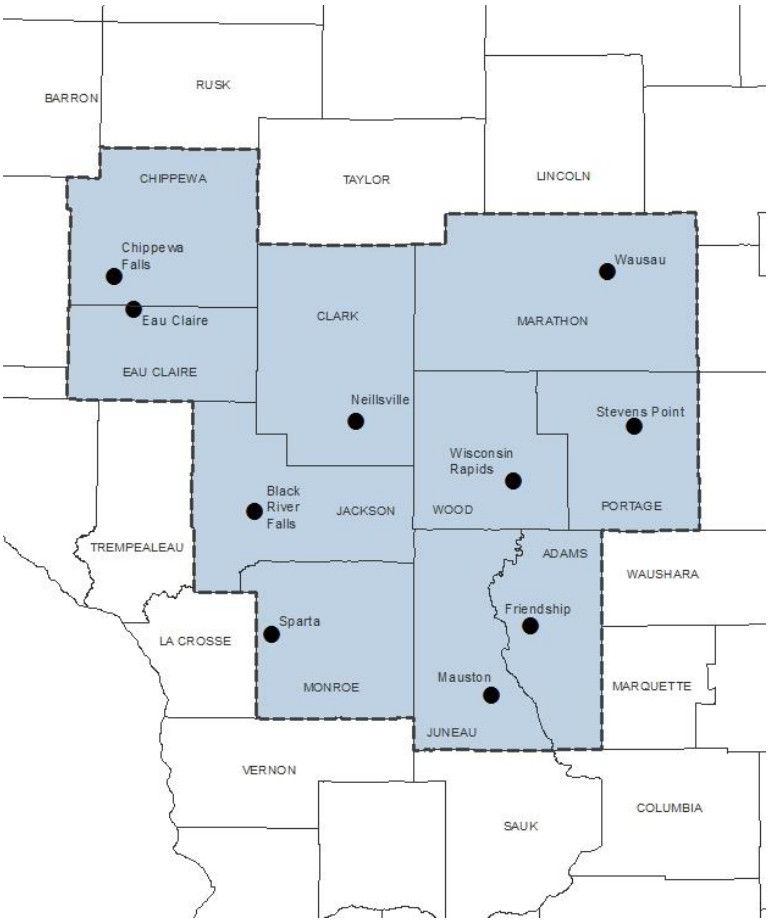
STATE FORESTRY PROPERTIES

- Hiking/walking/running loop trails of varying lengths.
- Cross-country ski trails could be established.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Picnic areas and wildlife viewing areas could be developed in areas not interrupting forestry operations.
- Primitive camping, allowing visitors to escape and surround themselves with the natural world.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths.
- Cross-country ski trails could be established and/or expanded on existing trails.
- Primitive camping, allowing visitors to escape and surround themselves with the natural world.
- Walk-in access to waterways for canoe/kayak users could be developed.

Recreation Opportunities Analysis



WESTERN SANDS REGION

6. Western Sands Region

Background

Landscape Setting

The Western Sands Region is in the west-central part of the state and encompasses Adams, Chippewa, Clark, Eau Claire, Jackson, Juneau, Marathon, Monroe, Portage and Wood counties. Outside of northern Wisconsin's abundant wilderness and water resources, the Western Sands Region has the third largest amount of public lands and water in the state. These areas include the Black River State Forest, several County Forests, Necedah National Wildlife Refuge, and the Wisconsin, Chippewa and Black Rivers. Although the region remains largely rural, it is influenced by outside tourism demands from the Chicago and Twin Cities metropolitan areas. Easy highway access and relatively cheap land prices within the region have made it a popular location for seasonal home development. The region's Non-Metro Recreation Counties, Adams and Juneau, have experienced especially high housing growth, particularly along river flowages.

In the middle of this region is the vast, remarkably flat, sandy plain that was once the bed of Glacial Lake Wisconsin. This lake, ringed by the Driftless Area to the southwest and the glacier to the north and east, was 70 to 150 feet deep and covered over 1,800 square miles. Streams and rivers draining from the glacier into the lake carried enormous loads of sand, silt, and clay that settled onto the lake bottom. The lake is believed to have drained catastrophically when the ice dam along its southern end failed. This flush of water out of the lake carved the spectacular narrow, deep-sided gorges at Wisconsin Dells. Additional striking features across the region include castellated mounds scattered across the south-central portion of this landscape. These irregular bluffs are remnants of a sandstone escarpment and the result of the steady erosional forces of wind and water slowly wearing away the softer sandstone surrounding them. There are no large, naturally occurring lakes here, although there are a number of hydroelectric dams on the Wisconsin River that create large impoundments. The sandy plain is also characterized by sandy soils, dry forests, pine and oak barrens, large wetland complexes and significant tracts of public land. The center of the region has large concentrations of county forest, as well as state and federal lands. Combined with low population density, few roads, and a high percentage of forested cover, this provides for a different set of recreational opportunities.

The north tier of this region, the productive soils and moderate climate makes this the northern extent of predominantly agricultural land use. Remaining forests here tend to occur as fragments and are often quite small. Small kettle lakes are common on the moraines. These lakes are readily accessible to population centers in the Chippewa Valley and are experiencing increasingly intensive development pressure. In Clark and western Marathon counties, very few lakes exist, and the land takes on a more rolling nature. Many small creeks and rivers flow across this area, creating a dendritic drainage system. Soils are diverse and range from sandy loam to loam and shallow silt loam. In contrast, the southwest area is highly eroded and unglaciated.

Local Economy

The major land use in the Western Sands Region is forest, followed by agriculture. Much of the existing forest in the central and southern portions of the region is comprised of oak, aspen and pine. Timber management is focused on pulp production, giving rise to an abundance of pine plantations. Agricultural activities in the central sands are dominated by extensive commercial cranberry and crop production through the use of center-pivot irrigation on drained soils. Due to the abundance of bogs, the region is also a hotspot for the commercial harvest of sphagnum moss. Along with the extensive dairy operations in the northern part of the region, there is ginseng production centered around Wausau. Towards the western side of the Western Sands Region, agricultural activities, namely dairy and beef production, are available on valley floors and ridge tops.

Top employment sectors of the regional economy include trade, transportation and utilities, manufacturing, education and health services, government, professional and business services and leisure and hospitality.

Recreation Uses and Participation

The Western Sands Region receives substantial public use for a variety of recreation activities, due largely to the amount of public land in the central forested area. The region boasts over 430,000 acres of county forest. Public forests offer opportunities for hiking and bird watching, which comprise a large portion of the recreational demand from local and out-of-town visitors. The eastern portion of the region is less densely populated than its surrounding areas and thus used heavily for hunting and fishing.

The northern part of the region has historically provided only limited public recreation opportunities. But, with the growth of the Fox Valley and several western and central Wisconsin cities, this area is under increasing pressure to meet growing recreation demands. Given the gentle topography and silt-loam soils, this landscape has great potential to provide off road biking, cross-country skiing, nature study, horseback riding, fishing, hunting and other outdoor activities. Access to the major rivers for boating and canoeing is in high demand. In the center of the region, an ample supply of trails helps foster other popular activities such as the use of all-terrain vehicles and snowmobiles. Clark and Jackson counties are especially well known for their motorized recreation opportunities.

Many shallow-water areas within large public properties offer fishing, canoeing, kayaking, waterfowl observation, and hunting opportunities. The Black River is a popular canoeing destination. Coldwater streams found throughout the region also support high quality trout fisheries and receive substantial use by anglers.

Recreation participation rates for Wisconsin residents as a whole were presented on page 14 of the Introduction. The majority of participation rates of Western Sands Region residents are consistent with the state average or within five percentage points in variation. Notable differences to the state average are shown in the box to the right.

Activities that residents of the Western Sands Region participate in at <u>higher</u> rates than the state average:

- Hunting – big game

Activities that residents of the Western Sands Region participate in at <u>lower</u> rates than the state average:

- Sailing/stand-up paddle boarding
- Downhill skiing/snowboarding
- Visiting a dog park
- Personal water craft – jet ski

Existing Recreation Supply in the Western Sands Region

Public Lands for Outdoor Recreation

The Western Sands Region has approximately 750,000 acres of public land available for outdoor recreation. The central forested areas and large river systems accommodate a variety of recreational activities. This section briefly describes the public conservation and recreation lands in the Western Sands Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The U.S. Fish and Wildlife Service manages just nearly 97,000 acres in the Western Sands Region. The properties are largely used for waterfowl production, forest production, wildlife habitat, outdoor recreation, water quality and fisheries habitat.

b) State

The Department of Natural Resources owns just over 221,000 acres and holds public access easements on approximately 13,000 acres in the Western Sands Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum, properties such as Hartman Creek and Buckhorn State Parks provide well-developed recreation settings with developed campgrounds, miles of trails, picnic areas, swim areas and boat launches. In addition, properties like the Black River State Forest also contribute to the extensive trail network for hiking, biking, ATV/UTV riding and other activities.

At the other end of the spectrum are properties like Quincy Bluff and Wetlands State Natural Area, which boast a unique mosaic landscape of wet-mesic forest, sedge meadow, pine barrens, shrub-carr and sand prairie. These types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching and nature study, but their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

The State Board of Commissioners of Public Land (BCPL) owns over 400 acres in the region. These lands are scattered throughout the region in tracts typically several hundred acres or smaller in size. The BCPL manages its lands primarily for forest products. Many of the BCPL lands are isolated or contain wetlands and generally have limited recreation potential.

c) County

The Western Sands Region is home to over 430,000 acres of county forest located across the region, including those in Chippewa, Clark, Eau Claire, Jackson, Juneau, Marathon, and Wood counties. These large blocks of forest land provide a variety of benefits including forest products, fisheries and wildlife habitat, many types of outdoor recreation and water quality protection.

Most of the counties in the region manage parks that provide campgrounds, boat launches, and other types of infrastructure to support recreation.

d) Other

Many cities, villages and townships in the Western Sands Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. The Stevens Point area and City of Eau Claire each have extensive trail networks that continue to grow in urban areas. Other larger municipalities in the region are actively developing trails due to the demand in their communities. In addition, several school forests in the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Forest Legacy program easements

Approximately 12,280 acres in Adams County and another 1,300 acres in Marathon County are part of the Forest Legacy program, which is designed to identify and protect environmentally important private forestlands threatened with conversion to non-forest uses (such as subdivision for residential or commercial development). To help maintain the integrity and traditional uses of private forestlands, the Forest Legacy Program promotes the use of conservation easements.

b) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs is found across the region, with the majority concentrated in Adams and Marathon Counties. Approximately 103,000 acres in the region are currently enrolled in these programs. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire.

c) Land trusts

These land trusts operate in the Western Sands Region: Ice Age Trail Alliance, North Central Conservancy Trust, The Conservation Fund, The Prairie Enthusiasts, Chippewa County Land Conservancy, West Wisconsin Land Trust, and Mississippi Valley Conservancy. These non-profit conservation organizations have protected over 1,600 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

d) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping, and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. 2014 funds are administered and provided by U.S. Department of Agriculture NRCS. To date, there are over 4,000 acres available in the Western Sands Region.

e) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 3,816 miles of snowmobile trail in the Western Sands region, of which 93% (3,531 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Western Sands Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the ten counties of the region.

The Western Sands Region contains a large amount of public land, largely forested. These properties provide a wide range of high-quality recreation opportunities. What follows are examples of infrastructure in the Western Sands Region that support a variety of recreation activities.

a) Black River State Forest

- 3 family campgrounds, 97 family campsites, 2 group campgrounds
- Designated swimming and picnic areas
- 34 miles of ATV, UTV and motorcycle trails
- 29 miles of biking trails
- 24 miles of groomed ski trails
- 48 miles of snowmobile trails
- Hunting and fishing opportunities

b) Buckhorn State Park

- 4 miles of trails
- 68 family campsites
- Picnic/day use areas, 300-foot swim area and boat launches
- Fishing, hunting, and trapping opportunities
- Skiing and ice fishing opportunities

c) Lake Wissota State Park

- Hiking, biking, and horseback riding trails
- 116 wooded, secluded family campsites
- Four picnic shelters, swimming beach and a boat launch
- Hunting, trapping, fishing and nature study opportunities

d) Rib Mountain State Park

- Picnic areas, amphitheater and observation tower
- Hunting and trapping opportunities
- Hiking and snowshoeing opportunities

e) George W. Mead Wildlife Area

- Trapping and migratory bird, small game and big game hunting opportunities
- Dog training and trialing areas
- Hiking, biking, cross-country skiing and snowshoeing opportunities
- Bird and wildlife viewing, gathering/harvesting edibles and nature study opportunities

f) Elroy-Sparta Trail

- The first rail-to-trail in the United States – featuring three rock tunnels and five small towns
- Hiking, biking, cross-country skiing and snowshoeing opportunities
- Snowmobiling trails
- Two non-reservable campgrounds

g) Jackson County Forest

- 5 campgrounds with almost 300 campsites
- Hiking, ATV, motorcycle, ***snowmobile*** and horse riding trails
- Scuba diving at the state's deepest lake, Wazee Lake

h) *Marathon County Forest, Nine Mile Unit*

- Hiking, mountain biking, cross-country skiing, and snowshoeing opportunities
- Horseback riding trails
- ***Range for trap, target shooting and archery***
- ***Snowmobiling opportunities***

PUBLIC INPUT ON RECREATION NEEDS IN THE WESTERN SANDS REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted four public open house meetings, in Eau Claire, Stevens Point, Onalaska, and Appleton between October 23 and November 1, 2017. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Western Sands Region.

In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from October 6 to November 17, 2017. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[14]

The department received comments in the following formats:

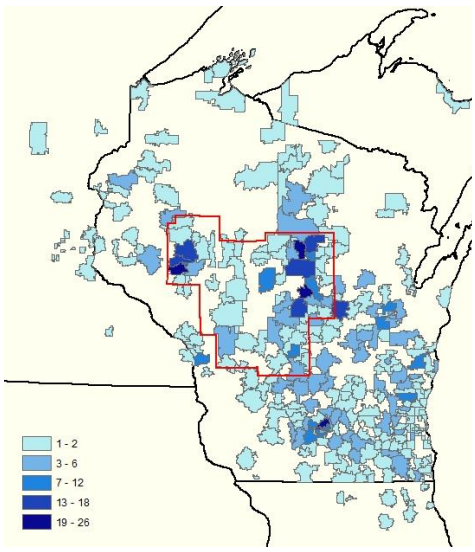
- 856 online public input forms
- 98 paper copies of the public input form
- 4 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

[14] The public input form was available for anyone to complete and over 900 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active, interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 954 respondents compare to the population of the ten-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map at right shows their distribution and frequency. For the most part, the primary residence of many people who provided input is within the ten-county Western Sands Region. The map to the right depicts that comments came from the more urbanized areas surrounding Eau Claire-Chippewa Falls, Stevens Point and Wausau. There was also a fair distribution of respondents from outside the region from southern and eastern Wisconsin.

Number of input forms submitted, by zip code



Almost 19% of respondents identified themselves as living in in Dane County. About 8% of respondents were from Marathon County and all remaining counties represented 6% or less of the whole. Of all the regions in this analysis, the Western Sands Region had the fewest total number of respondents to the questionnaire.

The department sought and received the following feedback about recreation in the Western Sands region. From central forests to the rugged southwest areas of the region, visitors will find much to explore. Proximity to urban centers combined with the large amount of public land is slowly shaping the Western Sands Region into a recreation destination.

Participation in outdoor recreation

Respondents to the public input form participate in many outdoor recreation activities. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table at right were the more popular activities that the SCORP survey indicated residents in the Western Sands Region participate. Respondents who engage in activities that are not bolded participated in this public input opportunity at a higher rate than what is reflected by the regional average. As can be seen, the activities that respondents to the ROA input form participate in resemble the results of the random sample of Western Sands Region residents generated by the SCORP survey.

Popular recreation activities in which respondents to the ROA input form participate

- **Bicycling – surfaced trails**
- Bicycling – mountain biking, single track
- **Camping – tent**
- Camping – RV/pop-up
- **Canoeing/kayaking**
- Cross-country skiing/ snowshoeing
- **Fishing – from a boat, canoe or kayak**
- **Hiking, walking, running on trails**
- Horseback riding
- **Swimming**
- **Wildlife/bird watching**

Properties that people visit

There are almost 750,000 acres in public ownership in the Western Sands Region between state, federal and county lands, third highest of all the ROA regions. Of the people that submitted information through the public input opportunity, over half had walked the Ice Age Trail and 40% had visited the Black River State Forest and Rib Mountain State Park in the last three years. About one third of respondents visited Hartman Creek State Park and the Elroy Sparta State Trail. Other popular properties included Marathon and Portage County Parks, the Necedah National Wildlife Refuge, and Roche-a-Cri and Buckhorn State Parks.

Factors important in determining favorite places to visit

Of the people providing input, the majority (71%) selected (1) the quality of trails as one of the top four most important factors in determining their favorite property to visit. This is expected, given that many respondents noted their participation in a variety of trail activities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) good maps, signs or information about the property, and (4) the quality of the habitat.

Additional outdoor recreation opportunities needed

Almost 80% of respondents believe that more recreational opportunities are needed in the Western Sands Region. Of the additional opportunities desired by respondents, five of the top six choices selected were trail-related. Again, this speaks to the respondents' participation in a variety of trail activities. The opportunity that was most frequently selected as needed in the Western Sands Region was more trails for hiking, walking or running, which was selected by 36% of respondents.

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities. The public input received as part of the ROA showed a similar pattern in the Western Sands Region. For example, a strong majority (80+%) of people who either ride single-track mountain bikes or horses believe there is a need for more single-track mountain bike or equestrian trails, respectively, in the Western Sands Region. Additionally, many horse trail supporters also noted a need for "horse campgrounds".

A growing voice within the Western Sands Region is that of rock climbers. Rock climbing fell just short of the top ten most frequently identified recreation opportunities needed in the Western Sands region. Once again, most of those who identified themselves as climbers noted a need for legal access to climbing opportunities.

Top 10 most frequently identified recreation opportunities needed in the Western Sands Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	348
More natural surface (dirt) bicycling trails	226
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	218
More horseback trails	200
More paved bicycling trails	184
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	150
More public shore access to lakes & streams	123
More developed campgrounds (electric hook-ups, flush toilets, showers)	116
More local parks and playgrounds	83
More wildlife watching decks or platforms	78

Department-managed roads and motorized access

Over 600 miles of roads exist on department properties in the Western Sands Region, most of which are either maintenance access drives. Generally, these roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. About one-third (215 miles) of these roads are open to the public to drive "street-legal vehicles"—this includes cars, pick-up trucks, SUVs, motorcycles and other licensed vehicles. By state law, these roads are also open to horses, horse-drawn vehicles and bicycles. Many local units of government in the Western Sands Region have authorized some types of motorized recreational vehicles on designated local roads and trails, amounting to over 2,600 miles of access.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to "street-legal" vehicles in the Western Sands Region to motorized recreation vehicles.[15] About 42% of people that provided responses believed that all DNR roads should remain closed to motorized recreational vehicles. Of the 51% that supported allowing at least some motorized recreational vehicles on DNR roads, almost half thought that this access should be on a subset of roads that connect larger regional motorized recreation networks. In addition, 27% of these respondents supporting opening roads thought opening should occur to provide access during the fall hunting season (Sept 1 to Dec 31).

[15] For purposes of the ROA, "recreational vehicles" includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

Input gathered as part of the Wisconsin SCORP

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- local parks and playgrounds

Respondents living in the ten counties in the Western Sands Region identified the following needs, among others, at a higher rate than the state average:

- equestrian trails
- trails for motorized recreation
- public campsites

Western Sands residents identified the following needs, among others, less frequently than the state average:

- hiking/walking/running trails
- bicycling trails
- public shooting ranges
- outdoor courts for tennis, handball, basketball

Future recreation needs in the Western Sands Region

The Western Sands Region has a variety of existing opportunities for most types of outdoor recreation. The diversity of the country-side between agriculture, forest cover, wetland complexes and various water resources allows for this variety of opportunities. There are a few clusters of urban areas with a population searching for nearby places to recreate. The amount of public land available for outdoor recreation is less than regions to the north, but still sufficient to offer opportunities to recreate outdoors. The main large block of public land is in the central forested area composed of county forests, the Black River State Forest and the Necedah National Wildlife Refuge. Future recreation needs seem to be those that are more trail related, and in many cases, these needs appear to be for “loop trail” experiences on smaller public properties (1000 acres or less). There also seems to be a theme of developing access to unique natural resource areas. Being able to experience the outdoors in a variety of ways, whether it is by land or water. The growing popularity of smaller watercraft suggests that more and more people are finding ways to enjoy the water.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (October 6 to November 17, 2017).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Western Sands Region – High	Future recreation needs in the Western Sands Region - Medium	Future recreation needs in the Western Sands Region - Low
Bicycling - bicycle touring/road riding	ATV/UTV riding	Bicycling - fat tire/snow biking
Bicycling - mountain biking/off-road biking	Dog training	Dog sledding/skijoring
Bird or wildlife watching	Dog trialing	Geocaching
Camping - developed	Fishing - ice fishing	Horse cart driving
Camping - primitive	Four-wheel vehicle driving	Sailing, windsurfing, rowing, stand-up paddling
Canoeing or kayaking	Gather mushrooms, berries, etc.	Scuba diving/snorkeling
Cross country skiing	Hunting - migratory birds	Snowmobiling
Dog walking	Hunting - small game	Target shooting - archery
Fishing - lake fishing from a boat, canoe or kayak	Hunting - turkey	Trapping
Fishing - lake fishing from shore or a pier	Motorboating (waterski/tubing, personal watercraft)	Visiting a beach, beach walking
Fishing - river fishing from a boat, canoe or kayak	Nature photography	Whitewater rafting
Fishing - stream or river fishing from shore or wading	Off-highway motorcycle riding	
Hiking, walking, trail running, backpacking	Participating in nature-based education programs	
Horseback riding	Rock climbing	
Hunting - big game	Target shooting - firearms	
Picnicking		
Snowshoeing		
Swimming in lakes and rivers		

Opportunities to meet future recreation needs in the Western Sands Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Western Sands Region to meet a variety of ecological and recreation goals. Since the region has fewer large blocks of public land, many of these experiences tend to be less remote than in the regions to the north. The central forested region, however, plays an important role in meeting the demand for activities that require large land areas. Proximity to population centers makes many of the small and moderately sized department properties popular with local residents. These properties are quick and easy to get to and have good points of access.

Applying the regional needs listed above, the department evaluated the properties it manages in the Western Sands Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be “good fits” to provide different activities will be used to help focus the department’s work developing and updating property master plans. A description of opportunities to meet recreation needs in the Western Sands Region (on department-managed lands) follows.

NON-MOTORIZED TRAIL RECREATION

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Western Sands Region. From hiking and biking in the summer to cross-country skiing in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

Participation in mountain biking has grown recently in the region and demand exists for trails suitable for a variety of skill levels. As opposed to recreational bicycle touring, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. Mountain biking trails are constructed, narrow trails less than two feet wide.

Hiking, walking, and running on trails in the region remain very popular activities. Many opportunities currently exist on department properties throughout the region. Urban centers in the region are actively adding trails to meet the local demand in their communities. The Ice Age Trail runs through parts of the region and planning is underway to link to communities to supply services needed by through-hikers.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, some of these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential "good fits" in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Western Sands Region, cooperatively managed trails include:

- Hillsboro State Trail
- Mountain-Bay State Trail
- Old Abe State Trail
- Tomorrow River State Trail

Horseback riding is in demand in the region and opportunities potentially exist to develop trails on department properties especially where camping is available and allowed with horses.

The following table lists current and potential future opportunities for non-motorized trail activities

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - mountain biking/off-road biking	Black River State Forest Buffalo River State Trail	Brunet Island and Lake Wissota State Parks Chippewa River, Elroy-Sparta and La Crosse River State Trails Buckhorn, Mc Millan, Mead, Meadow Valley, Sandhill and Wood County Wildlife Areas	Rib Mountain and Mill Bluff State Parks Big Rib River Fishery Area Dewey Marsh, North Bend Bottoms, South Beaver Creek and West Taylor Wildlife Areas	Buckhorn and Rocky Arbor State Parks Chippewa Moraine State Recreation Area Big Creek, Plover River and Emmons Creek Fishery Areas Augusta, Buena Vista, Colburn, Dell Creek, Leola Marsh, Paul Olson and Yellow River Wildlife Areas Central Wisconsin Grassland Conservation River Area

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/ road riding	Black River State Forest	Brunet Island, Buckhorn, Lake Wissota, Mill Bluff, Rib Mountain and Roche-A-Cri State Parks The 400, Buffalo River, Chippewa River, Elroy-Sparta and La Crosse River State Trails Mc Millan, Mead, Meadow Valley, Sandhill and Wood County Wildlife Areas	Dewey Marsh Wildlife Area	Rocky Arbor State Park Chippewa Moraine State Recreation Area Big Rib River and Big Creek Fishery Areas Augusta, Buckhorn, Buena Vista, Colburn, Dell Creek, Leola Marsh, Paul Olson, Tom Lawin and Yellow River Wildlife Areas Central Wisconsin Grassland Conservation Area
Cross-country skiing	Black River State Forest Mill Bluff, Buckhorn and Roche-A-Cri State Parks Chippewa River State Trail	Lake Wissota State Park Augusta, Dell Creek, Buckhorn, Meadow Valley, Sandhill, Tom Lawin and Wood County Wildlife Areas Quincy Bluff & Wetlands State Natural Area Dells of The Wisconsin River State Natural Area	Rib Mountain State Park Big Rib River, Big Roche-a-Cri, Duncan Creek, Elk Creek, Hay Creek, Lowes Creek, Mccann Creek, Sand Creek and Upper Neenah Fishery Areas Ten Mile Creek Streambank Protection Area Buena Vista, Dewey Marsh, Mc Millan, Mead and Paul Olson Wildlife Areas Central Wisconsin Grassland Conservation Area	Rocky Arbor State Park Chippewa Moraine State Recreation Area Buffalo River State Trail Colburn, Leola Marsh and Yellow River Wildlife Areas
Horseback riding	Buckhorn, Colburn, Leola Marsh and Yellow River Wildlife Areas	Lake Wissota State Park The 400 State Trail Buena Vista Wildlife Area	Black River State Forest Rib Mountain State Park Big Rib River, Elk Creek, Mccann Creek and Sand Creek Fishery Areas Augusta, Lake Hallie, North Bend Bottoms, South Beaver Creek, Tom Lawin and West Taylor Wildlife Area	Brunet Island, Buckhorn, Mill Bluff, Roche-A-Cri and Rocky Arbor State Parks Chippewa Moraine State Recreation Area Big Creek, Emmons Creek and Plover River Fishery Areas Dewey Marsh and Paul Olson Wildlife Areas Central Wisconsin Grassland Conservation Area
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			
Dog walking	Dog walking has similar characteristic as hiking. Dogs must be leashed on department properties except where the hunting season allows for using dogs. Nearly all department properties have opportunities to add trails designated for hiking. Properties closer to urban areas may provide better access to more people searching for dog walking opportunities.			
Snowshoeing	All department properties are open to snowshoeing, regardless if department properties have designated trails or not. Snowshoe use on groomed cross-country ski trails is usually not allowed.			

WATER RELATED RECREATION

There is fair demand for water related recreation in the Western Sands Region, including swimming, fishing and a variety of types of boating.

This region contains large rivers and several flowages created by hydroelectric dams that are popular for boating. There is also an abundance of tributary streams in the region to fish or to simply enjoy a day on the water. Although there are many existing boat launches that accommodate trailers with motorboats as well as carry-in access for canoes and kayaks, there are several opportunities for additional access sites on underserved waterways on department properties to meet regional demand.

The following table lists current and potential future opportunities for water related recreation.

Recreation Activity	
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. The following properties may have the potential to add more walk-in trails to access waterbodies with canoes or kayaks: Black River State Forest Big Rib River Fishery Area Big Roche-A-Cri Fishery Area Little Roche-A-Cri Fishery Area Mc Millan Wildlife Area Mead Wildlife Area North Bend Bottoms Wildlife Area Ten Mile Creek Streambank Protection Area Upper Neenah Fishery Area
Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. However, there are a limited number of lakes in the region and many of those are small kettle lakes. Department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. As such, there are few department properties that would be able to address this recreation activity. Other public land managers may be able to provide additional access. The following property may have potential to add more improved boat access sites (ramps for trailered boats): North Bend Bottoms Wildlife Area
Fishing - lake fishing from shore or a pier	All department lands with lakes are open to shore fishing and as such there are not significant opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access. The following properties may be able to provide opportunities: Chippewa River State Trail North Bend Bottoms Wildlife Area South Beaver Creek Wildlife Area

Recreation Activity	
Fishing - stream or river fishing from shore or wading	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels or to create disabled accessible fishing areas on the following properties: Black River State Forest Big Rib River Fishery Area Big Creek Fishery Area Chippewa River State Trail Emmons Creek Fishery Area North Bend Bottoms Wildlife Area Plover River Fishery Area Richard A Hemp Fishery Area Sand Creek Fishery Area South Beaver Creek Wildlife Area
Motorboating (waterski/ tubing, personal watercraft)	The department currently maintains improved boat launches throughout the region. However, the number of large waterbodies in the region that would be able to accommodate motorboating is limited. Department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. As such, there are no department properties that would be able to address this recreation activity. Other public land managers may be able to provide additional access.
Swimming in lakes and rivers	All department properties adjacent to public waters allow swimming. Many department properties, especially state parks and forests, have beaches, changing rooms and other amenities to accommodate swimming. The following department properties may be able to either add new opportunities for swimming access or expand existing: Black River State Forest North Bend Bottoms Wildlife Area

OTHER FORMS OF RECREATION

There appears to be demand for many other types of outdoor recreation in the Western Sands Region, including camping, picnicking, and big game hunting.

Camping in general is becoming more popular in this region. Being closer to urban centers, this region provides access to outdoor recreation with less time required to reach their destination. Primitive camping areas for those hiking the Ice Age Trail are in demand. Places to go for the day and picnic, or simply going for a walk to experience wildlife are also appearing to increase in popularity in the region. Local public land managers may be able to also meet the need for camping and picnicking areas.

Department properties here see a fair amount of use for hunting. There are occasions where higher hunter numbers lessen the quality of the experience, especially during the deer gun season. The blocks of county and state forest tend to see less competition.

The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed	Black River State Forest	Buckhorn, Brunet Island, Lake Wissota, Mill Bluff, Roche-A-Cri and Rocky Arbor State Parks Elroy-Sparta State Trail	Chippewa River State Trail	Chippewa Moraine State Recreation Area Big Rib River Fishery Area Augusta, Buena Vista, Colburn, Dewey Marsh, McMillan, Mead, Paul Olson and Tom Lawin Wildlife Areas
Camping – primitive	Black River State Forest Brunet Island State Park Chippewa Moraine State Recreation Area	Buckhorn State Park Roche-A-Cri State Park Meadow Valley Wildlife Area Wood County Wildlife Area	Chippewa River State Trail State Ice Age Trail Area properties Big Rib River, Duncan Creek, Elk Creek and Mccann Creek Fishery Areas Augusta, Dell Creek, Dewey Marsh, Lawrence Creek, McMillan, Mead, North Bend Bottoms, South Beaver Creek, Tom Lawin and West Taylor Wildlife Areas	Buena Vista Colburn, Leola Marsh, Paul Olson and Yellow River Wildlife Areas Central Wisconsin Grassland Conservation Area
Picnicking	Black River State Forest Rib Mountain State Park Big Rib River Fishery Area Elroy-Sparta and La Crosse River State Trails Meadow Valley Sandhill and Wood County Wildlife Areas	Chippewa Moraine State Recreation Area Chippewa River State Trail Brunet Island, Buckhorn, Lake Wissota, Mill Bluff Rocky Arbor and Roche-A-Cri State Parks Dells of The Wisconsin River and Ohmart Wetlands State Natural Areas	Dewey Marsh, McMillan and Mead Wildlife Areas	Central Wisconsin Grassland Conservation Area Augusta, Buena Vista, Colburn, Leola Marsh, Paul Olson, Tom Lawin and Yellow River Wildlife Area
Big game hunting	Nearly all department properties are open to big game hunting, at least some part of the season. State parks and trails have special regulations pertaining to when and where hunting is allowed in designated areas on the property. Hunter walking trails are sometimes desired to reach different parts of the property, so adding trails could provide better opportunity for some hunters. In some cases, properties may be able to add parking to improve access for hunters.			
Bird and wildlife watching	All department properties are open to bird and wildlife watching. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. Nearly all department properties have opportunities to add at least some designated hiking trails or viewing platforms that would aide this activity.			

SUMMARY OF THE WESTERN SANDS REGION ROA

With a diversity of public conservation lands within the diverse landscape, the Western Sands Region provides outdoor recreation for those looking for a mix of developed recreation facilities. Much of what recreationists look for can all be found here—regional trail networks for various forms of trail use, large properties for migratory bird and big game hunting, state and county park properties with camping, picnic areas and hiking trails, as well as waterways for boating and canoe/kayak use.

Although the region is rich in current opportunities, many needs were expressed by residents. Topping the list of needs are: hiking, walking, and running trails, developed and rustic campgrounds, picnic and wildlife viewing areas, as well as horseback riding, bicycle touring and mountain biking trails.

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Western Sands Region. In general, the department believes the following property groups are well-suited to provide the identified needs in the region:

STATE PARKS, FORESTS AND RECREATION AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Cross-country ski trails could be established and/or expanded on existing trails.
- Equestrian trails that either connect a network and/or are loop trails contained wholly in the property.
- Developed camping, including adding electrified sites to significant portions of campgrounds.
- Primitive camping to serve long-distance trail users and/or isolated sites in larger properties for wilderness-type camping for hunting, hiking and canoeing/kayaking.
- Picnic areas and wildlife viewing areas could be developed to meet the demand of day-users.
- Walk-in access to waterways for canoe/kayak users could be developed.

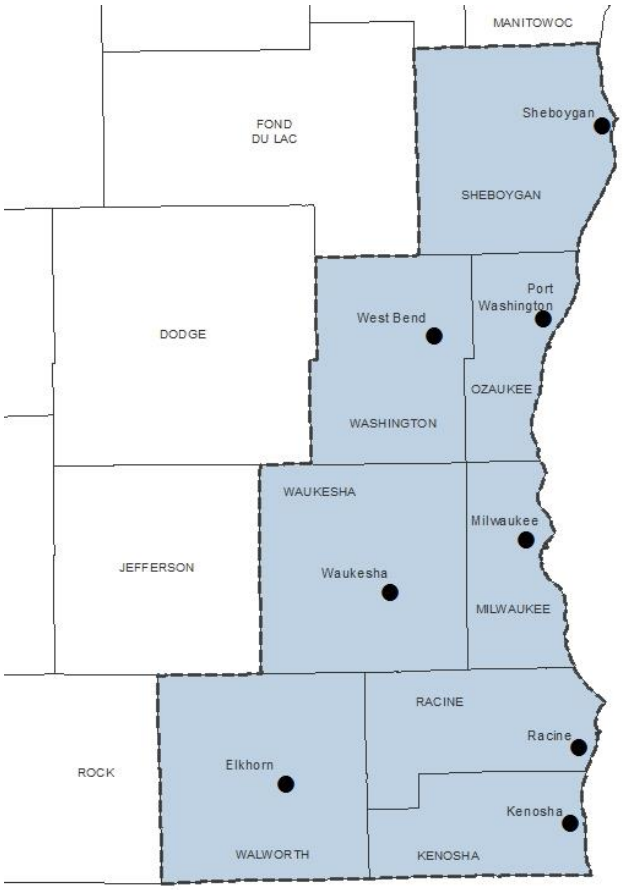
STATE TRAILS

- Hiking/walking/running loop trails of varying lengths.
- Cross-country ski trails could be established and/or expanded on existing trails.
- Primitive camping to enable trail users to take multi-day trips.
- Picnic areas could be developed or expanded at trailhead areas.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Equestrian trails that either connect a network and/or are loop trails contained wholly in the property.
- Cross-country ski trails could be established and/or expanded on existing trails.
- Primitive camping to serve long-distance trail users and/or isolated sites in larger properties for wilderness-type camping for hunting, hiking and canoeing/kayaking.
- Picnic areas and wildlife viewing areas could be developed to meet the demand of day-users.
- Walk-in access to waterways for canoe/kayak users could be developed.

Recreation Opportunities Analysis



LOWER LAKE MICHIGAN COASTAL REGION

7. Lower Lake Michigan Coastal Region

Background

Landscape Setting

The Lower Lake Michigan Coastal Region is in the southeast part of the state and encompasses Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington and Waukesha Counties. Home to Milwaukee, the largest city in the state, the Lower Lake Michigan Coastal Region is the most urban and most populous of all Wisconsin regions. The urban influence of Milwaukee and its surrounding suburbs has created demand for distinctly urban recreation facilities such as dog parks, city trails, and basketball courts. Despite this urban influence, some areas of the region such as Walworth County, the lakes area of western Waukesha County, and the Kettle Moraine State Forest offer opportunities for undeveloped outdoor recreation. Tourism, especially from the greater Chicago metropolitan area, is a major influence on Lower Lake Michigan Coastal recreation as increasing numbers of Illinois residents travel to the region to use Wisconsin lands and waters.

This region is also home to some of the world's best examples of continental glacial activity. Drumlins, eskers, kettle lakes, kames, ground and end moraines, and other glacial features are evident throughout the entire area. A particularly striking area is the long "ridge" (known as a kettle interlobate moraine) that formed between the Green Bay and Lake Michigan lobes during the Wisconsin Glaciation. The area is protected in part by the Kettle Moraine State Forest. Historically, many of the state's richest and most diverse streams and rivers were found in the southeastern part of Wisconsin. While most of these have been degraded, improving management practices have improved many of these waterways. However, the Mukwonago River has maintained its quality and harbors one of the highest concentrations of fish, mussels and other aquatic invertebrates in the Midwest.

To the east, the region is characterized by a lake plain along Lake Michigan that formerly harbored a mix of low woodlands, savanna and prairies. A series of low ridges, formed by advances in the Lake Michigan lobe of the last glacier, cause the few mid-sized rivers in the area to follow a course generally parallel to Lake Michigan. Today this area provides the setting for the Milwaukee-Chicago metropolitan corridor and is heavily urbanized. Some blocks of open space and natural settings occur, but are mostly fragmented, small, and often degraded by numerous invasive exotic species. The larger blocks of open space are primarily restricted to wet areas, two examples being the Germantown Swamp and the wetlands along the Des Plaines River. The Lake Michigan shoreline, although heavily developed, remains an important bird migration route and wintering area. The Milwaukee, Menomonee, Root, Pike and Des Plaines rivers harbor quality habitats along several stretches and their tributaries.

Local Economy

The major land cover in the Lower Lake Michigan Coastal Region is agricultural, followed by grassland. Most of the tillable land is intensively farmed, with dairying and cash-cropping of grains and vegetables being the predominant types of agriculture. Parts of the region are continuing to urbanize, with expanding household and commercial development in the Milwaukee area suburbs.

Some of the top employment sectors of the regional economy include education and health services, trade transportation and utilities, professional and business services, manufacturing, government, leisure and hospitality, and financial activities.

Recreation Uses and Participation

Lake Michigan is a major recreational resource for this region. It provides opportunities for fishing, swimming, wind-surfing, sailing and all types of boating. There are a number of parks in the area are located along Lake Michigan. Richard Bong State Recreation Area offers the widest variety of recreation activities of any state property, including canoe/kayaking, swimming, fishing, picnicking, camping, horseback riding, hiking, cross-country skiing, snowmobiling, motorcycling and hunting. Being a former military airbase, it is also an excellent example of how high-

quality recreation areas can be more a function of location, size, and soils that can accommodate a variety of activities, than "wild" settings.

Several rivers that empty into the lake, such as the Milwaukee, Root and Pike, also provide surprisingly good fishing that includes spring and fall runs of salmon and steelhead from Lake Michigan. Some urban recreational trails for walking, bicycling, and roller blading exist, such as the Root River in Racine and Oak Creek Parkways and the Hank Aaron State Trail in Milwaukee. As would be expected in an urbanized area, there is very little land available for open space recreation, such as camping and hunting. However, there are still many small patches of natural landscape left that could support activities such as bird watching and nature observation.

Activities that residents of the Lower Lake Michigan Coastal Region participate in at lower rates than the state average:

- Fishing – ice fishing
- RV/Pop up camping
- Snowmobiling

Recreation participation rates for Wisconsin residents as a whole were presented on page 14 of the Introduction. The majority of participation rates of Lower Lake Michigan Coastal Region residents are consistent with the state average or within five percentage points in variation. Some of the more notable variations are in the box to the right.

EXISTING RECREATION SUPPLY IN THE LOWER LAKE MICHIGAN COASTAL REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Lower Lake Michigan Coastal Region has approximately 95,000 acres of public land available for outdoor recreation. Properties in close proximity to Lake Michigan are especially popular, as well as other small pockets of land dispersed between the region's large urban centers. This section briefly describes the public conservation and recreation lands in the Lower Lake Michigan Coastal Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The U.S. Fish & Wildlife Service manages approximately 1,400 acres in the Lower Lake Michigan Coastal area, located in both Ozaukee, Sheboygan and Walworth counties. These parcels are reserved mainly for waterfowl production and grassland protection.

b) State

The Department of Natural Resources owns over 90,000 acres in the Lower Lake Michigan Coastal Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Kohler-Andrae and Harrington Beach State Parks that include developed campgrounds, miles of trails, boating opportunities and picnic sites. The Kettle Moraine State Forest State is a prominent property in this region, providing numerous trail and developed recreation opportunities. In contrast, properties like Cedarburg Bog State Natural Area, the most intact large bog in southeastern Wisconsin, housing a relict community of flora and fauna. Although these types of properties can provide some limited recreation opportunities for low-impact activities such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

c) County

The Lower Lake Michigan Coastal Region does not have any county forests, but county parks provide campgrounds, boat launches, walking trails and other types of recreational opportunities. For example, an impressive 172 parks in Milwaukee County totaling over 15,000 acres, provide opportunities for cross-country skiing, mountain biking and birding. Sheboygan county has also been active in recent years, developing over 39 miles of paved off-road, multi-use trails.

d) Other

Many cities, villages, and townships in the Lower Lake Michigan Coastal Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their easy proximity to many citizens and scenic views, these properties are very well-used. In addition, several school properties the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

Approximately 1,300 acres in the Lower Lake Michigan Coastal Region of land are currently enrolled in these forestry programs, divided between Ozaukee, Sheboygan, Walworth, and Washington counties. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire. MFL-closed land is not open for public use.

b) Land trusts

The following land trusts operate in the Lower Lake Michigan Coastal Region: Seno Kenosha/Racine Land Trust Conservancy, The Prairie Enthusiasts, Milwaukee Area Land Conservancy, River Revitalization Foundation, Ozaukee Washington Land Trust, Caledonia Conservancy, Glacial Lakes Conservancy, Ice Age Trail Alliance, Geneva Lake Conservancy, Kettle Moraine Land Trust, Land Trust Network, Cedar Lakes Conservation Foundation, Faye Gehl Conservation Foundation, Muskego Lakes Conservancy, Tall Pines Conservancy, and Waukesha County Land Conservancy. These non-profit conservation organizations have protected approximately 2,000 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

c) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. Funds from 2014 are administered and provided by U.S. Department of Agriculture-NRCS. To date, there are over 3,600 acres available in the Lower Lake Michigan Coastal Region. These properties are scattered throughout all counties except for Ozaukee and Milwaukee counties.

d) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 1091 miles of snowmobile trail in the Lower Lake Michigan Coastal region, of which 91% (996 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Lower Lake Michigan Coastal Region. In addition, department staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the eight counties of the region.

The Lower Lake Michigan Coastal Region contains fewer public land holdings than other, less urbanized regions. Specifically, the region is home to the Kettle Moraine State Forest, four state parks, several state fish and wildlife management properties, and trails. These properties provide a wide range of high-quality recreation opportunities. What follows are a few examples of infrastructure in the Lower Lake Michigan Coastal Region that support a variety of recreation activities.

a) Hank Aaron State Trail

- Connects Miller Park and the Lake Michigan lakefront
- Walking, bicycling and in-line skating opportunities

b) Kettle Moraine State Forest – Northern Unit

- 41 miles of equestrian and 60 miles of snowmobile trails
- Over 20 miles of mountain bike and 31 miles of hiking trails
- Over 20 miles of cross-country ski trails
- 4 campgrounds, 5 backpack shelters
- 3 swimming beaches
- Boat landings and walk-in access sites for canoes and kayaks
- Picnic and shelter areas

c) Kettle Moraine State Forest – Southern Unit

- Miles of hiking trails
- 87 miles of equestrian trails and horse camping
- 30 miles of renowned off-road biking trails
- Cross-country ski trails
- Boating, fishing and swimming opportunities
- Hunting opportunities and firearm target range
- Part of an 87-mile network of snowmobile trails

d) Kettle Moraine State Forest – Lapham Peak Unit

- Hausmann Nature Center
- Hiking and biking trails
- Observation tower and picnic areas
- Horseback riding opportunities
- Snowmaking for cross country skiing opportunities

e) Richard Bong State Recreation Area

- 200+ campsites
- 16 miles of hiking trails
- Picnic and shelter areas
- Horseback, ATV, UTV, and off-highway motorcycle trails
- 200-foot swimming beach and bath house, canoeing and kayaking
- Hunting, trapping, and fishing opportunities
- Special use zone for flying model airplanes, rockets, training falcons, etc.
- Cross-country skiing, sledding, and ice fishing in the winter

f) Kohler-Andrae State Park

- 100+ campsites
- Hiking opportunities – including nature trails, dune cordwalks, or along the Lake Michigan shoreline
- Picnic and shelter areas
- Hunting, trapping and fishing opportunities
- Bicycling areas
- Cross-country skiing and snowshoeing in the winter

g) Lakeshore State Park

- Hiking and walking trails with views of the Milwaukee skyline
- Paved trails for bicycling and skating
- 20-slip marina for mooring large boats
- Fishing opportunities
- Winter hiking, ice fishing and snowshoeing in the winter

h) State Wildlife, Fishery, and Natural Areas

- Hunting, fishing, and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

PUBLIC INPUT ON RECREATION NEEDS IN THE LOWER LAKE MICHIGAN COASTAL REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted four public open house meetings, in Baraboo, Horicon, Milwaukee, and Fitchburg between December 5th and 13th, 2017. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Lower Lake Michigan Coastal Region.

In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from November 15, 2017 to January 2, 2018. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[16]

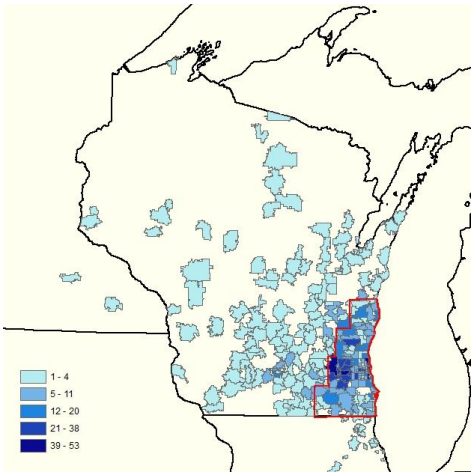
The department received comments in the following formats:

- 1,611 online public input forms
- 178 paper copies of the public input form
- 3 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map on the right shows their distribution and frequency. As can be seen, the primary residence of many people who provided input is within the eight-county Lower Lake Michigan Coastal Region. Over half of the respondents identified their primary residence as Waukesha County (54%) while almost a third were from Milwaukee County (29%). It is possible that proximity to the Kettle Moraine State Forest may have drawn many of these individuals to become interested in this input opportunity. In general, the overwhelming majority of respondents were from southeastern Wisconsin.

Number of input forms submitted, by zip code



[16] The public input form was available for anyone to complete and over 1,700 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 1,700+ respondents compare to the population of the ten-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

On the east side of the region, Lake Michigan is at the center of water-related outdoor recreation. On the west side of the region, the Kettle Moraine State Forest, with its large land base, is the primary location for many other outdoor activities to many in this region. Yet, between these two resources, the region is home to many other state and locally managed areas where people can recreate outdoors. The department received comments, perspectives and ideas on the following topics.

Participation in outdoor recreation

Respondents to the public input form participate in many outdoor recreation activities. Popular activities that were selected by respondents are seen in the table at right. We can compare these results with the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table were the most popular activities that the SCORP survey indicated residents in the Lower Lake Michigan Coastal Region participate in. The activities that respondents to the ROA input form participate in are similar to the results of the random sample of Lower Lake Michigan Coastal Region residents generated by the SCORP survey.

Popular recreation activities in which respondents to the ROA input form participate

Bicycling – surfaced trails
Bicycling – mountain biking, single track
Camping – tent
Canoeing/kayaking
Cross-country skiing/ snowshoeing
Fishing – from a boat, canoe or kayak
Fishing – from shore
Hiking, walking, running on trails
Swimming
Wildlife/bird watching

Properties that people visit

A small percentage of the Lower Lake Michigan Coastal Region is in public ownership, totaling over 95,000 acres. With a few exceptions, much of public lands are generally less than 2000-acre blocks. The most popular places to go among people who provided input are the Ice Age Trail, Kettle Moraine State Forest-Northern Unit, Southern Unit, Lapham Peak Unit and Pike Lake Unit, as well as the Glacial Drumlin and Hank Aaron State Trails. County park systems, including those in Milwaukee and Waukesha counties, were noted as popular places to recreate.

Factors important in determining favorite places to visit

Of the people providing input, the majority (76%) selected (1) the quality of trails as top of the four most important factors in determining their favorite property to visit. This is expected, given that many respondents noted their participation in a variety of trail activities. In decreasing order, the next three most important factors are: (2) the desire to be in a quiet place, (3) the quality of the habitat, and (4) good maps, signs or information about the property.

Top 10 most frequently identified recreation opportunities needed in the Lower Lake Michigan Coastal Region, based on public input gathered during the ROA process

Activity	# of responses
More hiking/walking/running trails	769
More paved bicycling trails	586
More natural surface (dirt) bicycling trails	412
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	390
More public shore access to lakes & streams	368
More local parks and playgrounds	279
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	225
More horseback trails	211
More wildlife watching decks or platforms	188
More developed campgrounds (electric hook-ups, flush toilets, showers)	183

Additional outdoor recreation opportunities needed

About 80% of respondents believe that more recreational opportunities are needed in the Lower Lake Michigan Coastal Region. Of the additional opportunities desired by respondents, the top three choices selected were for non-motorized trail-related uses. Primitive camping and more access to water also were identified as needs. The opportunity that was most frequently selected as needed in the Lower Lake Michigan Coastal Region was more trails for hiking, walking or running, which was selected by more than 40% of respondents.

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities. The public input received as part of the ROA showed a similar pattern in the Lower Lake Michigan Coastal Region. For example, 85% of those who identified themselves as ATV/UTV riders thought there was a need for more motorized recreation trails. Also, 55% of those who ride single track mountain bikes believe there is a need for more mountain biking trails in the Lower Lake Michigan Coastal Region. Lastly, about half of people who identified themselves as hikers/walkers/runners on trails thought that there was need for hiking/walking/running trails.

Interestingly, over 55% of those identifying themselves as canoe/kayakers desired more hiking, walking, running trails while only a third desired more public shore access to lakes and streams. A similar pattern occurs with respondents who cross-country ski, over half identifying a need for more hiking, walking, running trails. This occurrence may be simply due to respondents participating in multiple activities or that they identify that having more hiking, walking, running trails as an advantage to their primary activity.

Department-managed roads and motorized access

About 170 miles of roads exist on department properties in the Lower Lake Michigan Coastal Region. These roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. Over one-third (66 miles) of these roads are part of the property transportation network and open to the public at least part of the year to drive “street-legal vehicles” (this includes cars, pick-up trucks, SUVs, motorcycles and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to “street-legal” vehicles in the Lower Lake Michigan Coastal Region to motorized recreation vehicles.[17] About half of the people that provided responses believed that all DNR roads should remain closed to motorized recreational vehicles. Of the 39% that supported allowing motorized recreational vehicles on DNR roads, almost half thought that this access should be on a subset of roads that connect larger regional motorized recreation networks. In addition, about a quarter of these respondents supporting opening roads thought opening roads should occur to provide access during the fall hunting season (Sept 1 to Dec 31). Among those identifying themselves as big game hunters, 28% thought all roads should remain closed. Over a third of big game hunters who favored opening some roads to motorized use preferred that it connect to a regional motorized trail network while less than a third preferred motorized use during the fall hunting seasons.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- public campsites
- local parks and playgrounds

Respondents living in the eight counties in the Lower Lake Michigan Coastal Region identified the following activities, among others, at a higher rate than the state average:

- local parks and playgrounds

[17] For purposes of the ROA, “recreational vehicles” includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

Lower Lake Michigan Coastal residents identified the following activities, among others, less frequently than the state average:

- hunting opportunities

FUTURE RECREATION NEEDS IN THE LOWER LAKE MICHIGAN COASTAL REGION

The Lower Lake Michigan Coastal Region has an abundance of existing opportunities for most types of outdoor recreation. These opportunities are related to the diversity of public land ownership in the region. Even with the existing supply of opportunities available in the region, the public identified several future recreational needs. The public also expressed strong support to leverage existing opportunities to provide better and more recreational experiences for residents and visitors.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (November 15, 2017 to January 2, 2018).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Lower Lake Michigan Coastal Region – High	**Future recreation needs in the Lower Lake Michigan Coastal Region – Medium**	**Future recreation needs in the Lower Lake Michigan Coastal Region – Low**
Bicycling - bicycle touring/road riding	ATV/UTV riding	Dog sledding/skijoring
Bicycling - mountain biking/off-road biking	Bicycling - fat tire/snow biking	Dog training
Bird or wildlife watching	Camping – developed	Dog trialing
Camping - primitive	Dog walking	Horse cart driving
Canoeing or kayaking	Fishing - ice fishing	Hunting - migratory birds
Cross country skiing	Fishing – river fishing from a boat, canoe or kayak	Hunting - small game
Fishing - lake fishing from a boat, canoe or kayak	Fishing - stream or river fishing from shore or wading	Hunting - turkey
Fishing - lake fishing from shore or a pier	Four-wheel vehicle driving	Rock climbing
Gather mushrooms, berries, etc.	Geocaching	Scuba diving/snorkeling
Hiking, walking, trail running, backpacking	Horseback riding	Snowmobiling
Motorboating (waterski/tubing, personal watercraft)	Hunting – big game	Target shooting – firearms
Nature photography	Off-highway motorcycle riding	Trapping
Picnicking	Participating in nature-based education programs	Whitewater rafting
Snowshoeing	Sailing, windsurfing, rowing, stand-up paddling	
Swimming in lakes and rivers	Target shooting - archery	
	Visiting a beach, beach walking	

Opportunities to meet future recreation needs in the Lower Lake Michigan Coastal Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Lower Lake Michigan Coastal Region to meet a variety of ecological and recreation goals. These properties are largely influenced by the ecological landscape and presence of Lake Michigan. There are a variety of types of properties that provide a range of settings and experiences.

Applying the regional needs listed above, the department evaluated the properties it manages in the Lower Lake Michigan Coastal Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be "good fits" to provide different activities will be used to help focus the department's work developing and updating property master plans. A description of opportunities to meet recreation needs in the Lower Lake Michigan Coastal Region (on department-managed lands) follows.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, some of these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential "good fits" in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Lower Lake Michigan Coastal Region, cooperatively managed trails include:

- Eisenbahn State Trail
- White River State Trail – Racine County
- White River State Trail – Walworth County

Non-motorized trail recreation

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Lower Lake Michigan Coastal Region. From hiking and biking the state trails in the summer to cross country skiing at the state forests in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

An extensive network of state trails traverse the region, allowing riders miles and miles to explore – from Lake Michigan to Madison. Hiking, walking, and running on trails in the region also remain very popular activities. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers are likely to be most frequently used.

Participation in mountain biking has also grown recently in the region and demand exists for trails suitable for a variety of skill levels. As opposed to recreational bicycling, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. Mountain biking trails are constructed, narrow trails less than two feet wide.

Cross-country skiing is popular in this area of the state, however the reduced amount of snow the region receives and shorter winter season makes it challenging to have quality trails. Outside of the snow-making capabilities at Kettle Moraine State Forest-Lapham Peak Unit, skiers depend on adequate snowfall to provide skiing opportunities. Even though the season may be shorter than northern parts of the state, there are many opportunities on department properties to expand groomed trail networks or create new ones.

The following table lists current and potential future opportunities for non-motorized trail activities:

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/ road riding	Harrington Beach and Kohler-Andrae State Parks Kettle Moraine State Forest-Lapham Peak Unit Havenwoods State Forest Hank Aaron State Trail	Kettle Moraine State Forest – Northern Unit and Southern Unit Paradise Valley Wildlife Area	Kettle Moraine State Forest – Loew Lake Unit, Mukwonago River Unit and Pike Lake Unit	Allenton Marsh, Jackson Marsh and Theresa Wildlife Areas Onion River Stream Bank Protection Area
Bicycling - mountain biking/off-road biking	Onion River Stream Bank Protection Area	Kettle Moraine State Forest – Northern Unit, Southern Unit, and Lapham Unit Paradise Valley Wildlife Area	Kettle Moraine State Forest – Mukwonago River Unit	Kettle Moraine State Forest – Loew Lake Unit Allenton Marsh, Jackson Marsh and Theresa Wildlife Areas
Cross-country skiing	Havenwoods State Forest and Kettle Moraine State Forest – Lapham Peak Unit Hank Aaron State Trail Honey Creek and Onion River Stream Bank Protection Areas La Budde Creek Fishery Area	Kettle Moraine State Forest – Northern and Southern Units Cedarburg Bog and Lulu Lake State Natural Areas	Kettle Moraine State Forest – Loew Lake and Mukwonago River Units State Ice Age Trail Areas Allenton Marsh, Big Muskego Lake, Bloomfield, Clover Valley, Honey Creek, Jackson Marsh, Lyons, New Munster, Paradise Valley, Theresa, Turtle Valley and Vernon Wildlife Areas	Tichigan and Turtle Creek Wildlife Areas
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			
Snowshoeing	All department properties are open to snowshoeing, regardless if department properties have designated trails or not. Snowshoe use on groomed cross-country ski trails is usually not allowed.			

WATER RELATED RECREATION

In addition to trail-based activities, there is considerable demand for water related recreation in the Lower Lake Michigan Coastal Region, including motorboating, fishing, swimming, and canoeing or kayaking.

Given Lake Michigan and the number of streams in the region, fishing and boating have long been among the more popular outdoor activities here. Although there are many existing boat launches (both sites that accommodate trailers with motorboats as well as carry-in access for canoes and kayaks) there are several opportunities for additional access sites on underserved waterways on department properties to meet the demand. Depending on the waterway, foot access for fishing may be sufficient. In other cases, primitive canoe access or developed boat landings may be what is needed for additional access.

The following table lists current and potential future opportunities for water related recreation.

Recreation Activity	
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. The following properties may have the potential to add more or better develop walk-in trails to access waterbodies with canoes or kayaks: Honey Creek Wildlife Area Jackson Marsh Wildlife Area Kettle Moraine State Forest – Mukwonago River Unit New Munster Wildlife Area Onion River Stream Bank Protection Area Theresa Wildlife Area
Fishing - lake fishing from a boat, canoe, or kayak	The department currently maintains improved boat launches throughout the region. Many department properties connecting to these waterbodies either already have boat accesses or have no feasible way to create more. There are a few department properties that would be able to help address this recreation activity. Other public land management agencies may be able to provide additional access as well. The following properties may have potential to add more improved boat access sites (ramps for trailered boats): Honey Creek Wildlife Area Kettle Moraine State Forest – Mukwonago River Unit Onion River Stream Bank Protection Area
Fishing – lake fishing from a shore or pier	All department lands with streams or rivers are open to shore fishing and as such there are not opportunities to expand this opportunity at existing properties. There may be opportunities to expand shore fishing opportunities through the acquisition of key parcels or to create disabled accessible fishing areas on the following properties: Honey Creek Wildlife Area Kettle Moraine State Forest – Mukwonago River Unit Kettle Moraine State Forest – Northern Unit Onion River Stream Bank Protection Area Tichigan Wildlife Area
Swimming in lakes and rivers	All department properties adjacent to public waters allow swimming. Many state parks and forests have beaches, changing rooms and other amenities to accommodate swimming.
Motorboating (waterski/tubing, personal watercraft)	The department currently maintains improved boat launches throughout the region. In some cases, these opportunities are on small lakes, many of which have slow-no wake protections in effect. Any new opportunities for higher speed boating would be dependent on these resource protection measures.

OTHER FORMS OF RECREATION

There appears to be demand for many other types of outdoor recreation in the Lower Lake Michigan Coastal Region, including camping, picnicking, nature photography, and gathering berries and mushrooms. The best opportunities appear to be for expanding or creating day-use facilities at department properties.

The following table lists current and potential future opportunities for other forms of recreation.

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – primitive	Harrington Beach State Park Kettle Moraine State Forest-Northern Unit and Southern Unit	Big Foot Beach State Park Kettle Moraine State Forest-Pike Lake Unit and Lapham Peak Unit	State Ice Age Trail Areas (some) Kettle Moraine State Forest-Mukwonago River Unit Theresa Wildlife Area	Kohler-Andrae State Park Richard Bong State Recreation Area Allenton Marsh, Jackson Marsh and Paradise Valley Wildlife Areas
Picnicking	Harrington Beach, Kohler-Andrae and Lakeshore State Parks Richard Bong State Recreation Area Hank Aaron State Trail Kettle Moraine State Forest-Pike Lake Unit Silver Lake Marsh Wind Lake Fishery Area	Big Foot Beach State Park Havenwoods State Forest, Kettle Moraine State Forest-Northern Unit, Southern Unit and Lapham Peak Unit Allenton Marsh Wildlife Area	State Ice Age Trail Areas (some) Kettle Moraine State Forest-Mukwonago River Unit Forestry Education and Awareness Center Camp Lake, Crystal Lake, Eagle Lake, Onion River, Hooker Lake Marsh, La Budde Creek, Mullet River Schuet Creek Fishery Areas Cedar Creek Honey Creek and Jackson Marsh Stream Bank Protection Areas	Kettle Moraine State Forest-Loew Lake Unit Jackson Marsh, Paradise Valley, Theresa, Turtle Valley and Vernon Wildlife Area
Bird and wildlife watching	All department properties are open to bird and wildlife watching. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. Nearly all department properties have opportunities to add at least some designated hiking trails or viewing platforms that would aide this activity.			
Gather mushrooms, berries, etc.	All department properties are open to gathering edibles. Depending on what the fruit or mushroom sought, some properties may be preferred over others. Generally, no infrastructure is needed or desired for harvesting. Some products found on state properties are not allowed to be harvested without permission.			
Nature Photography	All department properties are open to nature photography. Depending upon if the target is a landscape view or a rare butterfly perched on a blade of grass, some properties may be preferred over others. Viewing platforms may assist some photography and provide better vantage points from which to capture images of wildlife.			

SUMMARY OF THE LOWER LAKE MICHIGAN COASTAL REGION ROA

With an assortment of public conservation lands, the Lower Lake Michigan Coastal Region is a frequently visited recreation destination, largely due to its proximity to urban centers such as Madison, Milwaukee, and Chicago.

Although the region is rich in current opportunities, several needs were expressed by residents. Topping the list of needs are: hiking, walking, and running trails, bicycling trails, rustic campgrounds, public shore access and local parks and playgrounds.

The department believes there are opportunities to meet some of the desired recreational experiences on some of the properties it manages in the Lower Lake Michigan Coastal Region. In general, the department believes the following property groups are well-suited to provide the identified needs in the region:

STATE PARKS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to urban areas would likely be most popular.
- Paved bicycle trails that expand the existing network linking to the existing urban trail network and to campgrounds.
- Primitive camping to connect visitors to the myriad of lakes and rivers in the region.
- Picnicking areas for visitors to gather, recharge and enjoy a day in the park.

STATE TRAILS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to urban areas would likely be most popular.
- Paved bicycle trails that expand the existing network linking to the existing urban trail network and to campgrounds.
- Cross-country skiing to allow visitors to continue their trail adventures through the winter.

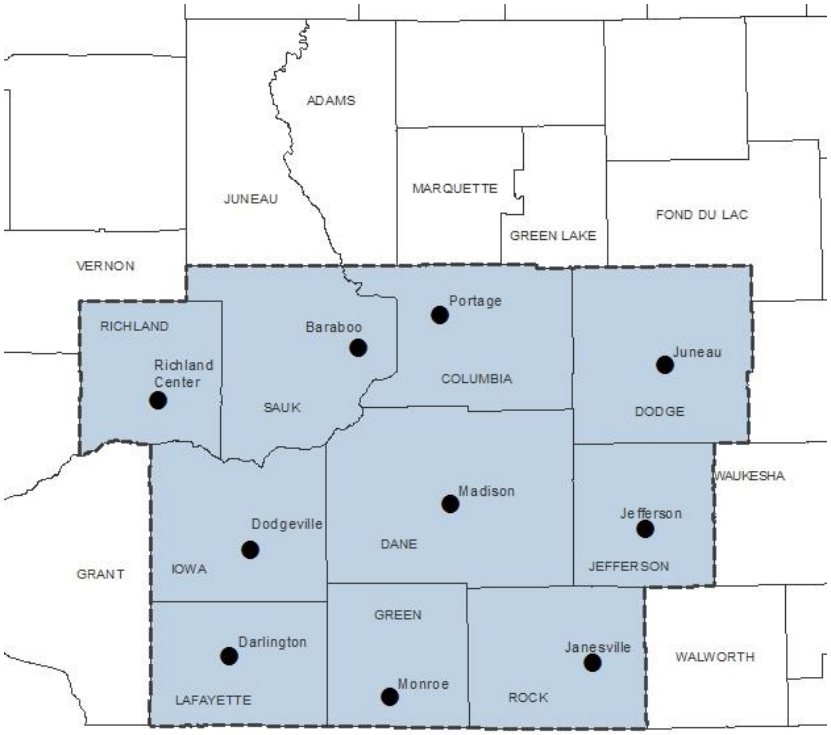
STATE FORESTS

- Paved bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking trails that expand existing opportunities and create new destinations. These trails could be single-track, constructed trails of varying difficulties (potentially including skills areas).
- Cross-country skiing to allow visitors to continue their trail adventures through the winter.
- Canoeing and kayaking with improved walk-in trails to access waterbodies.
- Lake fishing opportunities with improved boat access and disabled accessible fishing sites.

STATE WILDLIFE AND FISHERY AREAS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Cross-country skiing to allow visitors to continue their trail adventures through the winter.
- Canoeing and kayaking with improved walk-in trails to access waterbodies.
- Lake fishing opportunities with improved boat access and disabled accessible fishing sites.

Recreation Opportunities Analysis



SOUTHERN GATEWAYS REGION

8. Southern Gateways Region

Background

Landscape Setting

The Southern Gateways Region is in the south-central part of the state and encompasses Columbia, Dane, Dodge, Green, Iowa, Jefferson, Lafayette, Richland, Rock and Sauk Counties. From the rolling green hills of the southern portions of the region, to the centrally-located Wisconsin River and the marshy areas of eastern portions, this region contains a variety of environments, the combination of which provide a wide array of recreational opportunities. The Southern Gateways also has several important geologic features. Devil's Lake State Park, a craggy glacial lake surrounded by high cliffs and scenic overlooks, is one of the most popular recreation areas in the region. The Baraboo Hills, located in one of the few areas of the state that remained unglaciated in the past Ice Age, is a spectacular geologic resource with many unique rock formations, cliffs, waterfalls, and a high diversity of plant and animal species. The Madison urban center affects much of the Southern Gateways Region. Rapid suburban development within the greater Madison metropolitan area has made areas of Dane County among the fastest growing in the state. As urban populations increase, so too does the demand for traditionally urban-based recreation such as dog parks and developed sports facilities.

The rolling green hills of the southern and western areas of the region are characteristic of the landscape's deeply dissected, unglaciated topography with broad open hilltops, flat fertile river valleys, and steep wooded slopes. Prairies and savannas were the dominant habitat types in this area prior to Euro-American settlement. The dominant land use now is agriculture, although farms typically contain a combination of row crops, hay fields, and small woodlots. Given its proximity to Madison, Rockford, Dubuque and even Chicago, the area is experiencing rapid changes as former farms are split up into housing for commuters and recreation land for people that live outside the area.

The northern side of the region is home to the Central Sand Hills landscape. There are a number of productive fishing lakes and cold-water streams on the edge of the old Glacial Lake Wisconsin. Many rare species inhabit the coastal plain marshes in this area, which are a rare natural community type.

In contrast to the highly unglaciated western and southern areas of the region, the eastern half of the Southern Gateways Region is home to some of the world's best examples of continental glacial activity. Drumlins, eskers, kettle lakes, kames, ground and end moraines, and other glacial features are evident throughout the entire area. Most notable lakes here include the Yahara Chain of Lakes and Lake Koshkonong. Additionally, the largest single wetland in this landscape, Horicon Marsh, is a globally significant area. More fens also occur here than in any other part of North America.

Several high-quality warm and cold-water streams flow throughout the landscape and support diverse fisheries and some rare aquatic species. Large, meandering rivers and their associated floodplain forests are often managed for oak-hardwood production. Many of the region's lakes have extremely productive fisheries that draw anglers from throughout the Midwest.

Local Economy

The major land cover in the Southern Gateways Region is agricultural, occupying over 50% of the region's land. From dairy and beef farming in the western portion of the region to dairying and cash-cropping of grains and vegetables in the east, the influence of agriculture is prominent. Soils in the east are largely silt loams with areas of clay and sandy soils. Most of the tillable land is intensively farmed.

Top employment sectors of the regional economy include government, trade, transportation and utilities, professional and business services, education and medical services, manufacturing, and leisure and hospitality.

RECREATION USES AND PARTICIPATION

The Southern Gateways Region has the highest occurrence of Wisconsin State Park System properties within any region of the state. Yet, there is relatively little public land compared to other regions, and the handful of public properties receive heavy use. Recreation demand from residents and visitors is focused on sightseeing and other land based recreation activities such as camping and wildlife watching.

The rolling hills of the west and south harbor a range of opportunities for hiking, cross-country skiing, snowmobiling, camping, picnicking, wildlife watching, fishing, hunting, biking, paddling, nature studying, off-road biking and horseback riding. There are also some spring-fed, cold-water streams that support trout. These streams receive substantial use by anglers.

The recreational opportunities in the northern portion of the region reflect those of the rolling hills of the south and west. A stretch of the Wisconsin River from the Wisconsin Dells to Sauk City provides many opportunities for paddling, boating, and fishing. Lakes in the region provide some of the best and most popular inland lake fishing in the state.

Recreation participation rates for Wisconsin residents were presented on page 14 of the Introduction. Most of participation rates of Southern Gateways Region residents are consistent with the state average or within five percentage points in variation. Some of the more notable variations are in the box to the right.

Activities that residents of the Southern Gateways Region participate in at <u>lower</u> rates than the state average:

- Hunting big game
- Hunting small game
- Hunting turkey
- Riding ATV/UTV on trails/routes
- Riding motorcycles on trails/routes
- River fishing from boat/canoe/kayak
- Stream/river fishing from shore
- Target firearms

EXISTING RECREATION SUPPLY IN THE SOUTHERN GATEWAYS REGION

PUBLIC LANDS FOR OUTDOOR RECREATION

The Southern Gateways Region has approximately 230,000 acres of public land available for outdoor recreation. The area has a number of small pockets of land with a variety of opportunities, surrounded by large urban centers. This section briefly describes the public conservation and recreation lands in the Southern Gateways Region. A description of all public lands in Wisconsin is provided in Appendix 3.

a) Federal

The U.S. Fish & Wildlife Service manages over 28,000 acres in the Southern Gateways area, with over 21,000 of those acres located in Dodge county. These properties function as areas for prairie habitat restoration, wildlife refuges, and waterfowl production. Horicon National Wildlife Refuge, located in Dodge county, is especially known for its popularity among waterfowl during the spring and fall migration.

The National Park Service owns and manages over 100 acres in Dane County as part of the Ice Age State and National Scenic Trail as it winds through southern Wisconsin. The Ice Age Trail spans the entire state of Wisconsin, stretching from Interstate Park on the Minnesota border to Potawatomi State Park on Lake Michigan.

b) State

The Department of Natural Resources owns over 200,000 acres in the Southern Gateways Region. State properties in the region span the range of intended recreational settings and development levels (Map B3). At one end of the spectrum are properties such as Devil's Lake, Governor Dodge and Governor Nelson State Parks that include developed campgrounds, miles of trails, boating opportunities and picnic sites. Devil's Lake State Park is the most visited property in the state, attracting over 2.5 million people annually. At the other end of the spectrum are properties like McGilvra Woods State Natural Area, a small sugar maple forest lying deep in the Baraboo Hills. The property is home to wonderfully rich display of spring wildflowers and colorful forest birds. Although these types of properties can provide some limited recreation opportunities for low-impact activities

such as hunting, bird watching and nature study, their primary purpose is not necessarily to provide recreation opportunities requiring development or infrastructure.

c) County

The Southern Gateways Region has an array of county park properties that provide campgrounds, boat launches, several types of trails, dog parks, and other types of recreational opportunities. For example, the Dane County Parks Department manages over 12,000 acres of land with bike, horse and cross-country ski trails, segments of the Ice Age Trail, campgrounds and other specialty recreation and natural areas.

d) Other

Many cities, villages, and townships in the Southern Gateways Region own and manage parks, boat access sites, and other properties that provide opportunities for outdoor recreation. Given their easy proximity to many citizens and scenic views, these properties are very well-used. In addition, several school properties the region are open to some forms of recreation, generally when they are not in use by school and community groups.

PRIVATE LANDS OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

This section summarizes the privately-owned lands in the region that are open to the public for some types of recreation. A detailed description of private lands in Wisconsin open to the public is provided in Appendix 3.

a) Managed Forest Law (MFL) and Forest Crop Law enrolled lands

The amount of land enrolled in these forestry programs in this region is largely concentrated in Richland and Sauk counties. A total of over 5,000 acres in the Southern Gateways Region are currently enrolled in these programs. Because these programs use 25 or 50-year contracts, the total amount enrolled changes from year to year as landowners enroll lands into the program (only the MFL program is open to enrollment) and contracts covering other lands expire. MFL-closed land is not open for public use.

b) Land trusts

The following land trusts operate in the Southern Gateways Region: Baraboo Range Preservation Association, Groundswell Conservancy, Ice Age Trail Alliance, Madison Audubon Society, Stewards of the Dells of the Wisconsin River, The Prairie Enthusiasts, Friends of Pheasant Branch, Drumlin Area Land Trust, Land Trust Network, Driftless Area Land Conservancy, The Conservation Fund, The Nature Conservancy and Riverland Conservancy. These non-profit conservation organizations have protected over 12,000 acres in the region. Most of these lands are open to the public for some forms of recreation such as hunting, fishing, hiking, wildlife watching, snowshoeing and other similar activities.

c) Voluntary Public Access Program

The DNR Voluntary Public Access and Habitat Incentive Program provides financial incentives to private landowners who open their property to public hunting, fishing, trapping and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. Funds from 2014 are administered and provided by U.S. Department of Agriculture-NRCS. To date, there are over 13,000 acres available in the Southern Gateways Region, primarily located in Rock county.

d) Snowmobile Trails on Private Lands

The state snowmobile trail network has been developed through the work of local clubs partnering with private landowners. Agreements with willing landowners allow trails to be located for the winter season, which enables snowmobilers to travel throughout the network. There are 2,715 miles of snowmobile trail in the Southern Gateways region, of which 92% (2,496 miles) on are private lands.

EXISTING PUBLIC RECREATION INFRASTRUCTURE

The department contacted representatives from county governments and regional organizations to gather information about the recreation opportunities available to the public across the Southern Gateways Region. In addition, department

staff searched websites for additional data and descriptions of the recreation opportunities provided. Maps C and D show existing recreation infrastructure in the ten counties of the region.

The Southern Gateways Region contains many public lands, notably sixteen state parks, several state fish and wildlife management properties, and two federal properties. There are also several county and municipal facilities too numerus to list here. These properties provide a wide range of high-quality recreation opportunities. What follows are a few examples of infrastructure in the Southern Gateways Region that support a variety of recreation activities.

a) Horicon National Wildlife Refuge

- Wildlife observation and photography
- Hiking and bicycling
- Snowshoeing and cross-country skiing
- Deer and upland game hunting
- Fishing
- Guided tours and educational programs

b) Ice Age Trail

- Meanders over 1,000 miles across the state
- Backpacking trail for sightseeing, wildlife viewing and bird watching
- Snowshoeing and cross-country skiing opportunities

c) Devil's Lake State Park

- 29 miles of hiking trails
- 5 miles of off-road bike trails
- Rock climbing
- Family camping
- Playground and picnic areas
- Boat landings for boating (electric motors only), canoeing and kayaking opportunities
- Swimming and scuba diving opportunities
- Hunting, trapping and fishing opportunities
- A variety of wintertime activities –ice fishing, snowmobiling, cross-country skiing, snowshoeing and dog sledding

d) Governor Dodge State Park

- 40 miles of hiking trails
- 8 miles of off-road bicycle trails
- 22 miles of equestrian trails for horseback riding and camping
- Swimming, boating (electric motors only), canoeing and kayaking opportunities
- Hunting, trapping and fishing opportunities
- Playground and picnic areas
- Family camping
- Sledding hill, snowmobiling, winter hiking, snowshoeing, ice fishing and cross-country skiing

e) Aztalan State Park

- Premier archaeological site and National Landmark
- Hiking, snowmobiling and snowshoeing opportunities
- Boating, canoeing and kayaking in the Crawfish River
- Picnic area
- Hunting, fishing and trapping opportunities

f) Yellowstone Lake State Park

- Over 13 miles of hiking trails
- Two boat launch ramps for boats, kayaks, canoes, sailboats and other personal watercraft
- A swimming beach and bathhouse
- Hunting, fishing and trapping opportunities
- Snowmobile and cross-country ski trails
- Four miles of off-road biking trails

g) State Trails

- Over 150 miles of multi-use, off-road trails
- Badger State Trail connects Madison to the Wisconsin-Illinois border
- ATV opportunities on the Badger and Pecatonica State Trails
- Cross-country skiing, snowshoeing and snowmobiling options
- Walking, bicycling, and in-line skating opportunities
- Camping options at nearby state campgrounds
- Hunting opportunities on Glacial Drumlin State Trail

h) State Wildlife, Fishery and Natural Areas

- Hunting, fishing and trapping opportunities
- Hiking, nature study, photography, wildlife watching opportunities

PUBLIC INPUT ON RECREATION NEEDS IN THE SOUTHERN GATEWAYS REGION

INPUT GATHERED AS PART OF THE ROA.

The department hosted four public open house meetings, in Baraboo, Horicon, Milwaukee, and Fitchburg between December 5th and 13th, 2017. These open houses were designed to both present information about the ROA and to gather public input on the types of recreation activities they pursued, what places they liked to visit (including what attributes drew them to these properties), and what additional opportunities they wished were available in the Southern Gateways Region.

In addition to these open houses, the department posted an online public input form to its web page. A downloadable version was also available for people who preferred to print, fill out, and send in the form. The public input period ran from November 15, 2017 to January 2, 2018. The department sent out information and press releases about the ROA project and encouraged people to share their perspectives through the online or hardcopy public input forms. Recreation groups, non-profit organizations, and others distributed links to the input form to their members.[18]

The department received comments in the following formats:

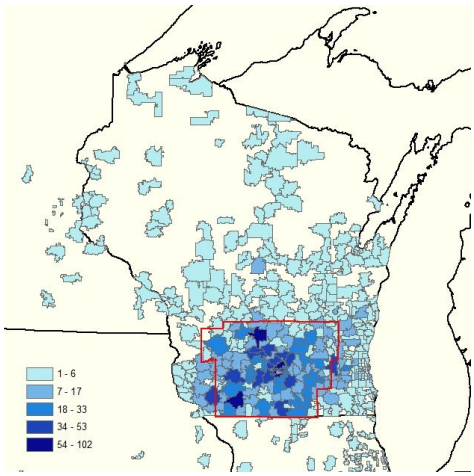
- 3,638 online public input forms
- 151 paper copies of the public input form
- 3 letters and emails

It is important for readers to keep in mind that the public input received through the ROA process is simply information gathered at one point in time, using an open-access technique. It is not a representation of what the "average" resident believes or the range of perspectives that exist.

[18] The public input form was available for anyone to complete and over 3,700 people did so. The department's experience is that when it provides "open access" opportunities in which anyone can participate, the people that respond tend to be those that find out about the input opportunity and to have a particular or active interest in a specific issue; that is, they care enough about an issue to take the time to find and fill out the form or write an email or letter. The responses received are valuable in providing the department with an understanding of people's perspectives, reasoning and breadth of viewpoints. However, because there is no "defined population" from which these responses originate, from a statistical perspective there is no way to know how the respondents compare to a larger population (for example, how the 3,700+ respondents compare to the population of the ten-county region or the state as a whole) and therefore no way that the results can be generalized with an associated error margin to a larger population.

Respondents were asked to list the zip code of their primary residence. Of those who provided this information, the map to the right shows their distribution and frequency. As can be seen, the primary residence of many people who provided input is within the ten-county Southern Gateways Region. Dane County (26%) was the most commonly identified county for this region. The remaining counties in the region each amounted to 1-7% of respondents. Overall, the 10 counties in the region amounted to a total of over 64% of the respondents to the questionnaire.

Number of input forms submitted by zip code



The occurrence of state and local parks in the Southern Gateways Region is quite high when compared to other regions of the state. The Baraboo Hills mountain range provide remarkable views and is home to the state's most popular park, Devil's Lake State Park. Bisected by the Wisconsin River, another popular recreation resource, the southern part of the region provides rolling hills and opportunities to enjoy the outdoors. The department received comments, perspectives and ideas on the following topics.

Participation in outdoor recreation

Respondents to the public input form participate in many outdoor recreation activities. Popular activities that were selected by respondents are seen in the table at right. We can compare these results to the participation results from the recent Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey. The **bolded** activities in the table at right were the most popular activities that the SCORP survey indicated residents in the Southern Gateways Region participate in. What is notable here is that popular activities noted the ROA public input opportunity appear to be significantly different from the random sample of the Southern Gateways generated by the SCORP survey.

Popular recreation activities in which respondents to the ROA input form participate

ATV/UTV Riding
Bicycling – mountain biking, single track
Bicycling on surfaced trails
Camping – tent
Canoeing/kayaking
Cross-country skiing/snowshoeing
Fishing – from a boat, canoe, or kayak
Fishing – from shore
Hiking, walking, running on trails
Hunting – big game (deer, bear)
Swimming
Snowmobiling

Properties that people visit

A small percentage of the Southern Gateways Region is in public ownership, totaling around 230,000 acres. The most popular parks among respondents are Devil's Lake State Park, Governor Dodge State Park, and Blue Mound State Park. The Ice Age Trail, Glacial Drumlin State Trail and Military Ridge State Trail also offer popular recreational activities. On a county level, Dane County Parks comprise the sixth most popular destinations in the Southern Gateways Region.

Hiking, walking, and running on trails and canoeing/kayaking are the most popular activities participate in at Devil's Lake and Governor Dodge State Parks. This reflects the top recreational activities noted in the region, which are similarly hiking, walking and running on trails as well as canoeing/kayaking.

Factors important in determining favorite places to visit

Of survey respondents, the majority (65%) selected 1) the quality of trails as the top factor in determining their favorite property to visit. Like other regions, this aligns with high participation and demand for trail activities. The next most important factors are 2) the desire to be in a quiet place, 3) good maps, signs or information about the property, and 4) the quality of the habitat.

Additional outdoor recreation opportunities needed

About 73% of respondents believe that more recreational opportunities are needed in the Southern Gateways Region. The opportunity that was most frequently selected as needed in the Southern Gateways was more trails for motorized recreation, following by more hiking, walking and running trails.

Top 10 most frequently identified recreation opportunities needed in the Southern Gateways Region, based on public input gathered during the ROA process

Activity	# of responses
More trails for motorized recreation (ATVs, UTVs, off-road motorcycles, etc.)	1182
More hiking/walking/running trails	1001
More natural surface (dirt) bicycling trails	724
More paved bicycling trails	676
More rustic/quiet campgrounds (pit toilets, no electricity or generators)	618
More public shore access to lakes & streams	618
More developed campgrounds (electric hook-ups, flush toilets, showers)	489
More local parks and playgrounds	405
More horse trails	401
More public shooting ranges	399

The recent SCORP survey of statewide residents found a correlation between the activities that people pursue and their perspectives on what additional opportunities are needed in their home county. For many activities, participants generally believed there was a need for more opportunities. The public input received as part of the ROA showed a similar pattern in the Southern Gateways Region. For example, among participants in ATV/UTV riding and off-road motorcycling, 73% and 76%, respectively, indicated a need for more trails for motorized recreation. Similarly, an assessment of those who hike, walk and run reveals the most commonly cited need as that of more hiking, walking and running trails.

Department-managed roads and motorized access

Over 380 miles of roads exist on department properties in the Southern Gateways Region. These roads are used primarily for management purposes, including primitive seasonal logging roads, natural resource management or other property service activities. About one-third (120 miles) of these roads are part of the property transportation network and open to the public at least part of the year to drive “street-legal vehicles” (this includes cars, pick-up trucks, SUVs, motorcycles and other licensed vehicles). By state law, these roads are also open to horses, horse-drawn vehicles and bicycles.

The department sought public feedback on potentially opening none, some, or all department roads that are currently open to “street-legal” vehicles in the Southern Gateways Region to motorized recreation vehicles.[19] About 56% of respondents to the survey believe that DNR roads should be open for at least some purposes. Of those that believe DNR roads should be open for some purposes, most support some roads being opened to in order to connect regional motorized trail networks, whereas under a third support some roads being opened to provide access during the fall hunting seasons. Additionally, 29% of respondents indicated a desire to keep roads closed year-round, and 26% desired to have all the roads open year-round.

[19] For purposes of the ROA, “recreational vehicles” includes off highway vehicles, ATVs, UTVs and off highway motorcycles.

Input gathered as part of the Wisconsin SCORP.

In 2016 as part of the development of the SCORP, the department asked a random sample of Wisconsin residents to identify additional outdoor recreation opportunities needed in their home county. The most frequently identified needs statewide were:

- hiking/walking/running trails
- bicycling trails
- public shore access to lakes, rivers and streams
- public shooting ranges
- public campsites
- local parks and playgrounds

Respondents living in the ten counties in the Southern Gateways Region identified the following needs, among others, at **a higher** rate than the state average:

- bicycling trails
- hiking/walking/running trails
- local parks and playgrounds
- outdoor courts and playing fields

Southern Gateways residents identified the following needs, among others, **less frequently** than the state average:

- hunting opportunities
- public boat launches
- trails for motorized recreation

Future recreation needs in the Southern Gateways Region

The Southern Gateways Region faces challenges to balance the growth of recreational demand alongside the regional population growth. There is a high demand for many varying types of outdoor recreation, but a limited amount of public land to recreate on. This high demand places pressure on limited resources that land managers are tasked to protect. Although there are many small pockets of land with existing recreational opportunities, the largest demand for recreational growth is with trails for motorized recreational and trails for hiking, walking and running. In some cases, these activities may be viewed as competing for the same resources. In other cases, the desired resources may be very different. In the end, many of these recreation demands will likely require partnerships to address fully. Some of these partnerships could include those with federal, state and local governments, user groups, property owners, as well as other organizations. The department has, for years, been involved in different types of partnerships and will continue to partner with others to provide southern Wisconsin high-quality outdoor recreation experiences.

The department used the following sources to identify which recreation opportunities are most needed in the region:

- Public input on recreation needs submitted during the comment period (November 15, 2017 to January 2, 2018).
- Data on recreation participation and needs gathered in a 2016 survey as part of the development of the 2017-2022 SCORP.
- Data gathered in previous SCORP planning efforts.

From this information, department staff grouped the relative needs for recreation activities as high, medium or low. The groupings are as follows:

Future recreation needs in the Southern Gateways Region – High	Future recreation needs in the Southern Gateways Region – Medium	Future recreation needs in the Southern Gateways Region – Low
ATV/UTV riding	Bicycling – fat tire/snow biking	Dog sledding/skijoring
Bicycling – bicycle touring/road riding	Cross country skiing	Dog training
Bicycling – mountain biking/off-road biking	Dog walking	Dog trialing
Bird or wildlife watching	Fishing – ice fishing	Horse cart driving
Camping – developed	Fishing – lake fishing from a boat, canoe or kayak	Hunting – migratory birds
Camping – primitive	Fishing – river fishing from a boat, canoe or kayak	Hunting – small game
Canoeing or kayaking	Fishing – stream/river fishing from shore or wading	Sailing, windsurfing, rowing, stand-up paddling
Fishing – lake fishing from shore or a pier	Four-wheel vehicle driving	Scuba diving/snorkeling
Gather mushrooms, berries, etc.	Geocaching	Trapping
Hiking, walking, trail running, backpacking	Horseback riding	Whitewater rafting
Motorboating (waterski/tubing, personal watercraft)	Hunting – big game	
Picnicking	Hunting – turkey	
Snowshoeing	Nature photography	
Swimming in lakes and rivers	Off-highway motorcycle riding	
	Participating in nature-based education programs	
	Rock climbing	
	Snowmobiling	
	Target shooting – archery	
	Target shooting – firearms	
	Visiting a beach, beach walking	

Opportunities to meet future recreation needs in the Southern Gateways Region on department-managed lands

On behalf of Wisconsin residents, the department owns and manages properties in the Southern Gateways Region to meet a variety of ecological and recreation goals. These properties span a diversity of landscapes; from the unglaciated, rolling hills of the west to the marshes of the east, a variety of recreation opportunities are available. At the same time, these properties face heavy demand from the region's urban areas.

Applying the regional needs listed above, the department evaluated the properties it manages in the Southern Gateways Region to identify places where it could potentially incorporate some activities or enhance existing opportunities to meet these needs. The identification of department-managed lands that appear to be "good fits" to provide different activities will be used to help focus the department's work developing and updating property master plans. A description of opportunities to meet recreation needs in the Southern Gateways Region (on department-managed lands) follows.

MOTORIZED TRAIL RECREATION

Based on public input received during the development of the Southern Gateways region chapter, there appears to be diverse opinions on the desirability of providing more ATV/UTV access. While many people support providing some access for motorized recreational vehicles, there is also vocal opposition to this use. The department recognizes that motorized recreational uses, particularly those that occur in warm-weather months, are a contentious issue.

Motorized trail recreation is rapidly growing in demand across the Southern Gateways region in part due to the number of local residents who own recreation vehicles. However, public land available for this use is quite limited. While there are many state-owned properties here, most are constrained by the amount of acreage available for trail development and many are isolated from each other. As opposed to the large contiguous blocks of national, state and county forest lands in the north, the landscape in this region is dominated by private agricultural lands. This makes it difficult to plan a trail network located on department properties. As a result, much of the ATV/UTV access in this region is on local road routes.

Cooperatively Managed Trails

It should be noted that the department owns several state trails in the region. However, some of these trails are cooperatively managed by local governments, usually counties. In these partnerships, the department typically holds the land ownership while the partners develop, maintain and operate the trail. Also, the managing partner conducts planning processes to determine which recreational uses will be allowed on the property. Since use decisions are planned by the trail partners, cooperatively managed trails will not be listed below as potential “good fits” in this analysis. However, the information collected will be provided to the partners for their use in future planning efforts.

For the Southern Gateways Region, cooperatively managed trails include:

- Pecatonica State Trail
- Great Sauk State Trail
- Wild Goose State Trail

Many of the properties in this region also receive high visitation rates. Devil’s Lake State Park, for example, is the most popular park in the state and rivals visitation at many national parks in the western United States. The amount of impact to the property through high usage levels is a concern to the department and adding more uses could place additional stress on the property. In addition, the high demand for the existing recreational uses currently at department properties in this area may be disrupted by adding motorized trail recreation.

With the growing number of ATV/UTVs, off-highway motorcycles and four-wheel drive vehicles, the need for a place to recreate with them is growing. The department has been aware of this need and began efforts in the mid-2000’s to search for a property that could best accommodate motorized recreation in southern Wisconsin. Termed the motorized recreation area (MRA), this property would be home to multiple types of off-road motorized recreation, including ATV/UTVs, motorcycles and four-wheel-drive vehicles. The department has investigated several locations for the MRA, however attempts to purchase property have been unsuccessful up to this point. The department remains committed to working with motorized recreation partners to develop the MRA when appropriate lands become available.

NON-MOTORIZED TRAIL RECREATION

Non-motorized trail recreation has been and continues to be a primary outdoor activity throughout the year in the Southern Gateways Region. From hiking the Ice Age Trail and biking the Military Ridge State Trail in the summer to snowshoeing at the state parks in the winter, the region's residents and visitors take advantage of the numerous opportunities that currently exist.

As opposed to recreational bicycle touring, where there are benefits to creating multiple connecting linkages, meeting the growing need for mountain biking and off-road biking opportunities can be created or expanded at multiple, stand-alone sites throughout the region. The driftless area in the western portion of this region provides excellent challenge for expert riders and plethora of opportunity for beginners.

Hiking, walking, and running on trails in the region remains very popular activities and top the list of activities with the most participants in the region. Many opportunities currently exist on department properties throughout the region. Additional trails near population centers, such as the Madison area, are likely to be most frequently used.

The following table lists current and potential future opportunities for non-motorized trail activities:

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Bicycling - bicycle touring/ road riding	Devil's Lake and New Glarus Woods State Parks Badger State Trail Horicon, Mud Lake, Shaw Marsh and Waterloo State Wildlife Areas	Governor Dodge, Mirror Lake, and Blue Mound State Parks Sauk Prairie State Recreation Area 400, Glacial Drumlin, Military Ridge and Sugar River State Trails Lower Wisconsin State Riverway	Natural Bridge and Governor Nelson State Parks Cadiz Springs State Recreation Area	Baraboo Hills State Recreation Area Dell Creek and Yellowstone State Wildlife Areas
Bicycling - mountain biking/off-road biking	Devil's Lake, New Glarus Woods and Yellowstone Lake State Parks Sauk Prairie State Recreation Area Badger State Trail	Blue Mound, Governor Dodge and Mirror Lake State Parks 400, Glacial Drumlin, Military Ridge and Sugar River State Trails Lake Mills State Wildlife Area	Belmont Mound and Natural Bridge State Parks Lower Wisconsin State Riverway Baraboo Hills and Cadiz Springs State Recreation Areas Jefferson Marsh, Koshkonong, and Rome Pond State Wildlife Areas	Dell Creek, Swan Lake and Yellowstone Wildlife Areas
Hiking, walking, trail running, backpacking	All department properties are open to hiking, although most fishery, wildlife and natural areas do not have designated trails. Designated trails are found on state park, trail, forest, and flowage properties. Nearly all department properties have opportunities to add at least some designated hiking/ running/backpacking trails.			
Snowshoeing	All department properties are open to snowshoeing, regardless if department properties have designated trails or not. Snowshoe use on groomed cross-country ski trails is usually not allowed.			

WATER RELATED RECREATION

In addition to trail-based activities, the variety of lakes and waterways in the Southern Gateways Region provide opportunities for water-related recreation, such as swimming, fishing, motorboating, and canoeing or kayaking.

There are many existing boat launches as well as state ownership frontage to these waterways. Depending on the waterway, foot access for fishing may be sufficient. In other cases, primitive canoe access or developed boat landings may be what is needed for additional access.

The following table lists current and potential future opportunities for water related recreation:

Recreation Activity	
Canoeing or kayaking	Although not every property with open water has formal boat access sites (or access sites on all waterbodies) many of the lakes, rivers, and larger streams on department-managed lands have some opportunities to carry in a canoe or kayak. The following properties may have the potential to add more or better develop walk-in trails to access waterbodies with canoes or kayaks: Badfish Creek Wildlife Area Devil's Lake State Park Jefferson Marsh State Wildlife and Natural Area Lake Mills Wildlife Area Mud Lake Wildlife Area Rome Pond Wildlife Area Sauk Prairie State Recreation Area Waterloo Wildlife Area
Fishing - lake fishing from shore or a pier	All department lands with lakes are open to shore fishing and as such there are not significant opportunities to expand this opportunity. There are some fishing docks or piers on department lands and there are some opportunities to add new ones, particularly at those properties near cities and villages and with easy road access. The following properties may be able to improve opportunities: Devil's Lake State Park Governor Dodge State Park Horicon Wildlife Area Lower Wisconsin State Riverway Mud Lake Wildlife Area Rome Pond Wildlife Area Sauk Prairie State Recreation Area Waterloo Wildlife Area
Motorboating (waterski/tubing, personal watercraft)	The department currently maintains improved boat launches throughout the region. In some cases, these opportunities are on small lakes, many of which have slow-no wake protections in effect. Any new opportunities for higher speed boating would be dependent on these resource protection measures. The properties with potential to add more improved boat access sites (ramps for trailered boats) include: Horicon Wildlife Area Lower Wisconsin State Riverway Mud Lake Wildlife Area Waterloo Wildlife Area
Swimming in lakes and rivers	All department properties adjacent to public waters allow swimming. Many state parks and forests have beaches, changing rooms and other amenities to accommodate swimming. There may be opportunities to create or expand existing swimming opportunities at the following properties: Devil's Lake State Park Horicon Wildlife Area Lower Wisconsin State Riverway Mud Lake Wildlife Area Waterloo Wildlife Area

OTHER FORMS OF RECREATION

There are also a number of other types of outdoor recreation in demand within the Southern Gateways Region, including camping, picnicking, gathering edibles and wildlife watching.

Camping, both primitive and developed, is growing in popularity in the area, especially over summer months. Proximity to the Madison area harbors a large population of outdoor enthusiasts looking for a reprise from the city. Additionally, places to go for the day and picnic, or simply going for a walk to experience wildlife are popular in the region.

The following table lists current and potential future opportunities for other forms of recreation:

Recreation Activity	Activity **currently exists** at the property; there are opportunities to **expand this use**	Activity **currently exists** at the property; there are only **limited opportunities to expand** this use	Activity currently **does not exist** at the property; there are opportunities to **add this use**	Activity currently **does not exist** at the property; there are only **limited opportunities to add this use**
Camping – developed (modern)	Blue Mound, Devil's Lake, Governor Dodge, and New Glarus Woods and Yellowstone Lake State Parks Glacial Drumlin State Trail	Mirror Lake State Park	Lower Wisconsin State Riverway Cadiz Springs, Capital Springs and Sauk Prairie State Recreation Areas Goose Lake Wildlife Area	Baraboo Hills Recreation Area Badger and Sugar River State Trails Dell Creek Wildlife Area
Camping – primitive (rustic)	Devil's Lake, Governor Dodge, Mirror Lake, New Glarus Woods and Yellowstone Lake State Parks Badger and Glacial Drumlin State Trails Lower Wisconsin State Riverway	Blue Mound State Park Lodi Marsh Wildlife Area	Natural Bridge State Park Baraboo Hills, Cadiz Springs, Capital Springs and Sauk Prairie State Recreation Areas State Ice Age Trail Areas Dell Creek and Goose Lake Wildlife Areas	400 and Sugar River State Trails Pine Island and Swan Lake Wildlife Areas
Picnicking	Aztalan, Belmont Mound, Lake Kegonsa, Mirror Lake, New Glarus Woods and Yellowstone Lake State Parks Sauk Prairie, Cadiz Springs, and Capital Springs State Recreation Areas Badger and Glacial Drumlin State Trails State Ice Age Trail Areas Shaw Marsh and Yellowstone Wildlife Areas	Blue Mound State Park Pine Island Wildlife Area	Baraboo Hills State Recreation Area Albany, Avon Bottoms, Evansville, Jefferson Marsh, Koshkonong, Lake Mills, Liberty Creek, Lima Marsh – Storrs Lake and Rome Pond State Wildlife Areas	Dell Creek Wildlife Area
Bird and wildlife watching	All department properties are open to bird and wildlife watching. Trails are sometimes desired but not necessary. In some cases, properties may be able to add viewing platforms that would provide better vantage points from which to view wildlife. Nearly all department properties have opportunities to add at least some designated hiking trails or viewing platforms that would aide this activity.			
Gather mushrooms, berries, etc.	All department properties are open to gathering edibles. Depending on what the fruit or mushroom sought, some properties may be preferred over others. Generally, no infrastructure is needed or desired for harvesting. Some products found on state properties are not allowed to be harvested without permission.			

SUMMARY OF THE SOUTHERN GATEWAYS REGION ROA

With smaller, diverse pockets of public lands, the Southern Gateways Region has been home to a wide range of recreational opportunities. Demand for both motorized and non-motorized trails opportunities is prominent in the area; the top needs included: trails for motorized recreation, hiking/walking/running trails, natural surface and paved bicycling trails, rustic camping and public shore access.

The department believes there are opportunities to meet many of the desired recreational experiences on some of the properties it manages in the Southern Gateways Region. In general, the department believes the following property groups are well-suited to provide the identified needs in the region:

STATE PARKS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking to expand existing opportunities and create new destinations. These trails could be single-track, constructed trails of varying difficulties (potentially including skills areas).
- Canoeing/kayaking with improved walk-in trails and access to waterbodies.
- Lake fishing from shore or pier, by adding improved boat access sites such as ramps for trailered boats.
- Swimming in lakes and rivers that are accommodated by beaches, changing rooms and other amenities.
- Primitive camping to allow visitors to take a break from the hustle and bustle of everyday life.

STATE TRAILS

- Hiking/walking/running loop trails of varying lengths. Properties in proximity to cities and villages likely would be most popular.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking to expand existing opportunities and create new destinations. These properties typically will not be able to accommodate single-track trails.
- Developed camping, including adding electrified sites to significant portions of campgrounds.
- Primitive camping to allow visitors to take a break on their trail adventures.

STATE RECREATION AREAS

- Hiking/walking/running loop trails of varying lengths.
- A future motorized recreation area is being sought to accommodate various motorized recreation, including ATV/UTV riding, off-highway motorcycling and four-wheel drive vehicle riding.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking to expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Canoeing/kayaking with improved walk-in trails and access to waterbodies.
- Improved boat access sites such as ramps for trailered boats for motorboating and lake fishing.
- Primitive camping to allow visitors to get away from the developed campground setting.

STATE WILDLIFE AREAS

- Hiking/walking/running loop trails of varying lengths.
- Surfaced bicycle trails that expand the existing network linking cities and villages and campgrounds.
- Mountain biking to expand existing opportunities and create new destinations. These trails could provide single-track, constructed trails of varying difficulties (including potentially skills areas).
- Canoeing/kayaking with improved walk-in trails and access to waterbodies.
- Improved boat access sites such as ramps for trailered boats for motorboating and lake fishing.
- Swimming in lakes and rivers that are accommodated by beaches, changing rooms and other amenities.
- Primitive camping to allow visitors to make hunting and fishing trips more adventurous.

Appendices

1. Descriptions of recreation activities
2. Recreation compatibility
3. Land in Wisconsin open to the public for outdoor recreation
4. Statewide Stakeholder Team
5. Descriptions of Department of Natural Resources properties by region:
    - Northwoods Region
    - Upper Lake Michigan Coastal
    - Great Northwest
    - Lake Winnebago Waters
    - Mississippi River Corridor
    - Western Sands
    - Lower Lake Michigan Coastal
    - Southern Gateways

APPENDIX 1: DESCRIPTIONS OF RECREATION ACTIVITIES

The department developed the following descriptions of recreation activities to ensure that there is a common understanding about what is meant for the outdoor activities addressed in this analysis and the associated conditions for satisfying experiences, distribution and seasonality.

The information in this summary sheet was developed with input from the Wisconsin ATV/UTV Association and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: ATV/UTV Riding

Range of desired experiences:

ATV and UTV use occurs in a number of ways on public lands using roads and trails. Roads allowing ATV/UTV use (e.g. routes) can serve as short or long travel routes to access services and connect communities, serve to connect private residences and businesses to trail networks, serve as access routes on public lands for other recreational activities (e.g., hunting, gathering, and sightseeing). Trails specifically designed for ATV/UTV users are generally preferred over road routes. Trail design considers width, trail tread type, challenge areas, mix of terrain, and traveling through scenic areas. Some riders use ATV/UTVs to complement other recreation and gathering activities including hunting access, wild game transport, and firewood gathering. Some riders desire specific areas designed for ATV/UTV use for more challenging opportunities. These can be dedicated lands or areas within a property designed specifically for ATV/UTV users. For multi-day riding in areas with large trail networks, access to services, gas, food, lodging, or camping is important as are safe, appropriately-located parking areas for vehicles and trailers.

Generally, riders prefer narrower, native-material roads and trails versus hard surface or gravel. The trail or road bed has a significant influence on experience and, if poorly designed, can create a negative experience. Participants that travel to a destination prefer over 75 miles of roads and trails and prefer opportunities to connect from trail system to trail system. Long linear roads and trails are desirable to access scenic areas and other natural features away from heavily developed areas and are viewed as a way to get outdoors. There is a slightly higher desire for hilly terrain and scenic rides with views of forests, open natural areas, lakes and streams. Riding long linear rail trails are generally viewed as non-challenging and a means to connect between trail systems and services. Highly disturbed areas can provide challenging riding within a small area.

Notable differences in participation or opportunities across state

The majority of the longer riding opportunities are on public lands with the vast majority in the northern half of the state. There are thousands of miles of trails and routes on county and federal lands, with much less on department lands. The Richard Bong State Recreation Area is an example of the smaller scale, shorter trail opportunities clustered in southeast Wisconsin. There are a number of state trails on old railroad beds that are mixed-use, but that availability varies across the state and depends on allowable uses. Many of these trails provide connections to other trail and road networks.

Notable times of the year of high or low participation

Use is very seasonal in nature occurring mostly between late spring and fall. Many roads and trails are closed in the spring due to soft trail treads during the spring thaw. Winter ATV/UTV is occurring and growing in interest on groomed snowmobile trails. Late summer and fall can be a very enjoyable recreation and tourism period with fall colors and cooler temperatures.

Potential social, economic and ecological considerations for property planning purposes:

ATV/UTVs are not significantly impacted by people in other recreation activities. Roads allow multiple uses including vehicles, horses and street legal motorcycles in which some congestion may occur but it is minimal. There are some challenges with mixing motorcycle and ATV use on designated ATV trails as they are designed for a certain type of vehicle. There can be winter use conflicts between ATV/UTV and snowmobiles for impacts to trail base and jeopardizing private snowmobile trail easements. From a planning perspective, consideration needs to be given to regional trails systems and town road designations as connecting systems for access and services. Trail and road systems should be considered to address users' needs and experiences including remote riding opportunities on closed loop systems and larger more regional road and trail systems.

Potential social, economic, and ecological considerations for property planning purposes:

Negative Impacts

- Conditions around ATV/UTV use areas may be dusty and noisy
- ATV/UTVs can spread invasive species
- Conflict may occur with users desiring a non-motorized recreational experience (e.g., no motor lakes, rustic camping, and wildlife watching)

Positive Impacts:

- ATV/UTV riding is a family activity which encourages people, including those with physical limitations, to get outside and enjoy nature and public lands
- ATV/UTV riding can provide a boost to the local and statewide economy for recreation/tourism services (e.g., lodging, food, and gas).

Participation[20]*:*

Participation rate: 16% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- A minimum of five miles of trails should be provided. Shorter trails providing access to a point of interest are acceptable.
    - Loop trails are typically 8 to 10 miles long or more and can be composed of a series of loops providing a variety of recreational riding experiences that return the participant to the trailhead.
    - Regional trails are point to point trails that can be several hundred miles long and traverse multiple jurisdictions and a combination of land ownership types. Such trail corridors are often shared with other recreational uses.
- Varied terrain is preferable for this recreation experience but steep slopes and unstable soils can affect development and maintenance costs and cause unnecessary resource damage. Avoid areas with slopes exceeding 12%. Avoid areas of sandy soils or peat and organic soils that are saturated for portions of the year. Trail segments with adverse conditions should be kept to a minimum for both long term costs and for environmental reasons.
- A designated trail or route is necessary. A designated ATV/UTV trail may be placed on lands with any DNR land classification but recreational trail setting for ATV trails will always be Type 3 (NR44.06) or Type 4 (NR44.07) Recreational Areas. Note that this use may not occur on land with the classification of Type 3 Non-Motorized Recreation Area (NR44.06(6)(h)) and is not compatible with Recreation Management Areas Type 1 and Type 2.
- Refer to Chapter 30 in the Department Design Standards Handbook (8605.1) and to the Trails Handbook (2540.5) for trail and support facility design guidance and best practices to minimize environment damage.

[20] Data on outdoor recreation participation was recently compiled as part of the department's update to the Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP). For more information, visit the DNR's website and search for "SCORP."

The information in this summary sheet was developed with input from Wisconsin Bike Fed and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Bicycling - Fat Tire/Snow

Range of desired experiences:

"Fat bikes" typically have a tire width three inches and a max tire pressure of 10 psi (12 psi on groomed trails). These purpose-built "fat bikes" can be used in much the same way as any other bicycle, as well as on sand[1], snow and ice. Riders of fat bikes prefer groomed (packed, untracked) trails and generally seek narrow single-track trails; however, width of grooming equipment and skill of groomer may dictate a need for wider trails. Participants like a mix of terrain (hilly mostly, some flat; mostly wooded) and will travel about an hour for a good experience (twenty plus miles of groomed trail).

Notable differences in participation or opportunities across state

Participation opportunities are highest in northern Wisconsin (e.g. CAMBA trail system has 22 miles of fat bike trails) and near highly populated areas where the volunteer base to support construction and grooming activities exist (as with mountain bike trails, fat bike trails are largely volunteer-driven). There is some crossover with mountain biking, but not all fat bikers are also mountain bikers.

Notable times of the year of high or low participation

Participation in snow biking is weather-dependent; however fat bikes themselves can be used in the same manner as other types of bicycles as well as on sand.

Potential social, economic, and ecological considerations for property planning purposes:

Trails may be winter use (snow covered) only or may be used during non-snow cover conditions for other uses, such as mountain biking. Trailhead shelter facility/warming huts and bathrooms are highly desirable. Consider closing trails when there is less than 4" of snow cover or when trail snow conditions deteriorate to the point where trails are bare and warm (ground is not frozen, tires sink in). Non-fat bike tires (e.g. standard mountain bike tire width) will sink in more easily and may require closing a trail sooner than for fat bike only use (some trails have restrictions on minimum tire width and max tire pressure for this reason).

Potential for trespass by fat bike onto snowmobile trails should be a consideration. Trail intersections must be well marked to indicate legal uses (e.g. where a state trail connects to a local snowmobile trail, snowmobilers may have secured the connecting trails for snowmobile use only).

Participation:

Participation rate: 4% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- A minimum of three miles of trails should be provided at a property. One-half day rides should be at least seven miles in length with 10 miles the minimum length for a full day's ride. Shorter trails providing access to a point of interest are allowed.
    - Loop trails are typically 8 to 10 miles long or more and are composed of a series of loops providing a variety of recreational riding experiences that return the participant to the trailhead.
    - Regional trails are point to point trails that can be several hundred miles long and traverse multiple jurisdictions and a combination of land ownership types. This trail corridor is often shared with other recreational uses.
- Varied terrain is preferable for this recreation experience but steep slopes and unstable soils can affect development costs, maintenance costs and cause unnecessary resource damage. Avoid areas with slopes exceeding 12%. Avoid areas of sandy soils or peat and organic soils that are saturated for portions of the year. Trail segments with adverse conditions should be kept to a minimum for both long term costs and for environmental reasons.

- A designated use trail is necessary for this facility type. A designated fat tire bicycling trail may be placed on lands with any DNR land classification but recreational trail setting for fat tire bicycling trails will always be Type 3 (NR44.06) or Type 4 (NR44.07) Recreational Areas. Note that this use may not be compatible with Recreation Management Areas Type 1 and Type 2.
- Refer to Chapter 30 (page 80) in the Department Design Standards Handbook (8605.1) and to the Trails Handbook (2540.5) for trail and support facility design guidance and best practices to minimize environment damage.

The information in this summary sheet was developed with input from Wisconsin Bike Fed and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Bicycling - Mountain biking

Range of desired experiences:

Mountain biking is the sport of riding bicycles over varying terrain, using purpose-built bicycles with enhanced durability and performance for rough terrain. Mountain biking can generally be broken down into multiple categories: cross country, trail riding, all mountain, downhill, freeride and dirt jumping. However, the majority of recreational mountain biking in Wisconsin falls into the category of the cross-country riding style, on purpose-built narrow trails (single-track, less than 2 feet wide).

Notable differences in participation or opportunities across state

Participation rates are higher in more populated areas; however most participants travel some or all the time to access trails. Constructed mountain bike trails meet layout and design specifications that require they be built by hand or with specialized equipment and require a close relationship between the land manager and the volunteer groups who build them, or specialized contractors to construct the trails. Thus, availability of trails specifically constructed for mountain biking is limited. However, there are more than 20 chapters of mountain bike-focused volunteer groups across the state, most of whom engage in trail building on public lands to create their desired riding experiences.

Notable times of the year of high or low participation

Mountain bikers (and all trail users) are generally discouraged from using trails during spring thaw, especially in areas with poorly drained soils. More than perhaps any other user group, peer pressure and advocacy organization education encourages responsible use of trails (e.g. not during times when tires will leave ruts). Late spring and summer are high participation, also fewer bugs and lower temperatures in the fall mean typically higher participation level at that time of year. Winter mountain biking is covered under the summary sheet for fat tire/snow bicycling.

Potential social, economic, and ecological considerations for property planning purposes:

The speed of mountain bicycles can be a source of conflict with slower recreationalists (e.g. hikers); the lack of sound from mountain bicycles can be a source of conflict with horses, which can be spooked by silent, quickly moving bicycles. Poorly designed or constructed mountain bike trails can lead to greater environmental impacts, including soil displacement and erosion. To ensure successful implementation of mountain bicycling at a property, the trail must be designed for the use from the beginning.

Participation:

Participation rate: 11% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Mountain biking is permitted only on trails designated for bicycling.
- NR44 addresses appropriate designated trail types for the various land classifications.
- Refer to the Department Design Standards Handbook (8605.1, Chapter 30) and the Trails Handbook (2540.5) for further design guidelines.

The information in this summary sheet was developed with input from Wisconsin Bike Fed and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Bicycling - Off-road biking

Range of desired experiences:

Off-road bicycling includes mountain biking, but also a variety of bicycling experiences on trails other than constructed single-track. Takes place on intermediate-level trails, often in the woods with a variety of surfacing, from native soil to wood chips. Appropriate for families with more adventurous riders and hybrid or mountain bikes. Off-road bicycling can be located on logging roads and usually is most attractive to casual riders.

Notable differences in participation or opportunities across state

Fairly consistent across the state, however bicyclists on the far ends of the age spectrum (old and young) will tend to participate in this type of bicycling more than other types.

Notable times of the year of high or low participation

Level of use is generally consistent with property visitation rates. Day users and in particular campers at a property are most likely to participate.

Potential social, economic, and ecological considerations for property planning purposes:

These experiences should not be located in inaccessible places due to their frequent use by inexperienced or unskilled riders and the need (expectation) for extraction after accidents or crashes. Wayfinding and current maps are extremely important, as are good sight lines and minimal grade (steepness). Not always constructed for this purpose (bicycling), trails can wash out and become maintenance issues (highly unlikely with constructed single-track).

Participation[21]*:*

Participation rate: 34% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Bicycling is permitted only on trails designated for that specific use and on DNR roads open to the public on department properties other than Northern State Forests.
- NR44 addresses appropriate designated trail types for the various land classifications.
- Refer to the Department Design Standards Handbook (8605.1, Chapter 30) and the Trails Handbook (2540.5) for further design guidelines.

[21] Data on outdoor recreation participation was recently compiled as part of the department's update to the Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP). For more information, visit the DNR's website and search for "SCORP."

The information in this summary sheet was developed with input from the Nonmotorized Recreation and Transportation Trails Council and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Bicycling - Road Bicycling/Rail-trail Bicycling/Bicycle Touring

Range of desired experiences:

Road bicycling, rail-trail bicycling and bicycle touring occur mostly on paved rural roads and paved or crushed stone-surfaced paths/trail systems across the state, including on the nearly 1,000 miles of rail trails (trails along former railroad corridors) in Wisconsin. This experience is generally appropriate for all ability levels and bikes with skinny tires. Participants often choose routes based on available amenities such as campgrounds, parks, interesting sites, and food/beverage availability. There is some cross-over with people using these same facilities for transportation (non-recreation) purposes. Length of trip can range from a few hours to a few weeks.

Notable differences in participation or opportunities across state

Availability of bicycle facility infrastructure ("bikeways") varies across the state, with stronger infrastructure investment generally located closer to urban areas. However, rural areas often have the advantage of lower volume of road traffic. Rail trails in the northern part of the state tend to allow and attract higher levels of motorized traffic and demand as well as actual use of those facilities tends to be lower by bicyclists.

Notable times of the year of high or low participation

Summer and fall are generally higher participation due to favorable weather, although late spring, depending on trail conditions for non-paved facilities, can also be popular, particularly for those experienced riders seeking intense physical activity. Winter participation will depend largely on the maintenance (snow removal) of facilities; but regardless will be low compared to other times of the year.

Potential social, economic, and ecological considerations for property planning purposes:

This is a high physical activity for participants, who are exposed to multiple eco-regions of the state. This activity generally takes place in out of the way locations and typically is not impacted by people involved in other types of outdoor recreation. Participants look for amenities such as drinking water and camping. Trails will generally be expected to be constructed to federal transportation-facility standards (minimum 10' width), particularly in more urban areas. Motorists who are not used to sharing facilities (roads, rail trails) with bicyclists can feel impacted by the presence of bicyclists. Appropriate bicycle accommodations on roads can increase road project costs as well as the footprint (size) of the road.

Studies have shown that increasing nonresident bicycling in Wisconsin by 20 percent has the potential to increase economic activity by more than $107 million dollars and create 1,528 full-time-equivalent jobs, mostly in retail, lodging and food service (http://wisconsindot.gov/Documents/travel/bike/econ-impact.pdf).

Due to the lack of topography and way in which railroads are initially constructed, maintenance costs for rail trails can be high after catastrophic weather events.

Participation:

Participation rate: 48% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- These types of biking occur on public roads managed by the DNR, towns, counties and the state and on railroad grades that have been converted into trails.
- Guidance for accommodating bicycle traffic on a variety of road types, including rural roads can be found in AASHTO's Guide for the Development of Bicycle Facilities, 4th Edition.
- Refer to the Department Design Standards Handbook (8605.1, Chapter 30) and the Trails Handbook (2540.5) for further design guidelines.

The information in this summary sheet was developed with input from the Wisconsin Society for Ornithology and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Bird watching

Range of desired experiences:

Bird watching is often characterized as either occurring around the home or away from home; of course, birders often participate in both types. Birding around the home is the second most frequently engaged in outdoor recreation activity by Wisconsin residents.

Enthusiast: Birding enthusiasts typically watch and track birds throughout the year, feed and watch birds at their residences, and take trips throughout the state or country specifically to view birds or add to their "life list." Although enthusiasts often participate in other silent sports, birding is usually the primary purpose of their outings. High-quality experiences are characterized by uncrowded, quiet conditions where these birders can slowly move through an area with minimal disturbance to wildlife, other birders, and other recreationalists.

Frequent participant: Frequent participants of birding enjoy visiting a variety of places and habitats and typically engage in a variety of other outdoor activities as part of their birding (e.g., nature photography, gathering berries, mushrooms and nuts, hiking, bicycling, and canoeing).

Occasional participant: Occasional participants of birding typically watch birds as a secondary activity to an outing focused on another outdoor pursuit.

Notable differences in participation or opportunities across state

With the Great Lake shorelines and the Mississippi River valley as natural migration corridors, Wisconsin hosts an abundance of high-quality birding opportunities. Although opportunities exist throughout the state, the type varies from remote, high-quality ecological sites to more disturbed sites in agricultural settings and even large metropolitan areas. Simply due to the number of people living in urban centers, most birding takes place in the southern and eastern parts of the state; however, the participation rate of residents is highest in the northern and western portion.

Notable times of the year of high or low participation

Birding occurs throughout the year. Peaks in participation away from the home occur during the spring and fall migration periods. Birding around the home, particularly associated with bird feeding, is popular with many people during the winter.

Potential social, economic, and ecological considerations for property planning purposes:

Birders, especially enthusiasts, can be impacted by people participating in activities that scare birds away from an area, even if only temporarily. As a consequence, birders typically report conflicts with motorized or louder activities occurring nearby.

Apart from possibly walking in sensitive areas, birders create few impacts on the environment. Birders typically have very few impacts on people participating in other activities. However, in some cases birders can conflict with each other, particularly when one or more birders over-zealously pursue birds in ways that cause them to fly away.

Participation:

Birding at home

Participation rate: 55% of adult Wisconsin residents

Birding away from home

Participation rate: 39% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Focus birding-specific facilities such as overlooks and observation trails on properties within or near the migratory flyways such as the Great Lakes, the Mississippi River, the Wisconsin River, Horicon Marsh, Crex Meadows, etc.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Camping – Developed (Modern) Campground

Range of desired experiences:

Campers of this type are seeking an experience near nature but still desire the comforts of home. Modern campgrounds are typically located near developed intensive recreational use areas or sites that offer a variety of recreational experiences close at hand. Campers expect to encounter others in the campground and in fact, often choose the campground with the expectation of enjoying the social interactions that accompany this camping experience.

Modern campground campsites feature picnic tables, fire rings, flush toilets, and sites can have electrical, water and sewage hook-ups. Bathhouses with hot showers can also be part of this experience from both public and private providers. Developed campgrounds can accommodate all type of camping units ranging from Class A motorhomes to tents. Private campgrounds may also include food and beverage services, swimming pools and other amenities associated with lodging establishments.

Notable differences in participation or opportunities across state:

The experience offered by modern campgrounds is available in all parts of the state and provided by both public and private entities.

Notable times of the year of high or low participation:

Highest use months are May through October.

Potential social, economic and ecological considerations for property planning purposes:

On department lands, modern campgrounds are associated mainly with state parks and southern /northern state forests. These campgrounds are associated with the intensive recreational use setting sub-classifications as defined in Wisconsin Administrative Rule NR 44. This administrative rule also defines camping facility development and design standards.

Campground and campsite development can cause environmental or social disturbances. Care must be taken when selecting proper locations and social impacts should be considered so as to not overwhelm a property or impact adjacent land uses.

Within the state park system, camping often complements other local and regional lodging options. Taken together, state park overnight visitors generate approximately $192,000,000 in yearly statewide economic impacts.

Participation:

Participation rate: 21% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- A minimum of 40 acre of land suitable for development (in terms of soils and slope) is needed for a 100-site campground and its support facilities. Modern campgrounds generally have 100 plus campsites with a separation distance of approximately 100 feet between sites.
- The department must work within the statutory limit regarding the number of electric campsites. The limit is currently 30% of the total number of campsites offered by the Wisconsin state parks system.
- Development of this type of facility is limited to the NR 44 Type 4 Recreation Setting classification and are considered “Modern Campgrounds” (NR44.07 (7)5.b).
- Refer to Chapter 40 in the Department Design Standards Handbook (8605.1) for guidance on location and design for this facility type.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Camping – Rustic Campground

Range of desired experiences:

Campers of this type are seeking an experience closer to nature and are less concerned with the comforts of home than campers at a modern campground. Differing from modern campgrounds, these sometimes are not located near developed intensive recreational use areas. Campsite access is usually via a vehicle, but can sometimes be by a short walk from a shared parking area to a "walk-in" site.

Campers expect to encounter others in the campground but less so than in modern campgrounds, a greater sense of privacy from others is often the camper's goal. Rustic campgrounds typically are smaller with fewer campsites and greater separation distance between campsites than modern campgrounds. The overall level of development is lower. Rustic campsites feature picnic tables, fire ring, and vault or flush toilets, but do not have electrical, water and sewage hook-ups. Toilet facilities are typically vault toilets but they may be pressurized water and flush toilets. Drinking water is provided at a central location from which campers haul it to their sites in water containers. Rustic campgrounds can accommodate various camping unit types from small RVs, large trailers to tents, but typically do not accommodate large camper units as well as modern campgrounds.

Notable differences in participation or opportunities across state

Rustic camping is available in all parts of the state and is the most common type of camping the department provides.

Notable times of the year of high or low participation

Highest use months are May through October.

Potential social, economic, and ecological considerations for property planning purposes:

On department lands, rustic camping is associated mainly with state parks and southern / northern forests. These campgrounds are associated with the intensive recreational use setting sub-classifications as defined in Wisconsin Administrative Rule NR 44. This administrative rule also defines camping facility development and design standards.

Campground and campsite development can cause environmental disturbances. Care must be taken to select proper locations and social impacts should be considered so as to not overwhelm a property.

Within the state park system, camping often complements other local and regional lodging options. Taken together, state park overnight visitors generate approximately $192,000,000 in yearly statewide economic impacts.

Participation:

Participation rate: 32% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- A minimum of 40 acre of land suitable for development (in terms of soils and slope) is needed for a 75-site campground and its support facilities. Rustic campgrounds generally are to be limited to a maximum of 75 campsites with a separation distance of 100 to 200 feet between sites.
- Development of this type of facility is limited to the Type-4 Recreation Setting sub-classification and are considered "Rustic Campgrounds" (NR44.07 (7)4.b).
- Refer to Chapter 40 in the Department Design Standards Handbook (8605.1) for campground site selection criteria.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary Sheet: Camping - Primitive Site

Range of desired experiences:

Campers of this type are seeking to experience nature in a remote setting offering opportunities for solitude and primitive self-reliant camping. The campsites are not part of a conventional campground but rather are dispersed single sites or a remote, small cluster of widely spaces sites. Clustered sites are call semi-primitive camping. Access mode is determined by the master plan and is usually via boating or paddling, backpacking or biking, but sometimes semi-primitive sites may be accessed by motor vehicle.

Campers expect little sight and sound contact with other recreational users. Campsites are minimally developed with a tent pad of native material, a fire ring, and perhaps a picnic table. Toilet facilities are typically box latrines, and water is not provided. Site occupancy is on a first come first served basis.

Dispersed Camping and other Special Purpose Camping

The vast majority of camping on department property occurs at designated, permanent campgrounds or campsites with at least some support facilities provided. Camping at sites with no facilities is also allowed from time to time (with a permit) on some properties. This type of unsupported camping is called “dispersed camping” because it occurs at variable “dispersed locations” on a property for a limited time period. Examples are hunting camps and backpack camping, most commonly occurring on state forests and along the Ice Age Trail. Special purpose camping permits are also issued for dog trials and other special events.

Notable differences in participation or opportunities across state:

Primitive and semi-primitive camping is available in all parts of the state but primarily in the north, being most common in the northern state forests, the northern flowage properties, and a few state parks and recreation areas.

Notable times of the year of high or low participation:

Highest use months are May through October.

Potential social, economic, and ecological considerations for property planning purposes:

These campsites are typically associated with the non-intensive use land management recreational sub-classifications of Wisconsin Administrative Rule NR 44. This administrative rule also defines camping facility development and design standards.

Because primitive campers seeking to experience nature and solitude care must be taken to select sites that meet the siting and campsite design criteria defined in NR 44.

Participation:

Participation rate: SCORP data is not available for this activity

Site Selection Considerations and Criteria:

While primitive camping is defined within the recreational sub-classification section of NR 44, it is not limited only to areas with the recreational use classification. A master plan may provide for this style of camping under most land use classes, if it is a compatible with the management objectives for the area and the primitive campsite siting and design criteria can be met. [Note: while primitive campsites may be developed in association with developed campgrounds, such as “walk-in campsites”, providing a popular and valuable camping opportunity they do not provide a fully remote camping experience.]

Development and siting criteria for primitive campsites are detailed in (NR44.07 (4) and (NR44.07 (5). Semi-primitive camping is detailed in (NR44.07 (6)).

The information in this summary sheet was developed by DNR staff. This information will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Canoeing and Kayaking

Range of desired experiences:

Canoeing and kayaking provide a wide range of experiences from flat water (lakes), to moving water (streams and rivers) to whitewater (streams and rivers with sufficient fall to create rapids and water falls). In addition, this activity can take place for a few hours during the day at a local lake or it can be a means of transportation on a tour of a river or a flowage over the course of several days. Canoes and kayaks are also used for fishing, bird watching and collecting wild edibles.

The experience level of the recreationalist varies greatly as well, with many outlets renting canoes and kayaks, the boater can be a first timer or just an occasional participant. Enthusiasts usually own their own boats, sometimes more than one, and will travel great distances to experience a certain body of water.

This type of boating requires little in the way of infrastructure in terms of launching the boats, a clearing on a shore line with minimal drop to the water level is sufficient. A safe parking area is necessary; toilets and drinking water are appreciated.

Notable differences in participation or opportunities across state

Participation occurs all over the state, although the lack of lakes and larger rivers in the Driftless area limits participation in this area.

Notable times of the year of high or low participation

Late spring, summer and early fall are the most popular times of the year for this activity, with summer being the peak period. Late fall and early spring are less popular due to colder air and water temperatures, although hearty participants can be found out on the water as long as it is not frozen.

Potential social, economic, and ecological considerations for property planning purposes:

Canoeist and kayakers who use motorized boat accesses can experience resentment by the motor boaters who feel they paid for the facilities via their boat licenses and the non-motorized boaters should launch elsewhere. Maintaining and advertising carry-in sites on popular water ways might diminish this conflict by separating the uses. The wake from motorized boating as well as the noise can prove to be an irritant to canoeists and kayakers. However, with 15,000 lakes, 43,000 miles of rivers and 670 miles of Great Lake shoreline, there is no shortage of water bodies in Wisconsin for everyone to enjoy.

Unwise placement of carry-in launches, such as on steep banks or unstable soil, can cause unnecessary erosion of the streambank or lake shore.

Participation:

Participation rate: 34% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- Although not officially adopted, the Canoe Campsites and Routes Handbook (2512) provides guidance on providing canoe trails.

The information in this summary sheet was developed with input from Wisconsin Nordic Network and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Cross-country Skiing (Nordic skiing)

Range of desired experiences:

Participants propel themselves across snow-covered terrain by either striding forward (classic style) or side-to-side in a skating motion (skate skiing). On department lands, cross-country skiing is listed as one of the five Nature Based Outdoor Activities. Skiers are generally treated as pedestrians, meaning they are allowed to traverse anywhere on department lands not posted closed to the public. In addition, other trail uses are not allowed on trails designated as and groomed for cross-country skiing. Skier's experience is enhanced when the trails are located on a mix of hilly and flat topography; and debris from surrounding vegetation, rocks and roots is kept to a minimum. Groomed trails enhance the experience but are not necessary for the sport.

Notable differences in participation or opportunities across state

Participation is weather-dependent. Participants often travel to better snow conditions and more extensive trail systems, particularly from southern to northern Wisconsin. Some participants enter races such as the American Birkebeiner, which necessitate regular training close to home for entrants. Wisconsin has more than 700 groomed cross-country ski trails.

Notable times of the year of high or low participation

This activity is entirely dependent on weather and snowfall. There are a few locations in the state where snowmaking equipment is used to enhance or create suitable conditions for groomed cross-country ski trails.

Potential social, economic, and ecological considerations for property planning purposes:

Trails may be winter use (snow covered) only or may be used during non-snow cover conditions for other uses. Trailhead shelter facility/warming huts are common. Lighted trails are growing in popularity as are candlelight ski events. This is a highly aerobic activity. Skiers will often complain about exhaust from any nearby combustion engines. Trails should be constructed a minimum of 4' wide with an additional 2' shoulders on either side. Grooming equipment width, height, turning radius, and weight should all be used to determine trail width, layout and bridge design. Additionally, the type(s) of cross-country skiing that will be accommodated will help determine trail width; skate skiing requires a wider trail corridor. Although groomed trails are not required for every type of cross-country skiing, grooming is often the expected experience when it is noted that a property provides cross-country ski trails. Grooming and track setting for classic style requires specialized equipment and techniques. Trail preparation employs snow machines that tow snow compaction, texturing and track-setting devices. Groomers must adapt such equipment to the condition of the snow—crystal structure, temperature, degree of compaction, moisture content. Skilled grooming is a key to providing quality cross-country ski trails. Grooming costs should be considered in decision making.

Participation:

Participation rate: 13% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Cross country skiing is permitted on any DNR land opened to public use, the guidance provided below relates to designated cross-country ski trails only.
- To accommodate low volume cross-country skiing a minimum of 4 miles of looped trails with a 1.5 to 2-mile beginner loop is necessary. Five parking stalls per mile of trail is standard.
- To accommodate high volume cross-country skiing a minimum of 6 miles of looped trails with a 2-mile or less beginner trail is necessary. A shelter, drinking water and some sort of toilet facility should be considered. Eight parking stalls per mile of trail is standard.
- NR44 addresses appropriate designated trail types for the various land classifications.

- Refer to the Department Design Standards Handbook (8605.1, Chapter 30) and the Trails Handbook (2540.5) for further design guidelines.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Dog Sledding and Skijoring

Range of desired experiences:

Dog sledding and skijoring are snow-based recreational activities where dogs are placed in harnesses and used to help pull humans along maintained trails and/or unmaintained land. In dog sledding the dogs are usually in teams of 2 or more and pull a sled and human driver. In skijoring, generally one or two dogs are harnessed to a human cross-country skier. While most activity takes place during the winter, variations of dog sledding and skijoring also occur in the absence of snow by using wheeled carts and bikes. Preferred settings contain both trails and off-trail areas where pets are allowed. A high-quality opportunity would include: at least 40 acres of habitat (no habitat preference) with varied topography (some hills and some flat) having at least 10 miles of trails (at least 4'-wide trail, 4-8' cleared corridor, native surface). Between 10 and 50% of participation takes place an hour or more away from participants' homes, so there is some willingness to travel.

Notable differences in participation or opportunities across state

Participation is highest in the northern third of the state, and low elsewhere.

Notable times of the year of high or low participation

Participation is highest in winter and low at other times of the year.

Potential social, economic, and ecological considerations for property planning purposes:

Participants' main concern is motorized vehicles, due to danger to both pets and humans. Impacts to other participants, other property users, or neighboring landowners include pet waste, noise from barking, and trail conflicts with snowshoers and skiers. Environmental impacts are minor and similar to cross-country skiing.

Benefits include exercise/health benefits for both dogs and owners and the opportunity for dog owners to enjoy their pet in a natural setting. There can also be some local positive economic impact associated with large events/races.

Participation:

Participation rate: No data provided in SCORP

Site Selection Considerations and Criteria:

- Skijoring and dog sledding is permitted on any DNR land opened to public use, the guidance provided below relates to designated cross-country ski trails but could be applied to the above activities.
- A cross-country ski trail can be used for skijoring but the trail should be considered set aside for the use as the dogs tend to ruin the ski track.
- NR44 addresses appropriate designated trail types for the various land classifications.
- Refer to the Department Design Standards Handbook (8605.1, Chapter 30) and the Trails Handbook (2540.5) for further design guidelines.

The information in this summary sheet was developed with input from Wisconsin Association of Field Trial Clubs and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Dog Training & Field Trialing (Pointing, flushing, & retrieving)

Range of desired experiences:

This activity involves training dogs to perform various hunting-related tasks (e.g., pointing, flushing, retrieving) and then applying the training in competitions or during hunting. Riders on horseback are used for pointing-dog events. Judges and participants on horseback follow the dogs and are able to identify "points"; this is what the dogs are judged on. Preferred settings are large areas (~1,000 acres) away from population centers with grassland, savanna, or wetland habitats and mostly flat terrain. Ideally, the facility will provide trails (4-8' cleared corridor, native surface), a mowed grassy area, drinking water and toilets (portable is fine), and a shelter with walls and a roof for bad weather. Over half of all participation takes place an hour or more away from participants' homes, so participants are willing to travel for a quality experience.

Notable differences in participation or opportunities across state

Participation is highest in the northwest (probably because of proximity to the Twin Cities) and south-central and southeast parts of the state (most of the Class I grounds are located here), moderate in the central, north-central, and western parts of the state, and lowest in the northeast.

Notable times of the year of high or low participation

Participation is highest in spring and fall and moderate in summer and winter. It is not desirable to run dogs or horses during the heat of summer or cold of winter. Also, it would be much harder to get around the state lands in the winter (many participants have large trailers for dogs and horses). Finally, many property managers limit the time of year that dog events can happen on a property due to nesting birds or other environmental concerns.

Potential social, economic, and ecological considerations for property planning purposes:

Participants' main complaint seems to be "people in places they shouldn't be"; i.e., lack of awareness on the part of other property users that there is a dog training area and being present and/or interfering with a training or trialing event. They would also like to have more Class I grounds. The main impact to other property users is that dog trainers/trialers hope or expect that other users will not use the area while a training or trialing event is in progress, essentially making the area off-limits to other users. Other impacts to users or to neighboring landowners include noise from dogs barking late at night or early in the morning and the report from a blank pistol or shotgun. There may also be perceived safety concerns if people nearby are unaware of training/trialing events and don't know that blanks are being fired instead of live ammunition. Large trucks and trailers used to transport dogs and horses could impact roads and traffic in the area. On the plus side, participants feel that their activity provides well-trained dogs that can be sold to the hunting public and/or that their expertise can help the hunting public train their dogs to be effective and efficient in retrieving downed game. Also, they volunteer to maintain dog training/trialing grounds through mowing and burning, which also helps provide/maintain habitat for other species.

Environmental impacts: Horses may trample soil and vegetation, particularly in wet conditions. Biologists and property managers put restrictions on the clubs for mowing and other maintenance (brushing, herbicide application, etc.) to lessen negative impact on wildlife and plants. Trials do take place during the bird nesting season. This is where the importance of the relationship between the property manager and the club is vital. They work together on where the dogs can go and when.

Participation:

Participation rate: SCORP data is not available for this activity

Site Selection Considerations and Criteria:

- Preferred settings are large areas (~1,000 acres) away from population centers with grassland, savanna, or wetland habitats and mostly flat terrain.

See also:

- s. 169.20-21, Wis. Stats.
- ch. NR 17, Wis. Adm. Code
- Manual Code 9438.1
- Wisconsin Dog Training and Trialing Regulations
  PUB-WM-444-2007

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary Sheet: Dog Walking

Range of desired experiences:

This activity is a form of recreation and exercise for both the dog owner and the pet, and can occur with the dog on or off a leash. Most dog-walking occurs for 0.5-2 hours at a time. Preferred settings include walking/hiking trails where dogs are allowed as well as fenced "dog parks" where dogs can be off-leash. A high-quality opportunity would include: at least four miles of trails (2-4'-wide, less than 4' cleared corridor, native surface) in grassland, savanna, or forest habitat with varied terrain (some hills and some flat) and a fenced area of at least three acres with a mowed grassy area and drinking water. Ponds or lakes are also desirable for pet swimming and water retrieving. Over 90% of participation takes place an hour or less from participants' homes, so locations near population centers are best.

Notable differences in participation or opportunities across state

Demand is generally highest near more heavily populated areas (south-central WI, Fox Valley, Green Bay) and moderate elsewhere in the state.

Notable times of the year of high or low participation

Participation is highest in spring and summer, moderate in fall, and low in winter.

Potential social, economic, and ecological considerations for property planning purposes:

Participants' main concern is motorized vehicles, due to danger to the pet. Impacts to other participants, other property users, or neighboring landowners include pet waste, noise from barking, and poorly-behaved or aggressive dogs. Dogs can also present a safety hazard for bikers. Environmental impacts are minor and similar to hiking (soil erosion or compaction, minor trampling of vegetation).

Benefits include exercise/health benefits for both dogs and owners and the opportunity for dog owners to enjoy their pet in a natural setting.

Participation:

Participation rate: 32% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site considerations and criteria do not apply to this activity.

The information in this summary sheet was developed with input from DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Fishing – Ice

Range of desired experiences:

Surprisingly, winter fishing makes up nearly one fourth of the annual catch in Wisconsin. People enjoy it for the solitude of being out on a frozen lake and the challenge of the sport. Others like the friendship and fond memories found with friends and family. Ice fishing is generally restricted to inland lakes, flowages of large rivers like the Wisconsin, Chippewa, Rock, and Flambeau, and portions of the Great Lakes (primarily harbors, Green Bay, and Lake Superior).

Notable differences in participation or opportunities across state

Ice fishing is most prevalent in the north where natural lakes are common, as well as on flowages of large rivers. The ice fishing season tends to be shorter in the south due warmer temperatures in late winter. Ice depths are also less dependable further south in the state. Besides some of the flowages, there are fewer lakes in the western and central part of the state and subsequently far fewer opportunities.

Notable times of the year of high or low participation

Mid to late December is typically when sufficient ice is available in northern Wisconsin. Early ice tends to produce more success. Depending upon the year in the southern part of the state, sufficient ice doesn't develop until January. Typically, by the end of March, much of the ice melts and gives way to open water.

Potential social, economic, and ecological considerations for property planning purposes:

Ice angling in general is a more social activity than open water angling, since ice anglers tolerate greater densities on the ice. That being said, excessive truck, ATV, and snowmobile traffic tend to disturb fish and fishing. Ice fishing requires ice. Warm weather and unsafe ice conditions can threaten the quality of the experience. Boat launch facilities can be crowded on popular ice angling lakes, however, other activities at the launch are generally at a low-point so the space conflicts at the launch is among ice anglers, not with other recreational activities.

Overall, there exist very limited impacts to the environment. Trash may be left on the ice, but anglers often police themselves. Exploitation of fish populations are closely monitored and regulated by the Department of Natural Resources through length and bag limits for each game fish species.

Economically, ice fishing may have significant impacts. For example, the Lake Sturgeon spearing season brings more than $3 million to the Lake Winnebago region as it is home to the world's largest sturgeon population.

Participation:

Participation rate: 23% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed with input from DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Fishing – Lake, from boat

Range of desired experiences:

Wisconsin has over 15,000 lakes, providing breathtaking scenery and beautiful wildlife along thousands of miles of shoreline, where Wisconsin residents and visitors can fish from a boat, canoe or kayak. Lake angling from a boat is very diverse, encompassing kayak angling, row trolling, pontoon angling, competitive angling in tournaments, and bow fishing. Lake angling from a boat typically involves the same departure and return locations, whether it be a private pier or a public launch facility. Most are day-trips and do not involve overnight camping or other associated activities.

Public access standards are described in NR 1.91; It is the goal of the state of Wisconsin to provide, maintain and improve access to the state's navigable lakes, rivers and streams for the public. Public access facilities shall allow for public rights of navigation, related incidental uses and other uses which are appropriate for the waterway. Waterway uses shall be equally available to all waterway users and include enjoyment of natural scenic beauty and serenity. These public rights and uses may be provided by any combination of publicly and privately-owned access facilities which are available to the general public free or for a reasonable fee.

Notable differences in participation or opportunities across state

Lake fishing from watercraft is most prevalent in the north and along Lake Superior and Lake Michigan. Since there are few lakes in the western and central part of the state, there are far less opportunities for lake fishing from watercraft.

Notable times of the year of high or low participation

Spring and summer are typically when lake fishing is popular and effective. The statewide fishing opener is the first weekend in May. Late spring to early summer tends to be a peak period for fishing activity. There is little to no lake fishing by boat in the winter.

Potential social, economic, and ecological considerations for property planning purposes:

Lake fishing from a boat has a number of both positive and negative effects. It provides anglers with sustenance and food, exercise, and connection with family, friends, and the natural aquatic environment. This escape from urban environments allows visitors to physically and mentally recharge.

At the same time, the popularity of lake fishing from a boat may result in extensive riparian development on non-urban lakes, poor water quality, and habitat loss. Night bow fishing results in light and noise disturbances, and motorized boats can disturb non-motorized boaters while moving between fishing locations. Furthermore, due to the frequency of visitation and traveling of visitors, there is an increased likelihood of the introduction of aquatic invasive species and potential for trash left at public launches.

Participation:

Rank of participation rate: 37% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed with input from DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Fishing – stream or river, from boat

Range of desired experiences:

Wisconsin has more than 12,600 rivers and streams that meander their way through 84,000 miles of varying terrain. The state also has nearly 1,600 stream and river miles designated as "outstanding" and recognized as the state's highest quality water resources. The Mississippi River winds its way through about 200 miles of Wisconsin. Other rivers, like the Wisconsin, Flambeau, St. Croix, Namekagon, Chippewa, Fox, Milwaukee, Wolf, Rock, Baraboo, Black, Menominee, and the Pecatonica join the Mississippi River to provide the majority of river float fishing opportunities.

Non-motorized watercraft river fishing most often involves launching and fishing while floating downstream to a defined take-out landing. Non-motorized landings can be quite primitive. Carry-in locations can sometimes be associated with road crossings at streams.

Motorized water river fishing generally occurs in the largest portions of the rivers without significant rapids, and anglers tend to motor back to the same landing rather than take-out downstream. Motorized river fishing ranges from very small watercraft to houseboats on the Mississippi River. River float fishing anglers are typically seeking catfish, sturgeon, walleye, smallmouth bass, and muskellunge. Bowfishing is another recreational activity that occurs on large rivers and their backwaters as anglers most commonly seek buffalo and carp.

Notable differences in participation or opportunities across state

River fishing from watercraft is most prevalent along the Mississippi River as well as the larger rivers in the northwest and southcentral part of the state. Along Lake Michigan and in the northeast areas where the dominant water features are lakes, there is much less opportunity for river fishing by boat.

Notable times of the year of high or low participation

Spring and summer are typically when stream fishing is popular and effective. The statewide fishing opener is the first weekend in May. Late spring to early summer tends to be a peak period for fishing activity. There is little to no river fishing by boat in the winter.

Potential social, economic, and ecological considerations for property planning purposes:

River fishing from a boat has a number of both positive and negative effects. It provides anglers with sustenance and food, exercise, and connection with family, friends, and the natural aquatic environment. This escape from urban environments allows visitors to physically and mentally recharge.

Anglers on non-motorized watercrafts are impacted by jet skis and other motorized water craft. On small rivers, high densities of canoe and kayak paddlers can also detract from river float experiences. Those anglers with motorized watercrafts are negatively impacted by powerboating activities such as water-skiing, wake boarding, and riding personal watercrafts, as these activities can displace fish and impact angling success. Night bow fishing results in light and noise disturbances. Ecologically, banks are susceptible to erosion from the use of carry-in launches and wakes caused by motorized boats.

Participation:

Rank of participation rate: 20% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed with input from DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Fishing – stream or river, from shore

Range of desired experiences:

Stream fishing from shore includes trout and smallmouth bass angling in wadeable streams, river bank and bridge-deck fishing in rural areas on larger rivers, and river bank and wharf fishing in urban areas. Wisconsin boasts over 13,000 miles of trout streams with over 5,000 classified as high quality, class I trout streams. Anglers employ different strategies from fly-casting to spinning rod with lures and straight hooks with bait. Public access to waterways is gained through the purchase of riparian rights or by wading in navigable waters.

At rural public fishing lands, parking lots or parking pads near bridges are useful to improve public access. Walking paths may also be helpful. There may be instances where accessible fishing areas can be cleared to provide fishing access to those with disabilities.

In urban settings on larger rivers, there are often community parks that have fishing piers and wharfs as well as toilet and water facilities. These facilities help to focus user traffic and minimize the amount of shoreline damage.

Notable differences in participation or opportunities across state

Stream fishing is most prevalent in the western Driftless Area of the state where the primary water features are small streams that empty into larger rivers. Stream fishing is also popular in central and southern regions of the state. In the northern areas where the dominant water features are lakes, there is less opportunity for stream fishing.

Notable times of the year of high or low participation

Spring and summer are typically when stream fishing is popular and effective. Trout angling season begins with a catch-and-release season in late winter or early spring. The statewide fishing opener is the first weekend in May. Late spring to early summer tends to be a peak period for fishing activity. As temperatures cool in the fall, fishing activity decreases. There is little to no stream fishing in the winter.

Potential social, economic, and ecological considerations for property planning purposes:

Quality trout and smallmouth bass angling is primarily a solitary experience in an undeveloped natural setting. Motorized vehicles within the 66' riparian zone negatively affect the quality of the experience. Bank erosion, trash, cows in the stream, and poor water quality all impair the experience due to reduced fish productivity. Rural riverbank fishing is often associated with roadside areas including river boat launches.

Anglers tend to accept adjacent bank anglers since there is minimal disturbance. Urban river bank and pier fishing is impacted by lack of physical facilities such as piers, wharfs, parking areas, mowed areas, and toilets. Higher angler densities are tolerated in these park areas.

There are some impacts that this activity can cause to other activities. On occasion, anglers can disrupt deer hunting activity for early fall bowhunters who hunt public lands with a waterway. Those who fish from piers can sometimes be in the way of those trying to launch watercraft at the same piers. Anglers may also leave trash along the shore fishing areas. Some bank erosion occurs from anglers moving up and down the bank face, especially at popular fishing locations.

Participations:

Rank of participation rate: 21% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Gathering edibles from the wild

Range of desired experiences:

Gathering fruits, nuts, berries, mushrooms and other edible items from the wild is pursued by a wide range of Wisconsinites and visitors. Enthusiasts may spend many hours collecting these items as the seasons progress, providing a significant amount of food for their family, or selling it to supplement their income. Wild rice, morel mushrooms, and wild ginseng are among the most valuable edibles sought. Frequent and occasional participants may make special excursions to collect wild edibles at the peak of their availability (e.g. maple sap, morels, blueberries), or collect edibles as random opportunities present themselves. Examples include collecting wild asparagus, water cress, blackberries, hickory nuts, etc.

Notable differences in participation or opportunities across state

Wild edibles are available in all corners of the state, from suburban woodlots and backyards in the southeast to large wilderness areas in the north.

Notable times of the year of high or low participation

Pursuit of wild edibles is closely tied to the seasons. Spring brings a flush of green edible plants such as leeks, nettles, watercress, some fungi and maple sap. Summer brings berries and fruits. Fall is prime season for most nuts, mushrooms and wild rice. Little to no participation occurs in the winter.

Potential social, economic, and ecological considerations for property planning purposes:

Impact to local populations of edible species from collecting is typically low. An exception is the illegal over-collection of wild ginseng (which requires a permit) on public lands. Trespassing onto private lands without permission is also an issue, especially by those seeking morels and ginseng. Trampling of vegetation and transporting invasive plant species propagules into natural areas is a suspected, but unproven, ecological impact. Competition among collectors, and resulting conflict, may be a consideration on small properties.

Participation:

Participation rate: 31% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection consideration and criteria do not apply to this activity.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Geocaching

Range of desired experiences:

This activity involves placing caches—typically small waterproof boxes—on properties open to the public to test participants' geo-locating abilities. The latitude-longitude of the caches is known to participants, usually through a posting on a website. Caches are often placed in remote locations and those who located the cache record their name and date in a log book inside the cache.

Notable differences in participation or opportunities across state

Geocaching is more popular in areas of higher populations in the state. The Madison, Milwaukee and Fox Valley metro areas tend to have more participants and geocache locations.

Notable times of the year of high or low participation

There is generally higher activity in the spring and fall and little to no activity in the winter.

Potential social, economic, and ecological considerations for property planning purposes:

This activity provides excellent health benefits by encouraging participants to get outdoors pursuing a fun, challenging, and often strenuous activity. In addition, this activity has educational value in allowing participants to practice geo-locating using a variety of techniques.

Caches are only to be placed at a property with the approval of the property manager. Depending on the popularity of the cache, impacts from trampling can occur and as a result the placement of caches should avoid sensitive areas and should be done in coordination with the property manager. Caches are typically left at a location for a limited number of months or years.

This activity typically does not impact other types of outdoor recreation and does not generate many complaints from other outdoor recreation participants.

Participation:

Participation rate: 10% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection consideration and criteria do not apply to this activity.

The information in this summary sheet was developed with input from Wisconsin Horse Council and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Horseback Riding and Horse Cart Driving

Range of desired experiences:

Horseback riding in Wisconsin occurs on public lands and privately-owned ranches and recreation areas. Riders need to have a basic understanding of how to handle a horse to safely participate in the recreation. Trail riding is most common. A 2007 study shows 78% of equine owners use their animals for trail riding or recreation. Trail riding trips typically involve significant effort and planning to transport horse(s) to the destination along with supplies and equipment. As a result, long distance multiday trips are typical, as opposed to single-day outings with horses. This makes access to camping areas important when planning where to go with horses. Riders typically want to be away from population centers and activity so that horses are not inadvertently startled. Truck and horse trailers need larger parking accommodations and loading areas. Drinking water, tie posts/rails and manure disposal areas are also key components to a usable equine recreation area.

Varied forested terrain is most desirable. Riders can challenge their horses and enjoy the landscape. Water features are helpful for providing water to animals without having to return to base-camp. Riding horses affords trail users a greater range of distances. To make a destination worth their trip, the desired trail lengths composed of over 15 miles of trails are best. Trails can be technical with two to four feet width of native material, but there needs to be a cleared height of about 12 feet and width of about eight feet.

Wisconsin also has an active Endurance Ride program where riders will compete over 10, 25 or 50 miles in a day.

Horse cart driving requires larger trails than traditional horseback riding, as the cart adds extra width and challenge. For those who horse cart drive competitively, a specific course is needed for practice, often created by private entities. There are also a number of recreational horse cart driving opportunities on public lands and trails scattered across Wisconsin. Since horse riding and horse cart driving are legal on public roads, town roads and forest roads are well-suited and common for horse cart driving.

Notable differences in participation or opportunities across state

Riding occurs across the state, but is more desirable in the following regions: Northwoods, Upper Lake Michigan Coastal, Mississippi River Corridor and Lake Winnebago Waters.

Notable times of the year of high or low participation

The most common times of year include spring and fall when temperatures are cooler for the horses and there is less of a problem with biting insects. There is less use during the summer when heat and insects affect the animals the most. Winter riding is not common.

Potential social, economic, and ecological considerations for property planning purposes:

Camaraderie of users is of key importance. Group rides are more common than solo riding. Riders are able to enjoy the outdoors and get to places that they may not normally access on foot. Communities that have places to ride benefit from equestrians spending on fuel, food, and shops.

Equines encounter problems when there is hiking and biking on the same trails. Bikes are fast and quiet as they travel down the trail. Hikers tend to want to stay out of the way of horses, so they move off the trail and "disappear" from the horse's view. Both of these instances can startle horses and cause them to throw off their riders and/or collide with other trail users. Etiquette education can help multiple trail uses to co-exist.

A common complaint about equestrian trails from other users is that of manure on the trails. Sharing the trails with hikers is beneficial in that it gives hikers the opportunity to safely interact with horses that they may not otherwise have. On private lands, the expectations of equestrians are that they do not litter, they stay on trails, and stay off cropland and lawns.

With the weight of the animal and hooves, there is likelihood for disturbance to a trail's surface. If trails are not sustainably designed, this disturbance can lead to erosion and rutting in the trail. Depending on the horse's diet and where it has been recently, there is a potential for spreading invasive plant species.

Participation:

Participation rate: 7% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- A minimum of three miles of trails should be provided at a property. One-half day rides should be at least seven miles in length with 10 miles the minimum length for a full day's ride. Shorter trails providing access to a point of interest are allowed.
    - Loop trails are typically eight to 10 miles long or more and are composed of a series of loops providing a variety of recreational riding experiences that return the participant to the trailhead.
    - Regional trails are point to point trails that can be several hundred miles long and traverse multiple jurisdictions and a combination of land ownership types. This trail corridor is often shared with other recreational uses.
- Varied terrain is preferable for this recreation experience but steep slopes and unstable soils can affect development costs, maintenance costs and cause unnecessary resource damage. Avoid areas with slopes exceeding 12%. Avoid areas of sandy soils or peat and organic soils that are saturated for portions of the year. Trail segments with adverse conditions should be kept to a minimum for both long term costs and for environmental reasons.
- A designated use trail is necessary for this facility type. A designated equestrian trail may be placed on lands with any DNR land classification but recreational trail setting for equestrian trails will always be Type 3 (NR44.06) or Type 4 (NR44.07) Recreational Areas. Note that this use may not be compatible with Recreation Management Areas Type 1 and Type 2.
- Refer to Chapter 30 (page 80) in the Department Design Standards Handbook (8605.1) and to the Trails Handbook (2540.5) for trail and support facility design guidance and best practices to minimize environment damage.

The information in this summary sheet was developed with input from Wisconsin Bear Hunters Association and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Hunting - Big Game (Deer & Bear)

Range of desired experiences:

Deer: Hunting for white-tailed deer is one of the most popular big-game hunting opportunities in Wisconsin. Deer hunters range in their level of interest from the occasional hunter to extremely dedicated hunters that spend many hours in the field. Most Wisconsin deer hunters choose to hunt with a firearm. However, hunting with archery and crossbow equipment continues to gain in popularity. Additionally, there continues to be increasing interest in hunting from the female segment of society. Regardless of the level of interest and equipment used, most deer hunters prefer to hunt in solitude with no interruption from other outdoor recreation participants. Hunting from portable tree stands is common on public and private lands and most hunters prefer to have relatively easy access to their favorite deer hunting spots. Deer hunters are willing to travel to their hunting spot or cabin, and the atmosphere of a camp setting contributes to the overall deer hunting experience.

Bear: Bear hunters typically hunt over bait used to attract bears within harvest range, or use hounds to pursue and harvest bears. The amount and type of allowable bait for bear hunting is regulated. Like deer hunters, bear hunters prefer solitude while hunting; however, hunting with hounds can be more of a social experience involving groups of family members and friends. Access to large areas of hunting land is important for bear hunting with hounds, while hunters that hunt using only bait may use smaller tracts of land. Bears can be hunted with firearm, archery, and crossbow equipment.

Notable differences in participation or opportunities across state

Deer: Deer hunting is very popular in Wisconsin and occurs in every county in the state. Although typically an activity occurring in rural areas, there is increasing opportunity for deer hunting in urban areas to manage high deer numbers. Wisconsin has a traditional 9-day gun deer season that is extremely popular, and extended archery and crossbow harvest seasons in urban or metro deer management units.

Bear: Wisconsin continues to be a leader in providing excellent bear hunting opportunities. Most of Wisconsin's bear hunting occurs on the large tracts of public land in northern Wisconsin; however, the southern two-thirds of the state continue to support an increasing number of bears. Wisconsin uses established bear management zones and harvest permit allocation to manage hunting pressure and achieve bear population goals.

Notable times of the year of high or low participation

Deer: Avid deer hunters are planning for the hunting season all year through scouting, equipment maintenance, and habitat management. However, the majority of participation in deer hunting occurs with the onset of the archery and crossbow season in September and ends in early January. Some urban or metro deer management units provide additional archery or crossbow hunting into late January.

Bear: The bear hunting season occurs in September and October; however, people are allowed to place bait for bears beginning in mid-April. In addition, people are allowed to train their hunting hounds beginning in July.

Potential social, economic, and ecological considerations for property planning purposes:

Bear and deer hunters cite lack of access and overcrowding on public lands as problems, as well as potential for conflicts with non-consumptive users. Other users likely also see potential for conflict, especially on properties that had not traditionally been open to hunting but now are (e.g., state parks). Other concerns include: weapons discharge too close to buildings; bear dogs trespassing on private land; violation of baiting regulations; poaching; location of stands/blinds; and the cutting of shooting lanes.

On the positive side, big-game hunting gets people out into nature; promotes family bonding and camaraderie; provides meat for personal consumption and for food pantries; provides significant funding to federal and state agencies; and has a significant, well-documented positive economic impact on local and state economies. In the case of deer, populations

are managed through hunting harvest to promote tree and plant regeneration that improves ecosystem diversity. Similarly, bear populations are managed through hunting harvest to reduce damage complaints from the public and negative human/bear interactions.

Participation:

Participation rate: 13% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection consideration and criteria do not apply to this activity.

The information in this summary sheet was developed with input from Wisconsin Conservation Congress and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary Sheet: Hunting - Migratory Bird

Range of desired experiences:

Migratory bird hunting includes hunting for game birds, such as dove, woodcock, snipe, sora rail and Virginia rail. Waterfowl, such as ducks and geese, are also migratory game birds, and are the predominant game bird for this activity. Hunters utilize boats and canoes, as well as hunting dogs to assist in this activity.

Notable differences in participation or opportunities across state

Wisconsin generally ranks in the top 5 for number of waterfowl hunters nationwide. Wisconsin waterfowl hunters range from those seeking the early blue-winged teal and wood duck harvest in northern marshes to the early September Canada goose hunter in the southeast and from the Mississippi River hunter seeking canvasback in November to the later season mallard and Canada goose field hunters in central Wisconsin.

Hunting success follows habitat needs for waterfowl, as well as migratory factors including weather fronts. Those engaged in this activity are open to travelling more than 1 hour.

Notable times of the year of high or low participation

This activity is limited to regulated seasons in the fall and early winter. This activity is also restricted to the type of firearm and ammunition allowed and requires permits beyond a small game license.

Potential social, economic, and ecological considerations for property planning purposes:

Migratory bird hunting provides health benefits by encouraging participants to get outdoors pursuing a fun, challenging, and sometimes strenuous activity. Migratory bird hunting is part of the Wisconsin's hunting heritage, and provides opportunities for building or continuing family traditions.

This type of activity does not require much infrastructure for upland sites, other than a potential parking area. Water sites will require a point of access or launch. Additionally, specific habitat management activities may provide a positive benefit to waterfowl abundance and provide additional hunting locations, which could increase hunter satisfaction.

Overcrowding of popular hunting locations, limited points of public access to water, and higher participation by hunters during the openings of seasons can cause impacts to the recreational experience. Some properties may also have restrictions on weapon discharge or running of dogs. There may also be potential for user conflicts between hunters and non-hunters who want to utilize the same area. Additional impacts may include potential trespass to retrieve down game and potential inadvertent spreading of aquatic invasive species.

Economic benefits include providing food for personal consumption; providing funding to federal and state agencies; and having a positive economic impact on local and state economies through draw of out-of-area hunters to locations known for high quality hunting.

Participation:

Participation rate: 5% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection consideration and criteria do not apply to this activity.

The information in this summary sheet was developed with input from Wisconsin Conservation Congress and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Hunting - Small Game

Range of desired experiences:

Small game hunting includes pursuit of various game birds, mammals, and furbearers. Some hunters utilize dogs to find, track, and retrieve game animals. Hunters desire adequate habitat for the target species.

Notable differences in participation or opportunities across state

With such a diverse array of animals to hunt in this activity, hunting pressure and techniques vary region to region. Many of the species can be found in rural habitats throughout the state. However, some species have limited ranges and habitats. For example, today's pheasant population is most common in the southeast one-third of the state and in a few west central region counties. Similar limitations are true for ruffed grouse, which prefer young, early successional forests typically found in the Central and Northern Forest Regions of the state. There also appears to be a willingness to travel more than 1 hour away from participants of small game hunting for these more select types of species, particularly for pheasant, ruffed grouse, and bobcat.

Notable times of the year of high or low participation

Highest participation follows hunting seasons and is typically fall through winter. However, there are some opportunities for year-round hunting of some animals classified as “unprotected”.

Potential social, economic, and ecological considerations for property planning purposes:

Small game hunting provides excellent health benefits by encouraging participants to get outdoors pursuing a fun, challenging, and sometimes strenuous activity. Small game hunting is part of the Wisconsin’s hunting heritage, and provides opportunities for building or continuing family traditions.

This type of activity does not require much infrastructure, other than a potential parking area. However, hunter walking trails or woods roads are commonly utilized for game bird hunting. Additionally, some state lands are stocked annually with pheasants.

There is higher participation by hunters during the openings of seasons, which may result in overcrowding of an area for hunters. Some properties may also have restrictions on weapon discharge or running of dogs. There may also be potential for user conflicts between hunters and non-hunters who want to utilize the same area. Additional impacts may include potential trespass to retrieve down game and discharge of lead ammunition into the environment.

Economic benefits include providing food for personal consumption and supplemental income through fur sale; providing funding to federal and state agencies; and having a positive economic impact on local and state economies through draw of out-of-area hunters to locations known for high quality hunting.

Participation:

Participation rate: 10% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection considerations and criteria do not apply to this activity.

The information in this summary sheet was developed with input from Wisconsin Conservation Congress and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Hunting - Turkey

Range of desired experiences:

Turkey hunting includes both spring and fall hunting, and is limited to regulated seasons. Turkey hunters desire opportunities to call-in, ambush or stalk turkeys. Habitat is a key component that affects the quality of the hunt. Weather conditions, such as snow cover, rain and wind, can negatively affect hunting experiences.

Notable differences in participation or opportunities across state

Turkey hunting success follows the natural history and habitat needs for wild turkey in Wisconsin. This includes roosting and nesting cover, brood-rearing habitat, and dependable food sources. Though found statewide, wild turkey numbers are larger in the southern half of the state. Deep persistent snow cover and extended periods of cold temperatures have great impact on turkey populations. In Wisconsin, turkeys tend to do better where the topography is varied and mature oak/hickory woodlands are interspersed with a variety of agricultural fields.

Turkey hunting is currently divided into seven management zones within Wisconsin. These zones allow wildlife managers to set permit levels appropriate to each area based on local turkey populations, the amount of turkey habitat, and the square miles of huntable land. Participants are willing to travel more than 1 hour, partially due to the limited number of permits available in any given management zone.

Notable times of the year of high or low participation

Participation is limited to the hunting seasons in the spring and fall, with spring typically showing higher participation. Scouting for birds may occur outside of the seasons.

Potential social, economic, and ecological considerations for property planning purposes:

Turkey hunting provides excellent health benefits by encouraging participants to get outdoors pursuing a fun, challenging, and sometimes strenuous activity. Turkey hunting is part of the Wisconsin's hunting heritage, and provides opportunities for building or continuing family traditions.

This type of activity does not require much infrastructure, other than a potential parking area. However, specific habitat management activities, such as creating openings in large forest canopies, may provide a positive benefit to turkey abundance and thereby, hunter satisfaction.

Even with limited numbers of harvest tags and staggered hunting periods for spring season, there is still potential for hunter overcrowding in a specific area, particularly in quality habitat areas within less abundant turkey management zones. Some properties may also have restrictions on weapon discharge. There may also be potential for user conflicts between hunters and non-hunters who want to utilize the same area. Additional impacts may include potential trespass to retrieve down game and discharge of lead ammunition into the environment.

Economic benefits include providing food for personal consumption; providing funding to federal and state agencies; and having a significant, positive economic impact on local and state economies through draw of out-of-area hunters to locations known for high quality hunting.

Participation:

Participation rate: 6% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Turkey hunting opportunities may be increased via habitat management decisions and the creation of additional turkey hunting zones.

The information in this summary sheet was developed with input from DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Motor boating

Range of desired experiences:

A motorboat, speedboat, or powerboat is a boat which is powered by an engine. Some motorboats are fitted with inboard engines; others have an outboard motor installed on the rear. In Wisconsin, Evinrude Motors developed its first outboard motor, a one-cylinder, 1.5 hp (1.1 kW) model, which became an instant success upon its introduction in 1909. This success has translated into a very popular outdoor recreational activity across the state. In 2011, Wisconsin was named one of the top 10 boating states in the nation. The plentiful water resources have a direct influence on the state's economy, job market, history, culture and success of the Wisconsin tourism industry.

The top three cross over boater activities are fishing, swimming and entertaining.

Notable differences in participation or opportunities across state

Motor boating is available in all parts of the state.

Notable times of the year of high or low participation

Highest use months are June – August.

Potential social, economic, and ecological considerations for property planning purposes:

Wisconsin is ranked 5th in the nation for registered boats and has shown the highest boater registration growth since 1999 with currently over 625,000 registered boats. Boater's activities greatly impact the state's economy through direct spending on fuel, travel, restaurants, lodging and boating expenses which impact other business in communities such as hauling, storage, repair, equipment, insurance, marina fees and taxes.

90% of boats in the Wisconsin are small, towable boats sized at 26 feet or less. This effects department standards on proper boat access ramp and parking design. In addition, the department is regulated by NR.9.1 on the number of vehicle / trailer parking spots available by the size of the waterbody. There are also a number of state and local laws on the operation and use of motorboats.

Participation:

Participation rate: 45% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Nature-Based Education Programs

Range of desired experiences

An incredibly diverse range of visitors engage in nature based education programs, ranging from hikers and bikers to hunter and anglers. Many different types of programs exist that discuss subjects such as bird migration, wild food, and property history. These programs may be geared towards a particular visitor demographic, or act as an opportunity to introduce visitors towards a new activity. Programs run all year, during all times of day.

Notable differences in participation or opportunities across state

The types of programs that are held vary depending on the natural features and amenities that a property may offer. Properties with amphitheaters may be able to host performances and other demonstrations, whereas remote properties with little light pollution may be able to offer astronomy and stargazing programs. Northern areas of the state may offer more programs geared towards winter-related recreation than southern areas, due to the cold climate of the area.

Notable times of the year of high or low participation

While nature-based education programs may be held throughout the year, the types of programs offered vary depending upon the season. Many wildflower and bird migration walks are held during the springtime. Summertime welcomes an incredible range of programs that include wildflower and bird walks alongside cooking, natural art, history, and other demonstrations. Autumn shifts towards hikes that explore the fall colors and bird migrations. In the wintertime, candlelit cross-country ski adventures and winter wildlife talks are common.

Potential social, economic, and ecological considerations for property planning purposes:

Nature based education programs have very little interference with other types of recreation. These programs share information about the outdoors with visitors, empowering them with new recreational skills as well as knowledge of their natural surroundings. These programs often unite visitor groups with common interests, building stronger visitor and recreational communities. These programs may attract visitors seeking community or to learn new skills, thereby increasing visitation to a particular area. This increase may in turn bolster the local economy.

Participation:

Participation rate: 52% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection consideration and criteria do not apply to this activity.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Nature photography

Range of desired experiences:

Participation in photography, both still and video, runs the gamut of experience from professional photographers and cinematographers using expensive, state-of-the-art cameras to those capturing a snapshot with a smartphone or point-and-shoot camera. "Nature" photography covers an extremely broad realm, including images of wild plants and animals, landscapes, and natural phenomena – almost any subject that has a decidedly natural focus. Nature photography can happen on any type of property and in any sort of habitat, size and configuration of the property is not important as long as access is available and there is something of interest to take a photo of. The experience is enhanced if the photographer has a chance to capture unusual flora or fauna or a landscape.

Notable differences in participation or opportunities across state

Nature photography is pursued throughout the state, from the back yard to large public lands.

Notable times of the year of high or low participation

Nature photography is done year around, but participation is likely highest from spring through autumn.

Potential social, economic, and ecological considerations for property planning purposes:

Social benefits of nature photography include physical and mental health of participants who explore the outdoor world. Economic impacts are unknown, and there are few identified impacts to the ecological values of DNR lands. One known concern is the trampling to vegetation caused by photographers eager to capture a picture of an uncommon subject, such as a rare orchid. There are no known conflicts with other outdoor recreational pursuits.

Participation:

Participation rate: 37% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site selection consideration and criteria do not apply to this activity.

The information in this summary sheet was developed with input from Off Highway Vehicle Council and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

There are generally two types of off highway motorcycles. The first type is street legal and licensed but designed for a mix of street riding and off-street riding (e.g. dual sport motorcycles). This type is allowed on any open designated public road. The second type is not licensed and is designed specifically for off-pavement riding. A new registration program is in place similar to ATV/UTV to allow registered off highway motorcycles on certain classifications of roads. Some public lands have specific trails designated for off highway motorcycles (OHM).

Summary sheet: Off Highway Motorcycle

Range of desired experiences:

Off highway motorcycling occurs in small areas, for a quick close-to-home experience, or large expansive areas with significant miles of trails for single or multi-day riding opportunities. Generally, users prefer native-material roads and trails less than four feet in width. The trail or road bed has a significant influence on experience and, if poorly designed, can create a negative experience. Participants that travel to a destination for off highway riding seem to prefer a minimum of 75 miles of roads and trails. Long linear roads and trails are desirable to access scenic areas and other natural features away from heavily developed areas and are viewed as a way to get outdoors. There is a slightly higher desire for hilly terrain and scenic rides with views of forests, open natural areas, lakes and streams. Riding long linear rail trails are generally viewed as non-challenging and a means to connect between trail systems and services. Highly disturbed areas can provide challenging riding within a small area.

Notable differences in participation or opportunities across state

Most of the longer riding opportunities are on public lands with the vast majority in the northern half of the state. There are thousands of miles of primitive roads in northern Wisconsin on state, county and federal lands that allow street licensed vehicles. There is a cluster of designated motorcycle trails in Jackson and Clark counties. The Richard Bong State Recreation Area is an example of the smaller-scale, shorter trail opportunities clustered in southeast Wisconsin. There are many state trails on old railroad beds that are mixed-use, but that availability varies across the state and depends on allowed uses. Many of these trails provide connections to other trail and road networks.

Notable times of the year of high or low participation

Use is very seasonal in nature occurring mostly between late spring and fall. Many roads and trails are closed in the spring due to seasonal thawing and there is no winter use. Late summer and fall can be a very enjoyable recreation and tourism period with fall colors and cooler temperatures.

Potential social, economic, and ecological considerations for property planning purposes:

Off highway motorcycles are not significantly impacted by people in other activities. At times, roads allow multiple uses including vehicles, horses and street legal motorcycles in which some congestion may occur but it is minimal. There are some challenges with mixing motorcycle and ATV use on designated ATV trails as they are designed for a certain type of vehicle. There may be conflict in passing width for trails, whether one-way or two-way. Consideration should be made in the design of trails and the mixed speeds that people may be recreating (for instance bikes and motorcycles sharing a trail). From a planning perspective consideration needs to be given to regional trail systems and town road designations as connecting systems for access and services. Trail and road systems should be considered to address user's needs and experiences including remote riding opportunities on closed loop systems and larger more regional road and trail systems.

Discussion on the issues and outcomes that can potentially result from people participating in the activity. These can include both positive and negative impacts to:

- Dust, noise, spread of invasive
- Family activity. Getting outside and enjoying nature and public lands
- Local and statewide economy for recreation/tourism services, hotel, food, gas, etc.

- Conflict with users desiring experiences of non-motorized uses (e.g. hiking, biking, rustic camping, hiking)

Participation:

Participation rate: 7% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- A minimum of 60 miles of trails should be provided at a property with 15 or more miles of connector routes or trails. Shorter trails providing access to a point of interest are allowed.
    - Loop trails are typically 10 miles long or more. An OHM area usually provides a series of loop trails providing a variety of recreational riding experiences that return the participant to the trailhead.
    - Regional trails are point to point trails that can be several hundred miles long and traverse multiple jurisdictions and a combination of land ownership types. This trail corridor is often shared with other recreational uses.
- Varied terrain is preferable for this recreation experience but steep slopes and unstable soils can affect development costs, maintenance costs and cause unnecessary resource damage. Avoid areas with slopes exceeding 12%. Avoid areas of sandy soils or peat and organic soils that are saturated for portions of the year. Trail segments with adverse conditions should be kept to a minimum for both long term costs and for environmental reasons.
- A designated use trail is necessary for this facility type. A designated OHM trail may be placed on lands with any DNR land classification but recreational trail setting for ATV trails will always be Type 3 (NR44.06) or Type 4 (NR44.07) Recreational Areas. Note that this use may not occur on land with the classification of Type 3 Non-Motorized Recreation Area (NR44.06(6)(h)) and is not compatible with Recreation Management Areas Type 1 and Type 2.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Picnicking

Range of desired experiences:

Picnicking is a popular way to share a meal, make memories, and appreciate the outdoor space that Wisconsin has to offer. It may be done by a variety of visitors including day use visitors, campers, bikers, hikers, motorized trail recreators, and more. The picnic experience may range from an all-day grilling event with brats and veggies to a quick pit stop for hungry hikers.

Notable differences in participation or opportunities across state

Many properties offer picnic areas with a range of amenities. These include more developed areas with shelters, grills, playgrounds, and volleyball courts as well as less developed areas with a picnic table with water and a toilet.

Notable times of the year of high or low participation

Picnicking is especially popular during the warmth of the spring and summer months, as well as during the beautiful colors of autumn. Fewer visitors participate in picnicking in the winter due to the cold temperatures.

Potential social, economic, and ecological considerations for property planning purposes:

Economic impacts of picnicking are great, as they provide a way for visitors to engage with the property without equipment. This broadens the range of visitors and thus the potential to bring revenue into the local economy.

Picnicking provides a time to recharge for visitors that may include hikers, bikers, and paddlers. In doing so, it facilitates an improved recreation experience for these groups. It also facilitates community bonding by bringing together different groups of people to spend time together.

The ecological impact of picnicking is minimal, although food crumbs may attract unwanted visitors to a picnic area. Trash and litter left behind by picnickers may also be unsightly and cause disturbance in the natural environment.

Participation:

Participation rate: 74% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Picnic areas should be located near other points of interest and have a mixture of open and shaded areas. Picnic tables and grills should be provided. Parking should be located within 150 feet, except for overlooks, water features and other special situations. Topography should be level to gently sloping, well drained and should not exceed 10% grade.
- Section NR 45.03(17) defines a picnic area as any tract of land developed and maintained for picnicking and containing not less than five picnic tables. Included in the definition of picnic area are adjacent playground and play field areas. The maximum density for picnicking should not exceed 60 people per acre.
- Standard size picnic area tables are 8 feet long. This size table provides comfortable seating for up to six people plus space for a cooler, large thermos jugs, etc.
- For department properties, pets are not allowed in a designated picnic area. Exceptions may be made for visitors with Service Dogs. Other exceptions are made in certain circumstances considering health and safety.
- Distance from drinking water to a picnic table should not exceed 400 feet. Wells with hand pumps may be used in picnic areas with a density is low. Pressurized systems should be considered in areas where the density exceeds 50 persons per acre. Areas with pressurized systems and a high degree of, or potential for, non-summer use should maintain at least one well with a hand pump. Water supply and toilets should be grouped in service centers, when feasible, yet water supply should still be separated by at least 50 feet from the toilets.

- Shelters are recommended in picnic areas with a use density of more than 36 persons per acre and which have a capacity of at least 180 persons. Design, size and number of shelters depend on local needs.
- Distance from the restroom to perimeter of picnic area should not exceed 600 feet and be within line of sight. Picnic areas with densities of over 51 persons per acre and a capacity of 200 persons should have flush toilet facilities. Vault-type toilets will be used where flush-type toilets are not available and/or where picnic area densities are under 51 persons per acre. If heavy non-summer season use is expected, a winterized flush toilet facility may be desirable.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Rock climbing

Range of desired experiences:

Rock climbing is an activity in which participants climb up, down or across natural rock formations or artificial rock walls. The goal is to reach the summit of a formation or the endpoint of a usually pre-defined route without falling.

Rock climbing is a physically and mentally demanding sport, one that often tests a climber's strength, endurance, agility and balance along with mental control. It can be a dangerous activity and knowledge of proper climbing techniques and usage of specialized climbing equipment is crucial for the safe completion of routes. Because of the wide range and variety of rock formations, rock climbing has been separated into several different styles and sub-disciplines.

Notable differences in participation or opportunities across state

Rock climbing is available in all parts of the state, but the primary opportunities occur in the southern half of the state.

Notable times of the year of high or low participation

Highest use months are April through October.

Potential social, economic, and ecological considerations for property planning purposes:

Rock climbing is an established, traditional recreational activity that may occur on department-owned lands and is consistent with the department's mission to provide outdoor recreational opportunities to the public.

Rock climbing is allowed on department-controlled lands on natural rock faces in non-designated use areas unless posted as closed. Some rock climbing within non-designated use areas may be restricted due to impacts on natural resources or user conflict. Climbing on buildings, towers, boardwalks or other department-managed structures or using such structures as anchors (i.e. fences, railings, and pilings) is prohibited.

The department has developed guidance entitled “Rock Climbing Policy for DNR-Managed Properties” (February 2000).

Participation:

Participation rate: SCORP data is not available for this activity

Site Selection Considerations and Criteria:

Site selection considerations and criteria do not apply to this activity.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Sailing, windsurfing, rowing, stand-up paddling

Range of desired experiences:

Sailing experiences range from day sailing across a bay to cruises and charter vacations. Smaller boats, such as simply dinghy and sloops, have traditionally been used for beginning sailors. Experienced sailors transition to larger boats and may compete in competitive racing. Sailboats range in size, hull configuration, keel type, number of sails, use, and purposes.

Windsurfing, rowing and stand-up paddling are all daytime activities. While windsurfing requires a larger water body and wind, rowing and stand-up paddling are best suited for smaller bodies of open water protected from the wind.

Public access standards are described in NR 1.91; It is the goal of the state of Wisconsin to provide, maintain and improve access to the state's navigable lakes, rivers and streams for the public. Public access facilities shall allow for public rights of navigation, related incidental uses and other uses which are appropriate for the waterway. Waterway uses shall be equally available to all waterway users and include enjoyment of natural scenic beauty and serenity. These public rights and uses may be provided by any combination of publicly and privately-owned access facilities which are available to the general public free or for a reasonable fee.

Notable differences in participation or opportunities across state

Opportunities are available across the state, with areas such as Lake Superior and Lake Michigan especially lauded for their sailing potential. Wind resources on the larger bodies of water are well suited for windsurfing and sailing. These opportunities are also available on river, such as the Mississippi River. Smaller lakes throughout the north and larger rivers and flowages in the central and southern part of the state are well-suited for rowing and stand-up paddling.

Notable times of the year of high or low participation

Summertime, accompanied by warmer temperatures, is especially popular for these activities. Spring and fall may yield adequate sailing temperature, but as winter settles in, the opportunity to sail diminishes.

Potential social, economic, and ecological considerations for property planning purposes:

Sailing, windsurfing, rowing, stand-up paddling has a number of both positive and negative effects. It provides visitors a means by which to escape onto and explore the water, whether it is with friends or family or on a solitary soul-searching journey. It also allows for community-building of groups of like-minded individuals.

However, due to the frequency of visitation and traveling of visitors, there is an increased likelihood of the introduction of aquatic invasive species and potential for trash left at public launches. Additionally, erosion at boat launches may begin to deteriorate the natural environment.

Participation:

Sailing participation rate: 7% of adult Wisconsin residents

Stand-up paddle boarding participation rate: 11% of adult Wisconsin residents

Windsurfing and rowing participation rate: SCORP data is not available for these activities

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Scuba Diving

Range of desired experiences:

Scuba diving opens up a world of exploration of natural and cultural features from shipwrecks to historic docks and underwater artifacts. Areas ranging from the Great Lakes to lakes within county parks are suitable for scuba diving, each with a unique environment to unveil beneath the surface. Scuba diving is also used for spear fishing.

Both shore diving and boat diving are available, differing largely by method of entry. Shore diving also requires more planning than boat diving in order to find the best entry points and be mindful of the equipment carried across land before entry. Night diving and ice diving are also options for the particularly adventurous diver.

Notable differences in participation or opportunities across state

Areas for participation range from Lake Michigan and Lake Superior to Devil's Lake and various county lakes. Lakes with clear water are preferred. Since there are few lakes in the western and central part of the state, there are far less opportunities for scuba diving.

Notable times of the year of high or low participation

Warmer weather yields more mild waters suitable for scuba diving. Subsequently, summer is the most popular season for scuba diving. Although ice diving opportunities do exist, colder waters require more extensive equipment and preparation before entering the water, and do not harbor welcoming water conditions.

Potential social, economic, and ecological considerations for property planning purposes:

Scuba diving is not compatible with many fishing activities, as their presence may deter and alarm fish that are in the area. Furthermore, divers may run into conflict with motorboats and sailors, as these motors may injure a diver. Scuba diving may also result in the damage of natural and cultural features that are often hidden and undisturbed under the surface.

At the same time, scuba diving allows for the understanding of the world from a new perspective. It enables new discoveries and sheds light on the past by uncovering historical artifacts.

Participations:

Participation rate: SCORP data is not available for this activity

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

The information in this summary sheet was developed with input from the Association of Wisconsin Snowmobile Clubs and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Snowmobiling

Range of desired experiences:

Riding snowmobiles occurs on over 22,000 miles of interconnected groomed trails across the state. The trails are open to the public and located on both private and public property with most trails maintained and groomed by volunteer members of over the 600 snowmobile clubs in the state. Public properties with trails include county forests, national forests and various state properties. Participants range from casual to highly dedicated, but participation is entirely dependent on weather. Some participants will ride a short distance to a destination (e.g. a local supper club), others prefer long-distance riding, covering hundreds of miles in a day. Long-distance riders will both "base camp" (stay in one location and ride back to that location each night) and move from one place of lodging to the next for multiple nights.

Notable differences in participation or opportunities across state

Participation is weather-dependent; however, participants often travel (trailering machines) to better snow conditions and more extensive trail systems, particularly to northern Wisconsin. There are approximately 200,000 registered snowmobiles in Wisconsin.

Notable times of the year of high or low participation

This activity is entirely dependent on weather and snowfall. Participation on DNR lands takes place in winter only, however there are some unique snowmobile events that take place in non-winter seasons.

Potential social, economic, and ecological considerations for property planning purposes:

Snowmobilers affect the local economy with purchase of fuel, food, lodging, rentals, and equipment. Most common issues cited by adjacent landowners and other users of public lands are the speed and noise of the machines, and exhaust fumes. Machines with studded tracks can cause damage to wood or asphalt. Snowmobile stud use should be considered for any such surfaces (epoxy treatments, protective coverings etc.).

This is an outdoor activity that allows participation regardless of physical ability.

DNR properties could be considered for two types of experiences: to facilitate connections between systems, and to provide a destination-type experience. Interconnection with existing trails and routes is the greatest key. No real user preference for topography, habitats, or general location. Trail needs to be 12' wide at a minimum with bridges engineered to support grooming equipment, which can weigh 25,000 pounds.

Funding from machine registration, fuel tax and snowmobile trail passes is available for maintenance on state funded trails. Construction and maintenance can be performed by local snowmobile clubs.

Participation:

Participation rate: 15% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Rolling terrain is acceptable but grades and slopes should not exceed 25%.
- Trails will not be routed over bodies of water, nor will they be routed through or by areas of anticipated conflict that may include, but are not limited to, wilderness areas, game preserves, winter browse areas, experimental stations, nurseries, plantations, eagle or osprey nesting sites, known wolf habitat, residences and other area considered sensitive by the department.
- NR44 addresses appropriate designated trail types for the various land classifications.
- Refer to the Department Design Standards Handbook (8605.1, Chapter 30(Trails) and Chapter 90 (Parking) and the Trails Handbook (2540.5) for further design guidelines.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Snowshoeing

Range of desired experiences:

This activity involves using snowshoes--a device to facilitate walking on top of the snow without breaking through or sinking in the snow, typically an oval or racket-shaped frame with a network of straps stretched across and attached to a boot. This winter activity requires measurable snow; use is generally on hiking trails or open areas without dense woody vegetation.

Trails in forested areas make the activity more enjoyable, trails in open spaces aren't necessary.

Notable differences in participation or opportunities across state

Snowshoe participation occurs across the state in the winter.

Notable times of the year of high or low participation

Winter is typically the only time of year for this use.

Potential social, economic, and ecological considerations for property planning purposes:

This activity allows outdoor recreationists to traverse deep snow without sinking in. There are health and wellness benefits associated with exercise. It also enables those recreating or working in the outdoors to access areas without maintained or packed trails. There are generally no negative effects from snowshoeing. The only consideration of note is that groomed ski trails are disrupted by snowshoe imprints.

Participation:

Participation rate: 13% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- As this activity can take place on any hiking trail the selection consideration and criteria is similar to that of hiking.
- NR44 addresses appropriate designated trail types for the various land classifications.
- Refer to the Trails Handbook (2540.5) for further general trail design guidelines.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Swimming in lakes and rivers and visiting a beach

Range of desired experiences:

This activity involves entering water bodies and water ways simply for swimming, wading or otherwise interacting with the water and nature. There is a strong relationship between picnicking, sunbathing, people watching and swimming.

Visiting a beach may include swimming in lakes and river, but also encompasses those who use a beach for walking and other water sports.

Notable differences in participation or opportunities across state

This activity occurs in water bodies across the state, typically at parks with beach access to the water. Higher participation occurs in more populated areas at urban parks and in northern vacation areas.

Notable times of the year of high or low participation

This activity only occurs in the summer when water temperatures are favorable.

Potential social, economic, and ecological considerations for property planning purposes:

Swimming in natural water bodies can provide cooling on hot summer days, as well as an introduction to water-based recreation, interaction with aquatic plants and animals.

Poor water quality, sharp rocky substrate, silty/mucky substrate, cold water temps, dense aquatic vegetation may deter swimming. Swimmers can disrupt fishing activities or become and obstacle to boaters and small water craft users. Creating a beach area for swimmer access can eliminate shore habitat for aquatic species.

Participation:

Swimming participation rate: 54% of adult Wisconsin residents

Visiting a beach participation rate: 65% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- Lakes and rivers with good swimming potential have a uniform slope (between a ratio of 1:3 and 1:10) to a water depth of five feet with a sandy bottom. The beach area should be as big as the swim area or preferably bigger. A grass area with partial shade is best located in close proximity to the beach.
- See the Department Design Standards Handbook (8605.1) Chapter 20 for additional design guidelines.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Target Shooting – Archery

Range of desired experiences:

This activity involves the shooting at various types of targets with a bow and arrow. Targets are generally arranged along a course or range. Outdoor archery ranges vary in whether they have 3D targets, or two-dimensional paper animal targets that are either mounted directly to an arrow-catching device (bail of compressed material) or mounted to horizontal wires set in front of a sand berm. Most walk-through ranges offer a variety of distances and often provide distances from 10 to 60 yards. Usually the farther distances have a larger animal. In some cases, however, even spot-style targets are used in outdoor ranges. Preferred settings are in savanna, forest, or river/stream habitats with moderate topographical relief (mostly hilly or some hills and some flat). A high-quality opportunity would include: at least 80 acres of habitat away from populated areas with ~1 mile of trail (>4'-wide, 4-8' cleared corridor, native surface); a mowed grassy area; shooting platforms, target bunkers, an assembly building, and a secure storage facility to hold targets, materials, tools, and a UTV with trailer.

Notable differences in participation or opportunities across state

Participation is similar across the state. Serious archers will travel great distances to participate at sanctioned shoots. Most larger shoots are 3D competitions, however there are some popular long-distance spot shoots.

Notable times of the year of high or low participation

Participation is highest in summer and low the rest of the year.

Potential social, economic, and ecological considerations for property planning purposes:

Participants' main complaint is regarding poorly maintained trails and targets. Signage is important as well. Stations/targets should be numbered. Shooting lanes need to be maintained well to make shots possible, yet challenging. Target locations, or distances should change to offer a new experience or challenge at each visit. Most ranges need return customers to be viable. Archery is a quiet sport. Safety is the main concern. Trail layout must incorporate a design that makes it safe for all users. Therefore, areas beyond the target have to be closed to use. Arrows that deflect from a branch or trunk can travel quite a distance.

Trails have to be well maintained and sustainable, able to withstand UTV traffic for maintaining the range. 3D targets can be quite large and heavy, so most clubs use UTVs to put out and take down targets. Trails should be mowed regularly. Grass should not exceed 6" tall.

3D targets are commonly destroyed by bears if left out overnight, so targets need to be stored nightly. Archery is a sport that can be enjoyed by people of all ages, so multiple generations can enjoy this activity together.

Participation:

Participation rate: 19% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- General Location: Ranges may be built on department lands where the range is compatible with the surrounding land use. Ranges can also be built on county, federal, or local government lands. Some considerations to take into account:
    - Look for a minimum of an eighty-acre site that can accommodate a minimum one-mile shooting trail
    - Avoid wetlands or hydric soils, State Natural Areas and archeological sites
    - Direct road access is preferred
    - Minimize impact on other recreational users
    - Minimize impact on blocks of wildlife habitat
    - Look for rolling topography that is supportive of developing a shooting range

The information in this summary sheet was developed with input from Wisconsin FORCE/NRA and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Target Shooting – Firearms

Range of desired experiences:

This activity involves various forms of target shooting with shotguns, including sporting clays, 5-stand clays, skeet, and trap shooting. Sporting clays are generally arranged along a course and 5-stand, skeet, and trap are shot on fields. Preferred settings are in grassland, savanna, or forest habitats with varied topography (some hills and some flat). A high-quality opportunity would include a developed area with walkways, mowed grassy area and a clubhouse area with supplies and services. Additional amenities include electricity and a lighted course; target stands, shooting stands, trap houses and skeet houses. There is some willingness to travel.

Notable differences in participation or opportunities across state

This activity occurs across the state, but demand is strongest and supply most limiting in more populated urban-suburban areas of the state, particularly in southeast Wisconsin.

Notable times of the year of high or low participation

Participation is highest in summer and fall, and less active in the spring.

Potential social, economic, and ecological considerations for property planning purposes:

Crowding can affect the shooting experience. Noise is the primary complaint from other property users or neighboring landowners. Safety is also an expressed concern, but can be very effectively managed. Some damage to trees and other vegetation from shooting. Lead deposition in the soil has been identified as a concern; however, contamination of soil and groundwater is relatively uncommon and can be prevented. Lead recycling is a widely used practice at these facilities and can be a financial benefit.

Benefits include proficiency in handling a shotgun and performing in competition. Providing these facilities on department properties has increased the availability of well-managed sites to shoot on. However, fully developed, high quality experiences are provided by clubs and organizations around the state, and it is a primary source of income for them. There is demand for additional public trap and skeet shooting opportunities in southeast Wisconsin.

Participation:

Participation rate: 29% of adult Wisconsin residents

Site Selection Considerations and Criteria:

- The considerations below are from the Shooting Range Guidance for Range Development Considerations on Department Lands, presented at the May 2014 NRB meeting. See the green sheet for additional considerations regarding the siting and design of shooting ranges.

  General Location: Ranges may be built on department lands where the range is compatible with the surrounding land use. Ranges can also be built on county, federal, or local government lands. Some considerations to take into account:

  - Be aware of the issue of noise disturbance to residences within 1,000 yards
  - Look for a minimum of four-acre site and avoid wetlands or hydric soils or soils with hydric inclusions
  - Avoid State Natural Areas and archeological sites
  - Direct road access is preferred
  - Minimize impact on other recreational users
  - Minimize impact on blocks of wildlife habitat
  - Look for topography that is supportive of developing a shooting range

The information in this summary sheet was developed with input from Wisconsin Trappers Association and DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs and issues.

Summary sheet: Trapping

Range of desired experiences:

This activity involves regulated harvest of animals using various types of traps. This activity typically occurs on lands open to trapping, depending upon if the target species is present. Most traps need to be checked daily, with some sets designed to kill animals (in the water or in enclosed boxes) having a 4-day check law. Access is important, by boat or vehicles, to areas not commonly used by other user groups during the winter months. Trappers also look for areas having concentrations of furbearing animals. There is some willingness to travel for this activity, however with regular checking of traps required, distance can be limited.

Notable differences in participation or opportunities across state

Trapping occurs across the state. Participants use a range of different habitats and prefer locations away from population centers.

Notable times of the year of high or low participation

Participation is highest in fall and winter, moderate in spring, and low in summer.

Potential social, economic, and ecological considerations for property planning purposes:

High use of an area by other user groups and domestic pets would negatively impact trapper use of an area. Impact to other users generally is low, but incidental trapping of domestic pets is possible. Environmental impacts include reduction in populations of furbearers. Removing beaver may result in altered hydrology.

Trapping gets people out into nature; provides supplemental income through fur sales; provides a way to remove or reduce numbers of nuisance wildlife; and generates funding for federal and state wildlife management agencies. Removing a harvestable surplus of furbearing animals can also help control disease by reducing concentrations of animals that carry wildlife and zoonotic diseases, reduce predation on desirable nesting/denning wildlife species by reducing predator numbers, and help maintain cold-water streams by removing beaver. Trapping can also benefit deer and small game by harvesting animals that are competing with these species for food.

Participation:

Participation rate: 4% of adult Wisconsin residents

Site Selection Considerations and Criteria:

Site considerations and criteria do not apply to this activity.

The information in this summary sheet was developed by DNR staff. These summaries will evolve as the department continues to work with the public in identifying outdoor recreation opportunities, needs, and issues.

Summary sheet: Whitewater Rafting

Range of desired experiences:

There are six grades of difficulty within whitewater rafting, ranging from small rough areas to stretches of river with considerable drops, hazard, waves, and whitewater. Canoes, rafts, kayaks, and other crafts may be used for whitewater rafting. Rafters vary in experience from those with basic paddling skills to others with full mastery of the tricks and maneuvering in whitewater rafting.

Public access standards are described in NR 1.91; It is the goal of the state of Wisconsin to provide, maintain and improve access to the state's navigable lakes, rivers and streams for the public. Public access facilities shall allow for public rights of navigation, related incidental uses and other uses which are appropriate for the waterway. Waterway uses shall be equally available to all waterway users and include enjoyment of natural scenic beauty and serenity. These public rights and uses may be provided by any combination of publicly and privately-owned access facilities which are available to the general public free or for a reasonable fee.

Notable differences in participation or opportunities across state

Whitewater rafting is most popular in the upper Lake Michigan area, followed by the Northwest portion of the state. The geology of the area is pierced by the Douglas Fault, resulting in a rocky landscape connected with tumbling rivers and rapids. The Upper Wolf River is a particularly popular whitewater rafting resource.

The western Driftless Area is dominated by small streams that empty into larger rivers. Moving northwards, larger rivers become popular. Both these small streams and larger rivers are suitable whitewater rafting destinations.

Notable times of the year of high or low participation

Summertime, accompanied by warmer temperatures, is especially popular for whitewater rafting. Springtime is also popular as the snow melts and river water levels rise. Fall and winter are not common whitewater rafting seasons, due to the cold and reduced river flow.

Potential social, economic, and ecological considerations for property planning purposes:

Whitewater rafting builds community among water enthusiasts, and provides an outlet for exercise. It also connects people to the water, thereby strengthening motivation for environmental stewardship.

At the same time, whitewater rafting may run into conflict with activities such as stream or river fishing, since these folks often seek peace and quiet without rambunctious rafters heading down the channel. Rafting activity may also disturb the extant fish communities.

Whitewater rafting may also encourage dredging, blasting, and altering the riverbed in order to remove safety hazards and make more exciting whitewater features. Boat launches may also suffer erosion due to heavy visitor traffic.

Participation:

Participation rate: SCORP data is not available for this activity

Site Selection Considerations and Criteria:

- Refer to the Department Design Standards Handbook, Chapter 80 (Recreational and Boating Facilities) and 90 (Roads and Parking) for related design standards.
- NR1.91.

APPENDIX 2: RECREATION COMPATIBILITY

The two following tables were developed with input from the Statewide Stakeholder Team to identify general levels of compatibility between people engaged in different recreation activities. The first table shows activities that occur in upland settings during warm weather conditions (non-winter); the second shows winter and water-based activities. The compatibility determinations listed in the tables were developed based on the knowledge and experience of team members and their understanding of their constituent' perspectives.

The intent of developing the tables is to identify potential opportunities to combine recreation activities and, conversely, where separating activities in space or time may be necessary to ensure satisfying experiences for all participants. The levels of compatibility are defined as follows:

- High: (green) Participants pursuing the activity are not adversely affected by people engaged in the other activity. There may be some temporary inconvenience, but no impact of any significance.
- Medium: (yellow) Participants pursuing the activity are affected by people engaged in the other activity to a degree that is noticeable or distracting, but does not prevent the participant from being able to engage in the activity.
- Low: (orange) Participants pursuing the activity are affected by people engaged in the other activity to a degree that it substantively alters the participant's ability to successfully engage in the activity.

		People that participate in these activities … ⬇ / … are affected by participants in these activities ➡	IF OCCURRING ON THE *SAME TRAIL*								IF OCCURRING NEARBY ON THE *SAME PROPERTY*																										
			ATV/UTV riding	4-wheel vehicle driving	Off-highway motorcycle riding	Bicycling - bicycle touring/road riding	Bicycling - mountain biking/off-road biking	Hiking, walking, trail running, backpacking	Horse cart driving	Horseback riding	ATV/UTV riding	4-wheel vehicle driving	Off-highway motorcycle riding	Bicycling - bicycle touring/road riding	Bicycling - mountain biking/off-road biking	Fishing - stream/shore	Hiking, walking, trail running, backpacking	Horse cart driving	Horseback riding	Bird or wildlife watching	Camping - developed	Camping - primitive	Dog training	Dog trialing	Dog walking	Gather mushrooms, berries, etc.	Geocaching	Hunting - big game	Hunting - migratory birds	Hunting - small game	Hunting - turkey	Nature photography	Participating in nature-based edu. progs.	Picnicking	Rock climbing	Target shooting - archery	Target shooting - firearms	Trapping
Trail activities	Motorized activities	ATV/UTV riding	H	H	H	M	M	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		4-wheel vehicle driving	H	H	H	M	M	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		Off-highway motorcycle riding	H	H	H	M	M	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
	Non-motorized activities	Bicycling - bicycle touring/road riding	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		Bicycling - mountain biking/off-road biking	L	L	L	H	H	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		Hiking, walking, trail running, backpacking	L	L	L	H	M	H	M	M	M	M	M	H	H	H	H	H	H	H	H	H	M	M	H	H	H	M	M	M	M	H	H	H	H	M	H
		Horse cart driving	M	M	M	L	L	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H
		Horseback riding	M	M	M	L	L	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H	H	H
Non-trail activities		Bird or wildlife watching									M	M	M	H	H	H	H	H	H	H	H	H	M	M	H	H	H	L	M	M	M	H	H	H	H	M	H
		Dog walking									M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	M	M	M	H	H	H	H	H	M
		Fishing - stream/shore									L	L	L	H	H	H	H	H	H	H	M	H	H	H	H	H	H	M	M	M	M	H	H	H	H	L	H
		Gather mushrooms, berries, etc.									H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	M	M	M	H	H	H	H	H	H
		Geocaching									H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	M	M	M	H	H	H	H	H	H
		Hunting - big game									M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	H	M
		Hunting - migratory birds									M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	H	M
		Hunting - small game									M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	H	M
		Hunting - turkey									M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	H	M
		Nature photography									M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	M	M	M	H	H	H	H	M	H
		Participating in nature-based edu. progs.									M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	M	M	M	H	H	H	H	M	H
		Picnicking									M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	M	M	M	H	H	H	H	M	H
		Rock climbing									H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		Trapping									L	L	L	M	M	L	M	M	M	M	L	M	M	M	M	M	M	H	M	M	M	M	M	H	M	M	M	M
Dedicated places		Camping - developed									M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	H
		Camping - primitive									L	L	L	M	M	H	H	M	M	H	M	H	M	M	M	H	H	M	M	M	M	H	H	H	H	L	H
		Dog training									M	M	M	M	M	H	M	M	M	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		Dog trialing									M	M	M	M	M	H	M	M	M	M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		Target shooting - archery									M	M	M	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H
		Target shooting - firearms									H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H

	People that participate in these activities … ⬇ / … are affected by participants in these activities ➡	IF ON THE SAME TRAIL					IF NEARBY ON THE SAME PROPERTY						IF NEARBY ON THE SAME WATER										
		Snowmobiling	Cross country skiing	Snowshoeing	Dog sledding/skijoring	Bicycling - fat tire/snow biking	Snowmobiling	Cross country skiing	Snowshoeing	Dog sledding/skijoring	Bicycling - fat tire/snow biking	Fishing - ice fishing	Canoeing or kayaking	Fishing - lake fishing from a boat, canoe, or kayak	Fishing - lake fishing from shore or a pier	Fishing - river fishing from a boat, canoe, or kayak	Fishing - stream or river fishing from shore or wading	Motorboating (waterski/tubing, personal watercraft)	Sailing, windsurfing, rowing, stand-up paddling	Scuba diving/snorkeling	Swimming in lakes and rivers	Visiting a beach, beach walking	Whitewater rafting
Winter activities	Snowmobiling	H	L	L	L	L	H	H	H	H	H	H											
	Cross country skiing	L	H	M	M	M	M	H	H	H	H	H											
	Snowshoeing	L	H	H	H	H	H	H	H	H	H	H											
	Dog sledding/skijoring	L	H	H	H	H	H	H	H	H	H	H											
	Bicycling - fat tire/snow biking	L	H	H	H	H	H	H	H	H	H	H											
	Fishing - ice fishing	M	M	M	M	M	H	H	H	H	H	H											
Water activities	Canoeing or kayaking												H	H	H	H	H	M	H	H	H	H	H
	Fishing - lake fishing from a boat, canoe, or kayak												H	H	H	H	H	M	H	H	H	H	-
	Fishing - lake fishing from shore or a pier												H	H	H	H	H	M	H	H	H	H	-
	Fishing - river fishing from a boat, canoe, or kayak												H	H	H	H	H	M	H	H	H	H	H
	Fishing - stream or river fishing from shore or wading												H	H	H	H	H	L	H	H	L	H	H
	Motorboating (waterski/tubing, personal watercraft)												H	H	H	H	H	H	H	H	H	H	-
	Sailing, windsurfing, rowing, stand-up paddling												H	H	H	H	H	M	H	H	H	H	-
	Scuba diving/snorkeling												H	M	M	M	M	M	M	H	H	H	-
	Swimming in lakes and rivers												H	H	H	H	H	M	H	H	H	H	-
	Visiting a beach, beach walking												H	H	H	H	H	H	H	H	H	H	H
	Whitewater rafting												H	-	-	H	H	-	-	-	-	H	H

APPENDIX 3: LAND IN WISCONSIN OPEN TO THE PUBLIC FOR OUTDOOR RECREATION

Publicly-owned lands open for outdoor recreation

A. Federal

The **National Forest Service** owns 1,522,000 acres in Wisconsin as the Chequamegon-Nicolet National Forest. Previously two separate properties that were both established in 1933, the forests were combined for administrative efficiency in 1993. The Chequamegon-Nicolet National Forest offers the full spectrum of outdoor recreation opportunities that attract visitors from across northern Wisconsin and beyond. Its suite of developed campgrounds, less developed primitive camping areas, beaches, boat launches, picnic areas, non-motorized and motorized trails contribute economically and culturally to local rural communities.

The **U.S. Fish & Wildlife Service** (FWS) owns 149,500 acres in Wisconsin in seven National Wildlife Refuges and two Wetland Management Districts. The bulk of the FWS land in Wisconsin is within the refuges, the two largest being Necedah and Horicon. These two properties have a variety of facilities to support visitors and are among the most popular properties in the state for hunting and bird watching. In addition to the refuges, the FWS owns and manages over 50 Waterfowl Production Areas totaling over 13,000 acres in 17 counties throughout the state. The WPAs have very limited facilities.

The **National Park Service** owns 68,000 acres, primarily within the Apostle Islands National Lakeshore and the St. Croix National Scenic Riverway. These properties are managed to provide remote, wild experiences in two of the most spectacular settings in the state. A range of basic facilities are present.

The **U.S. Army Corps of Engineers** owns about 14,000 acres, primarily in the Mississippi River valley as part of the lock and dam system. The lands along the Mississippi River are cooperatively managed with the FWS as part of the Upper Mississippi River Wildlife and Fish Refuge, which provides high-quality and diverse hunting and fishing opportunities that draw visitors from throughout the Midwest.

In addition to these lands, the Department of Defense (Army) owns over 60,000 acres in central Wisconsin as part of Fort McCoy and associated properties. Although access is regulated, the public can hunt, fish, trap, and cross-country ski on portions of the property.

B. State

The **Department of Natural Resources** (DNR) is the principal state agency providing places for outdoor recreation. The DNR owns 1.5 million acres spread across 71 of 72 counties (not Menominee County). These properties range from small boat launches to the 232,000-acre Northern Highland American Legion State Forest. The DNR manages the full range of facilities to accommodate outdoor recreation including hiking, biking, equestrian, snowmobile, ATV, and other types of trails, campgrounds, nature centers, picnic shelters, fishing piers, and wildlife watching blinds.

The DNR also owns easements along streams and rivers throughout the state to provide fishing opportunities and to manage critical streambank habitats. Many of these easements are along trout streams. Finally, the DNR owns public access easements across large blocks of forested lands as part of the federal Forest Legacy program. This program is designed to maintain healthy and economically viable working forests open to some forms of public recreation.

The **Board of Commissioners of Public Land** (BCPL) owns about 75,000 acres, mostly in northern Wisconsin. These lands, remnants of the millions of acres of land granted to the state by the federal government at statehood, are managed to provide quality forest habitat and an income stream to fund public education in the state. These lands have minimal facilities and are primarily used for hunting, trapping, fishing, and wildlife watching.

C. County

Counties provide a very wide diversity of opportunities for outdoor recreation. Most northern counties own large acreages that have been enrolled in the **County Forest** program. These lands, totaling over 2.3 million acres, primarily came to public ownership due to tax delinquency in the 1920s and 1930s following the mass clear-cutting of trees throughout the north combined with the country's economic collapse. Collectively, these lands now provide extensive trail networks, campgrounds, some of the best hunting and fishing in the state, and remote experiences.

In the southern part of the state is the award-winning Milwaukee County Parks program that consists of over 140 parks and nearly 15,000 acres. With facilities ranging from basketball courts to disc golf courses and swimming pools to botanical gardens, these properties receive millions of visits each year.

In between are countless county properties that provide a critical blend of natural areas and developed settings. Increasingly, many of Wisconsin's more populated counties host dog parks. The number and total acreage within county park, recreation, and conservation lands is not known, but is estimated to be about 70,000 acres.

D. Cities, Villages, and Towns

The bulk of participation in outdoor recreation in Wisconsin likely takes place on the many and varied city and village properties found throughout the state. With ball fields, playgrounds, urban trails, picnic sites, and many other facilities, these properties are easily accessible to the state's 3.6 million residents that live in urban settings. As such, they are typically heavily used on a daily basis. Excluding the City of Milwaukee (because the park land within the city is actually owned and managed by Milwaukee County), the nine largest cities in the state are estimated to hold over 15,000 acres of park, recreation, and conservation lands. If the remaining 180 cities and the 402 villages average 10 acres per 1000 residents,[22] that would encompass an additional 15,000 acres. With these assumptions, it is estimated that about 30,000 acres of park, recreation, and conservation lands are owned and managed by cities and villages in Wisconsin.

Some towns have small, but typically well-used, parks. There are 1,259 towns in the state. It is unknown how many towns have park and recreation properties, nor how large they average. If 25% of towns have park and recreation properties which average 5 acres, then towns in Wisconsin would hold about 1,500 acres. In sum, cities, villages and towns are estimated to hold about 31,500 acres of park and recreation land in Wisconsin.

E. School Forests

Over 230 school forests encompassing over 25,000 acres have been established throughout the state. These properties are heavily used as outdoor environmental education resources. Some also have physical education facilities, such as ropes courses. When the properties are not being used as part of educational programs, many are open to the general public for passive recreational uses. These forests are managed for (and to showcase) sustainable forest management. The school forest program is administered by Wisconsin's K-12 Forestry Education Program housed at UW-Stevens Point.

F. School and university properties

Wisconsin is home to over 2,200 public schools, nearly all of which have facilities to support outdoor recreation. For many students, these fields, playgrounds, and courts are where the majority of their participation in outdoor recreation takes place. Many of these properties are open to the public when school activities are not underway. The number and type of facilities and acres within these properties are unknown.

Some universities own and manage arboretums, botanical gardens, and other similar properties that are open to the public, generally for walking, photography, nature study, wildlife watching and similar activities. The number of these properties and acres within them are unknown.

[22] For many years the goal of 10 acres of park land per 1000 residents was a widely held standard. Today, communities recognize that there are many factors that go into determining appropriate goals for park land – some seek to achieve more than 10 acres, others fewer.

Privately-owned lands open for outdoor recreation

A. Non-profit organizations

Nonprofit groups in Wisconsin have been actively involved in providing outdoor recreation opportunities for decades. These organizations own or have ownership interests in a range of properties throughout the state. Many of these groups are organized as land trusts and have land protection as a central goal for their operations.[23] Other nonprofit groups that have protected lands that are open to the public in Wisconsin include Pheasants Forever, Ducks Unlimited, the Trust for Public Land, and other similar organizations. The Knowles-Nelson Stewardship fund provides matching grants to nonprofit organizations for the acquisition of qualifying parcels. Lands acquired using Stewardship funds must be open to the public for hunting, trapping, fishing, hiking, and cross-country skiing unless an exemption is provided by the Natural Resources Board.

In addition, many other lands protected by land trusts in Wisconsin not subject to the Stewardship requirement are open to the public for fishing, hunting, hiking, wildlife watching, nature study and photography, and similar activities.

B. Managed Forest Law and the Forest Crop Law programs

Wisconsin's forest tax laws encourage sustainable forest management on private lands by providing a property tax incentive to landowners. Some of these privately held forest lands also allow public access for recreation. Lands enrolled under the Managed Forest Law program as "open" to public access (about 1.08 million acres) allow for hunting, fishing, hiking, sight-seeing, and cross-country skiing. Lands enrolled under the Forest Crop Law program (about 125,000 acres) allow for public hunting and fishing. Both tax laws require that all hunting and fishing follow the DNR hunting and fishing seasons and regulations.

C. Forest Legacy Program

The Forest Legacy Program (FLP) is a federal program that supports state efforts to protect environmentally sensitive forest lands. It was created in 1990 as part of the Farm Bill under the U.S. Department of Agriculture. Designed to encourage the protection of privately owned forest lands, FLP is an entirely voluntary program. To maximize the public benefits it achieves, the program focuses on the acquisition of partial interests in privately owned forest lands. FLP helps the States develop and carry out their forest conservation plans and encourages and supports acquisition of conservation easements, legally binding agreements transferring a negotiated set of property rights from one party to another, without removing the property from private ownership. Most FLP conservation easements restrict development, require sustainable forestry practices, and protect other values. Approximately 215,000 acres in Wisconsin have been protected under the FLP.

D. Voluntary Public Access

The Voluntary Public Access (VPA) program is administered by the Wisconsin Department of Natural Resources and provides financial incentives to private landowners who open their property to public hunting, fishing, trapping and wildlife observation. Funding was authorized in the 2008 and 2014 Farm Bills. Enrollment in the program and use of these lands has grown steadily since inception and now encompasses about 41,000. VPA properties are located in roughly 50 counties across the state.

E. Snowmobile Trails on Private Lands

There are over 22,000 miles of groomed snowmobile trails across Wisconsin. The trails are open to the public and located on both private and public property with most trails maintained and groomed by volunteer members of the over 600 snowmobile clubs in the state. Club members work with willing landowners to get permission to cross private property. A great majority—over 85%--of the miles of trails are located on private lands, typically across agricultural lands that are not in use during the winter. Willing landowners allow these trails through agreements with clubs and a county's trail recreation departments.

[23] Gathering Waters is an umbrella organization that provides a range of services to local land trusts in Wisconsin. A map and list of land trusts operating in the state is on their website at http://gatheringwaters.org/about-land-trusts/find-a-local-land-trust/.

F. Businesses

A large number of privately owned businesses and enterprises provide places or opportunities for the public to participate in outdoor activities. Examples include campgrounds, marinas, golf courses, ski hills, and horse stables. There is not a central database of these enterprises and as such their number and distribution is easily quantifiable.

APPENDIX 4: STATEWIDE STAKEHOLDER TEAM MEMBERS

Adam Harden	Wisconsin ATV/UTV Association
Blake Theisen	Nonmotorized Recreation and Transportation Trails Council
Bryan Much	State Trails Council
Dale Anhalt	Wisconsin FORCE / NRA
Dave Cieslewicz	Wisconsin Bike Fed
Dave Larson	Wisconsin Conservation Congress
Dave Newman	Association of Wisconsin Snowmobile Clubs
Ed Liermann	Wisconsin Association of Field Trail Clubs Inc.
Jerry Knuth	Wisconsin Wildlife Federation
Kevin Thusius	Ice Age Trail Alliance
Kricket Jewett	Wisconsin Horse Council
Tom Thrall	Trout Unlimited
Lucas Withrow	Wisconsin Bear Hunters Association
Mark LaBarbera	Outdoor Heritage Education Center
Michael John Jaeger	Wisconsin Society for Ornithology
Philip Nelson	Wisconsin Nordic Network
Rob McConnell	Wisconsin Off-Road Vehicle Council
Scott Zimmermann	Wisconsin Trappers Association

APPENDIX 5: DESCRIPTIONS OF DEPARTMENT OF NATURAL RESOURCES PROPERTIES BY REGION

NORTHWOODS

The Department of Natural Resources owns approximately 480,000 acres in the Northwoods Region. Brief descriptions of the larger properties are provided here.

Northern Highland-American Legion State Forest

Established in 1925 to protect the headwaters of the Wisconsin, Flambeau and Manitowish rivers, the Northern Highland American Legion (NHAL) State Forest is the largest state-owned property and occupies more than 232,000 acres in Iron, Vilas, and Oneida counties. The property is extensively wooded, mostly with young to middle-aged forests that provide employment and economic support to rural and urban communities through the production of forest products, recreation and tourism.

The property's 18 campgrounds provide a diversity of experiences – from modern, fully-developed campgrounds to remote sites on quiet lakes. With 900 lakes and many miles of streams, water-based recreation is a primary attraction at the NHAL. Some lakes are very remote and provide wilderness experiences while others are heavily used by motorboats and water-skiers. Boating, canoeing, and fishing are supported by over 100 boat launches. Hunting and trapping are popular activities and access into areas is facilitated by a network of hundreds of miles of logging roads.

The recent construction of a series of paved biking trails, some connecting campgrounds to local communities, others linking communities, has proven to be very popular and provided an opportunity to connect campers with restaurants, stores, and other businesses. Extensive and high-quality mountain biking trails are popular with local residents and visitors.

Cold-weather activities have been a staple on the NHAL and with over 400 miles of snowmobile trails; the area has long been a winter destination.

Turtle Flambeau Flowage

The Turtle-Flambeau Scenic Waters Area is located in southern Iron County. Formed by a dam constructed in 1926 near the confluence of the Flambeau and Turtle rivers that flooded 16 named lakes, the flowage connects several large public properties (Chequamegon-Nicolet National Forest, Northern Highland American Legion State Forest, Hay Creek-Hoffman Lake State Wildlife Area, and Iron County Forest) and the Lac du Flambeau Indian Reservation.

The 35,000-acre property (including about 14,000 acres of water covered by the flowage) hosts a popular network of 60 island campsites serviced by 6 boat access sites. Remote rustic camping and high-quality fishing are the two biggest draws for the property. Campsites are spaced far apart and accessible by boat only, giving campers a wilderness like experience of camping on an island and off the road system. The flowage is one of northern Wisconsin's gems with endless fishing opportunities. The fish community is highly diverse and has something to offer every angler, although is most famous for a high-density walleye fishery. The musky fishery has a history of producing world-class fish and smallmouth bass fishing is excellent.

Wildlife viewing is also a popular draw for visitors with a rich diversity of wildlife habitat. Eagles, loons and osprey are abundant on the property as well as nesting populations of merlin and the rare black tern. The Little Turtle Waterfowl

Management Area offers opportunities to see nesting tree swallows, trumpeter swans, and an abundance of waterfowl during the spring and fall migration.

Willow Flowage

With limited development and access, the Willow Flowage Scenic Waters Area is a large island studded reservoir with a truly wild flavor. The property is located in west central Oneida County and includes 73 miles of shoreline (95 percent of which is undeveloped), 106 islands, and 7 boat landings. The DNR-managed portion of the property, including the flowage, encompasses more than 30,000 acres where hunting, fishing, paddling, and hiking opportunities abound.

Surrounded by swamps, bogs and other watery lowlands, the Willow Flowage Scenic Waters Area was created in 1926 with the damming of the Tomahawk River; the flowage is downstream from the confluence with the Willow River. The property's remoteness, along with its natural shoreline, draws visitors from around the state and region. The Willow Flowage supports a diversity of aquatic plants, fish, and wildlife, including abundant walleye and panfish populations, along with northern pike, muskellunge, and large and smallmouth bass. White-tailed deer, bear, ruffed grouse, ducks, eagles, and loons frequent the property.

There are 33 rustic campsites scattered along the shoreline and islands; all campsites are occupied on a first come-first served basis with no registration, no reservations, and no fees. Campsite amenities include a fire ring (with cooking grill), picnic table, and outdoor toilet.

An active forestry program is in place on the Willow Flowage to maintain prime wildlife habitat, emphasize forest diversity, and to promote a natural and aesthetically pleasing appearance. Future thinnings of selected trees and occasional prescribed burns will help restore the shoreline to historic forest conditions dominated by long-lived tree species such as red and white pine.

Pine-Popple Wild Rivers

The entire 89-mile length of the Pine River and the 62 miles of its major tributary, the Popple River, were designated by the Wisconsin legislature as State Wild Rivers in 1965 to be protected from development and kept in a natural, free-flowing condition. Being among Wisconsin's more remote river systems, the Pine and Popple Rivers offer a true wild experience. The area is rugged and undeveloped. Access is limited and often difficult. Both the Pine and Popple Rivers are born in the vast forests and swamps of the Chequamegon-Nicolet National Forest.

Mid-way along their courses the rivers leave the national forest and enter the Pine-Popple Wild River project area managed by the DNR. The DNR's project area includes the lower 12 miles of the Popple River and the lower 33 miles of the Pine River, ending with the Pine at the Menominee River. The DNR owns about 11,000 acres for conservation and public recreation purposes within the Pine-Popple Wild Rivers property.

The shorelines are heavily wooded with sugar maple, yellow birch, hemlock and white cedar on the upper stretches and aspen, silver and red maple, white and jack pine the most common trees on the lower reaches. The rivers' moods alternate from quiet sections that meander lazily through lowland forest to swift rocky riffles, low rapids, and waterfalls. These rivers offer high quality paddling and fishing in a secluded, natural environment.

The private property in the Wild Rivers Legacy Forest is under a conservation easement, open to the public for recreational uses including hiking, hunting, and fishing. Certain trails and roads across both public and private property are open for vehicle access, snowmobile and all-terrain vehicles as posted. The We Energies lands are also open to the public, except for the areas near the dam and power generating facilities, which are closed for public safety and security reasons.

Upper Wolf River Fishery Area

The Upper Wolf River Fishery Area is comprised of just over 9,000 acres of state-owned land along the Wolf River in Langlade County. About 95 percent of the Upper Wolf River watershed is wooded and wild. Flowing south from its origin in southern Forest County, five principal tributaries join the Wolf River in Langlade County including Swamp Creek, Pickerel Creek, Hunting River, Lily River, and Ninemile Creek. The Upper Wolf River has long been recognized for its aesthetically pleasing characteristics - a wide, boulder-strewn, natural, undeveloped stream with a rapid gradient in many locations.

Fish species inhabiting the Upper Wolf River include brook, brown and rainbow trout, large and smallmouth bass, northern pike, musky, walleye and numerous species of pan fish and forage minnows. Trout are most prevalent from County Highway T downstream to the county line. Smallmouth bass inhabit the entire length of river in Langlade County. Walleye, northern pike, musky and bass are generally found in the upper portion of the Wolf River in the area from Post Lake dam downstream to Lily.

The Upper Wolf River has become a major destination for whitewater sports. Several commercial rental, outfitters, and guide companies offer whitewater rafting on the Wolf River. The Wolf River is annually the site of privately sponsored races for rafts, canoes, and kayaks, which draw hundreds of contestants and thousands of spectators.

Pershing Wildlife Area

Pershing Wildlife Area consists of approximately 7,900 acres in west central Taylor County. The property is comprised of two units that encompass over 1,000 acres of wetlands (including 15 flowages, runoff ponds and potholes). Approximately 3,000 acres of brush-prairie is managed (in conjunction with the wetlands) through periodic rotations of prescribed burning. The remaining 3,000 acres is managed in scattered blocks of aspen and northern swamp hardwood forest.

The property is managed for sharp-tailed grouse, waterfowl and other open wetland, grassland and brush-prairie species. The forested acreage is managed for ruffed grouse and other upland game and non-game species.

Kimberly Clark Wildlife Area

Kimberly Clark Wildlife Area is an 8,700-acre property that dates back to 1945 with the purchase of 1,600 acres of land that was known as the Price Creek deer yard. In 1963 the DNR obtained a gift of 5,240 acres near the deer yard from the Kimberly-Clark Corporation and since then supplemental purchases have increased the property to its current size.

The property consists of bracken fern grasslands, upland aspen/fir, northern hardwoods and tamarack/black spruce bog. A small remnant sharptail grouse (a game bird that is of high conservation concern) population lives on the property and surrounding lands. In the early 1990s, this wildlife area had the second highest population of sharptail grouse in the state.

Today this property is primarily managed for sharptail grouse, deer, turkey and bear. Prescribed burning is used to maintain about 4,000 acres of early successional habitat for sharptail grouse. Deer, wolves, coyotes, badgers, foxes, sandhill cranes and numerous other species use these open areas regularly. This wildlife area is close to current herds of reintroduced elk and it is expected that elk will be residents of the wildlife area in the foreseeable future.

Over 17 miles of firebreaks have been created and several small flowages are maintained for waterfowl and wild rice production. The remaining acreage is managed for wood fiber production.

Hay Creek-Hoffman Lake Wildlife Area

Hay Creek-Hoffman Lake Wildlife Area is a 13,800-acre property located 8 miles northeast of Park Falls in Ashland and Iron Counties. The property adjoins the Turtle Flambeau Scenic Waters Area to the east and the Chequamegon Nicolet National Forest to the south. The Flambeau River, an Outstanding Resource Water, lies in close proximity.

The property is heavily timbered with aspen, northern hardwoods and lowland conifer.

This property was initiated in 1946 as part of the "deer yard" acquisition program. Today, this property is heavily timbered with aspen, northern hardwoods and lowland conifer and is primarily managed for whitetail deer, ruffed grouse, woodcock and bears. Commercial timber harvest is the main habitat management tool and follows a harvest prescription designed to meet project goals while being silviculturally sound.

This area also has a vast network of gated hunter walking trails and wildlife openings. In addition to hunting and trapping activities, great berry picking, off-trail snowshoeing, birding and wildlife watching opportunities exist.

Powell Marsh Wildlife Area

Powell Marsh State Wildlife Area is approximately 4,300 acres located in southwestern Vilas County adjacent to the Northern Highland American Legion (NHAL) State Forest. Powell Marsh is not a true marsh, but rather a large peatland complex containing several wetland types and plant communities. Several small flowages and small lakes are on the property. The primary plant communities at the property include:

- Open water flowages with submerged and floating aquatic plants
- Unforested wetlands, comprised of sedge meadows, alder and willow fens, and bogs with low shrubs, sphagnum moss and stunted spruce and tamarack
- Forested wetlands of black spruce and tamarack
- Grassy upland islands
- Upland forest of aspen, white birch, red maple, red oak and white pine

Today, Powell Marsh Wildlife Area provides significant opportunities for wildlife-based recreation, particularly waterfowl hunting and birding opportunities. Users are drawn to the area because this scenic open area is much different than surrounding forested habitat. Dike infrastructure allows for hiking, hunting, trapping and birdwatching experiences. The diversity of wildlife species draws visitors who enjoy the open expanse; many local residents utilize this property for getting exercise (walking and hiking, taking their dogs on walks etc.). This property is listed as an Important Bird Area and draws birdwatchers from all over the state.

Management emphasizes habitat for waterfowl and species that require open wetland and grassland habitat. A combination of prescribed fire, hand cutting, mowing and shearing is used to limit the growth of shrubs and tamarack, while increasing the abundance of grasses and sedges.

Spread Eagle Barrens State Natural Area

At over 6,500 acres, Spread Eagle Barrens is one of the largest State Natural Areas in Wisconsin. The department’s ownership here, in combination with lands managed by We Energies, Florence County, and others, protects a huge

landscape of bracken grassland and barrens dominated by scattered jack pine, red pine, scrub oak, and quaking aspen. The sandy soils support an understory of sedges, bracken and sweet fern, slender wheat grass, muhly grass, poverty oats, hazelnut, serviceberry, blueberry, and willows. Frost pockets, treeless depressions where frost may occur at any time of year, punctuate the landscape. Sedges, lichens, and other plant species have adapted to this harsh microclimate and are able to dominate these low-lying areas.

The lower reaches of the Pine River, a designated Wild River, traverse the site and the Menominee River forms the property's eastern boundary. Management activities such as timber harvest and prescribed burning help maintain the open landscape. Spread Eagle Barrens is owned by the DNR and WE Energies and was designated a State Natural Area in 1995.

Council Grounds State Park

Nestled in a bend of the Wisconsin River and a dam forming the Alexander Flowage, Council Grounds State Park is located on the western side of Merrill. Historically, the site was used as a gathering area by the Chippewa Tribe for annual festivities. In later years, between the 1870s and early 1900s, immense rafts of logs were sorted here on their way to sawmills downstream. The 505-acre park is heavily wooded and has over 12,000 feet of water frontage.

The property has a 55-unit family campground (with about one-third of the sites with electric hook-ups), as well as three group campsites. In addition are picnic grounds, boat launch, accessible fishing pier, beach, and various trails.

Krueger Pines State Natural Area, a 29-acre site, features an old-growth northern dry-mesic forest dominated by an even-aged stand of white pine, some as large as two feet in diameter. Red pine is also present along with paper birch, big-tooth aspen, white oak, and black oak. Canopy birds include eastern wood pewee, red-breasted nuthatch, brown creeper, red-eyed vireo, blackburnian and pine warblers, and scarlet tanager.

In April 2011, a tornado went through the eastern portion of the park, including part of Krueger Pines State Natural Area. Timber harvesting has focused on removing trees that blocked roads, were hazards, or were heavily damaged and could serve as a source for growing populations of wood damaging insects.

Table 1. Selected additional properties in the Northwoods Region.

County	Property Name	Acres
Langlade	Ackley Wildlife Area	1,149
Oneida	Bearskin State Trail	559
Lincoln	Bill Cross Wildlife Area	1,523
Langlade	Evergreen River Fishery Area	1,391
Price, Iron	Flambeau River State Forest	9,650
Lincoln	State Ice Age Trail Areas	2,230
Forest	Little Rice Wildlife Area	2,627
Lincoln, Oneida	Menard Island Resource Area	1,744
Iron	Moose Lake State Natural Area	3,790
Lincoln	New Wood Wildlife Area	2,642
Forest, Florence	Nicolet State Trail	448
Langlade	Peters Marsh Wildlife Area	1,681
Langlade, Lincoln	Prairie River Fishery Area	1,924
Price	Spring Creek Wildlife Area	1,003

Lincoln, Langlade, Forest, Iron, Price, Oneida, Florence, Vilas	State Owned Islands	668
Oneida	Thunder Lake Wildlife Area	3,075
Iron	Underwood Wildlife Area	1,602
Forest, Langlade	Wolf River State Trail	494
Oneida	Woodboro Lakes Wildlife Area	3,329
Langlade	Woods Flowage Fishery Area	1,232

UPPER LAKE MICHIGAN COASTAL

The Department of Natural Resources owns approximately 110,000 acres in the Upper Lake Michigan Coastal Region. Brief descriptions of the larger properties are provided here.

Peshtigo River State Forest

Located in Marinette and Oconto counties, the Peshtigo River State Forest is a pocket of mature forest and recreational opportunity in northeastern Wisconsin. It allows access to two of the largest flowages in the area as well as the Peshtigo River.

While simultaneously providing a diversity of forest products, the Forest also supports a variety of recreation opportunities and high-quality wildlife habitat. The flowages offer food, water and shelter for a range of creatures including songbirds, turkeys, white-tail deer, black bears, and butterflies.

In the winter, 20 miles of snowmobile trails connect with the regional trail network and these trails are also open to ATV usage. A number of unmarked trails, rustic roads, and hunter-walking trails are open to cross-country skiing and hiking. These trails may also be used for horseback riding and mountain biking.

In addition to the plentiful access to water within the forest, the forest provides two beaches for visitors to indulge in over the summer months.

Green Bay West Shores Wildlife Area

The Green Bay West Shores Wildlife Area has an enchanting chronicle of human occupation, beginning with the Native Americans who used the bay resources and adjacent land. From there, a number of missions and trading posts were established by the French, British, and Americans from the 1700's to 1800's. More recently, the area was inundated with lumber mills, supportive for a small commercial fishing industry, and tilled for agriculture.

In the 1930's, the government became involved with the conservation of the West Shore. Wildlife area units were slowly accumulated through the 1970's, and resulted in an over 5,000-acre area dedicated to wildlife habitat and wildlife based recreation focusing on waterfowl, wetland-dependent wildlife, migratory birds, and forest game species.

Pike Wild River

Comprised of around 310 square miles of rock outcrop and forests of all types, the Pike Wild River watershed has a vast network of small spring seeps and large lakes that contribute to its wild and scenic qualities. A 150-feet no buffer zone allows for older growth forest habitat and plentiful rapids and waterfalls that leap through the area.

Visitors are attracted to the Pike Wild River primarily for canoeing and kayaking, but a number of hunting, hiking, berry picking, and wildlife watching opportunities exist. Species such as the red-shouldered hawk and wood turtle are present in the area, drawing in wildlife enthusiasts. Lake sturgeon may also be seen migrating through the area. On the water, rapids and waterfalls make for a challenging river course. The upper reaches of the river are especially difficult to canoe, but are fantastic locations for trout fishing.

Collins Marsh Wildlife Area

The Collins Marsh Wildlife Area is comprised of 4,200 acres of marsh, wetlands, grasslands, and bottomland hardwood forest. In 1946, the area was leased by the state as public hunting grounds; in 1959, the land purchasing process was initiated. A large dam, as well as many smaller impoundments were created throughout the late mid to late 1900's to add more wetland habitat.

The marsh is primarily managed for wetland wildlife, including osprey, herons, muskrats, and otters. Grassy areas also provide refuge for ring-necked pheasants, cottontail rabbits, bobolinks, and sandhill cranes – attracting both hunters and wildlife watchers alike.

Peninsula State Park

Complete with rolling waves and towering bluffs, Peninsula State Park provides picturesque scenic views alongside ample recreational opportunities. Over the summer, visitors can enjoy a show at the Northern Sky Theater, tour the Eagle Bluff Lighthouse, or play a round of golf at a six-hole learning Short Course. The bluffs of the Niagara Escarpment cultivate microhabitats for rare crustaceans, snails, ferns, and delicate flowers, and are explorable by land and water. Fishing for smallmouth bass, rock bass, and brown trout is also available at Weborg Pier. Wintertime reveals plenty of opportunity for snowshoeing, ice fishing, snowmobiling, and sledding and tubing.

Established in 1909, Peninsula State Park has served a number of roles within the community. In the early 1900's, initial towers and campgrounds were constructed and a sawmill, game farm, and camp for girls all found a home on the property. The mid-1900's saw the advent of modern facilities, including flush toilets, sinks, and showers added to campgrounds. A number of trails are established for visitors. The last hereditary chief of the Potawatomi nation, Chief Simon Kahquados, was buried near the Memorial Pole – which was continuously restored and maintained.

Today, Peninsula State Park is lauded for its beautiful landscape and opportunities for an incredible range of visitors, making it one of Wisconsin's most popular state parks.

Point Beach State Forest

Lining the shores of Lake Michigan, the 3,000-acre Point Beach State Forest has six miles of sandy beach that allow visitors to embrace Lake Michigan's natural beauty and power. Swimming and fishing are popular along the shore. Hiking and biking trails wind through the forest and ridges. Furthermore, for hikers, three State Natural Areas provide a space for local flora and fauna, including the sand dune willow, and hikers seeking to immerse themselves in the natural world.

In the 1800's, 26 ships were foundered or stranded on the point – including 20 schooners, a barge, two steamers, and three brigs. Since 1853, the Rawley Point Lighthouse has been in operation by the U.S. Coast Guard and the tragedies have ceased. The lighthouse stands 113 feet above Lake Michigan, and is hailed as one of the largest and brightest on the Great Lakes.

Newport State Park

Located at the tip of the Door Country Peninsula, Newport State Park is Wisconsin's only formally-designated wilderness park. Made up of over 2,000 acres and 11 miles of Lake Michigan shorelines, the park allows for visitors to escape the busyness of Door County. Over 30 miles of hiking trails through evergreen and hardwood forests, wetlands, and upland meadows are dotted with hike-in campsites.

In the evening, the open skies of the park twinkle with the light of distant stars, delighting both casual stargazers and astronomers. Through a rigorous application process, the International Dark-Sky Association has designated the park as a Dark Sky Park, affirming the park's commitment to dark skies.

Potawatomi State Park

Potawatomi State Park is named after the tribe that inhabited Green Bay's shores and islands when the Europeans first arrived. The tribe was called Bo-De-Wad-Me, meaning keeper of the fire. Over time, the spelling and pronunciation were changed to Potawatomi.

The park is lined along Sturgeon Bay with the bluffs of the Niagara Escarpment. Paddlers have an opportunity to explore the shoreline from the water. SCUBA diving and water skiing are also popular, and the park acts as a home base for these visitors. Dense forests of sugar maple, basswood, white pine, and beech trees are common, with wildflowers blooming in the summer and fall. Wildlife viewers will enjoy the thrill of potential deer, hawk, shorebird, raccoon, opossum, and chipmunk sightings. Over 200 bird species have been reported as migrants or residents.

Whitefish Dunes State Park

From 100 B.C. to the late 1800's, eight separate occupations have dominated Whitefish Dunes State Park. The land's suitability for settlement was largely attributed to the availability of lake sturgeon, walleyes, lake trout, and white fish as well as shoreline with high fishing productivity and diversity. This prolific fishing habitat also harbored rare plants and stunning sand dunes, which gained attention in the 1930's as an area that needed protection. In 1967, the Whitefish Dunes State Park was established. The Whitefish Dunes State Natural Area followed in 1982.

Miles of hiking trails allow visitors to explore and awe in the impressive forces that shaped the park's sand dunes. Mammals such as the beaver, deer, fox, porcupine, coyote, and squirrel may be seen throughout the park. Birds life is plentiful and diverse. Beyond fauna, the sand dunes host unique plant communities; the harsh wind-driven sand and hot sun make growing conditions especially difficult. Dune goldenrod, dune thistle, dwarf lake iris, and sand reedgrass are a few species that are able to persist in this tough environment.

Table 2. Selected additional properties in the Upper Lake Michigan Coastal Region.

County	Property Name	Acres
Door, Kewaunee	Ahnapee State Trail	582
Kewaunee	C.D. (Buzz) Besadny Fish and Wildlife Area	2713

Oconto	Copper Culture Mounds State Park	42
Brown, Manitowoc	Devil's River State Trail	283
Manitowoc	Fischer Creek Recreation Area	123
Brown	Fox River State Trail	210
Marinette	Governor Thompson State Park	2966
Door	Grand Traverse Island State Park	27
Brown	Heritage Hill State Park	55
Brown	Lost Dauphin State Park	19
Marinette	Menominee River State Recreation Area	4766
Brown, Oconto	Mountain-Bay State Trail	209
Oconto	Nicolet State Trail	632
Oconto	Oconto River State Trail	90
Door	Rock Island State Park	912
Kewaunee, Manitowoc	State Ice Age Trail Areas	133
Manitowoc	Two Creeks State Park	25

GREAT NORTHWEST

The Department of Natural Resources owns approximately 426,000 acres in the Great Northwest Region. Brief descriptions of the larger properties are provided here.

Flambeau River State Forest

The beautiful, shining waters of the Flambeau River flow through the Flambeau River State Forest, providing ample opportunity for paddling and fishing. The North Fork of the river offers easier routes and is ideal for novice paddlers, whereas the South Fork is well-suited for advanced paddlers. Musky, sturgeon, trout, walleye, bass, and panfish can be also caught in the river. During the appropriate hunting season, the land is open to the public for hunting bear, waterfowl, deer, and grouse. Miles of trails offer adventure for ATV riders, cross-country skiers, hikers, bikers, and snowmobilers.

The forest is also home to a number of notable natural features, including the Sobieski Flowage and Bass Lake. The Sobieski Flowage was once a cranberry farm, but has since transitioned into a waterfowl nesting area with several miles of hunter walking trails. Bass Lake is a designated wilderness lake that allows fishing, hunting, and sightseeing opportunities, but no motors or camping.

Brule River State Forest

Hailed for over 100 years as an estimable trout stream, all 44 miles of the Bois Brule River reside within the Brule River State Forest. The river valley was shaped by meltwater flowing south from Glacial Lake Superior, carving both the Bois Brule River Valley as well as the St. Croix River Valley. The area today is home to Brook, Brown, and Rainbow Trout. Both trout, and Coho and Chinook Salmon also migrate annually up from Lake Superior.

While the upper river (southern portion) winds through miles of coniferous bogs, as soon as the river crosses the Copper Range it begins tumbling and cascading between steep river bluffs as it races towards Lake Superior. This diversity leads to a number of opportunities to fish, paddle, view wildlife, and hike. Rare birds such as the black-backed woodpecker, white-winged crossbill, merlin, and goshawk have been spotted on the property.

Crex Meadows Wildlife Area

Composed of 30,000 acres of soft, rolling wetlands, brush prairies, and forests, the Crex Meadows Wildlife Area is part of the Northwest Wisconsin Pine Barrens, formed by the carving of Glacial Lake Grantsburg. The area is a critical Important Bird Area that provides landscape-level management options for pine-oak barrens, northern sedge meadows and marshes, and emergent marsh and wild river habitats. It is also a Land Legacy Place and Conservation Opportunity Area for pine-oak barrens of global significance.

The area attracts visitors throughout all seasons, primarily to view wildlife. The Education and Visitor Center is home to a sales area, information center, library, auditorium, and exhibit and classroom area that allow for further interpretive experiences and for visitors to learn more about the natural world. Hunters and trappers also find opportunity in the area, as bear, deer, waterfowl, small game, and sharp-tailed grouse are popular.

Governor Knowles State Forest

In 1981, the St. Croix River State Forest was re-designated as the Governor Knowles State Forest, in honor of Governor Warren P. Knowles, an avid outdoorsman and conservationist. The forest serves as an extended resource protection zone for the St. Croix National Scenic Riverway, encompassing a designated wilderness zone and six state natural areas.

In addition to natural resources protection, the forest allows visitors to indulge in the riverway's natural beauty through hiking, biking, paddling, horseback riding, and a number of other activities. Whitetail deer, turkey, black bear, squirrel, ruffed grouse, and woodcock can be seen throughout the forest. On the water, several trout streams and access to the St. Croix River allow for opportunities to catch small mouth bass, trout, walleye, catfish, musky, and sturgeon.

Chippewa Flowage

Chippewa Flowage, a 15,300-acre impoundment, is spotted with about 200 undeveloped islands and a 233-mile highly irregular, wooded, and generally undeveloped shoreline. The wild, uncrowded atmosphere draws visitors seeking respite from the built environment and to surround themselves within the natural world. Throughout the Midwest, the Chippewa Flowage is regarded as a premier destination for water-related recreation. It is home to some of the finest musky and walleye fishing, as well as a seemingly endless maze of islands, points, bays, floating bogs, and channels.

The landscape is a pattern of rolling hills, valleys, streams, and bogs that are reminiscent of the land's glacial origins. Shorelines are forested with a mixture of aspen, birch, pine, northern hardwoods, and oak. A number of species iconic to Northern Wisconsin, including the bald eagle, osprey, and loon, can be found on the flowage.

Copper Falls State Park

One of Wisconsin's most scenic parks, Copper Falls State Park has a deep history filled with ancient lava flows, spectacular gorges and picturesque waterfalls. Iron-rich waters from deep in the earth were forced into local sediments, producing gorgeous copper ore. Thousands of cubic miles of lava then oozed from deep fissures within the present-day Lake Superior, creating layers and layers of earth, now visible in Copper Falls State Park. As the basin settled, sand, boulders, and mud entered and the earth's tectonic activity pushed and pulled at these forming layers. Ultimately, these forces are what contributed to the stunning colors and varied terrain of Copper Falls State Park.

Squirrels, wolves, porcupines, deer, fishers, black bears, among other animals, make their home in the park and over 200 species of birds either migrate through or reside within the park. The 500-acre area surrounding the falls has been designated as a State Natural Area.

Big Bay State Park

Located on Madeline Island, Big Bay State Park is nestled within the Apostle Islands and a short ferry away from Bayfield. The Apostle Islands are relics of sedimentary rocks deposited in the Lake Superior Basin over 600 million years ago. The park offers a 1.5-mile beach, family and group camping, picnic areas, and short boardwalk. Seven miles of hiking trails meander through the island's pine forests, lagoon, and wetlands, with viewing opportunities for over 200 species of birds.

Totogatic Wild River

Winding through Bayfield, Sawyer, Washburn, Douglas, and Burnett counties, the Totagatic Wild River is a natural treasure full of diverse aquatic and terrestrial species, excellent water quality, beautiful scenery, and wonderful fishing and paddling opportunities. Designated as a "Wild River", the Totagatic Wild River is under one of the highest levels of stream protection allowed by Wisconsin State Statue. It is a popular fishing destination for trout and smallmouth bass.

Pattison State Park

Featuring the highest waterfalls in Wisconsin, Pattison State Park has a tumultuous geologic history that began with a layer of basalt formed by the solidification of ancient lava flows. As the lava cooled, great oceans covered the area and brought sand, silt, and sediment to the area. This formed layers of light-colored sedimentary rock called Lake Superior sandstone. Furthermore, the Douglas Fault that runs through the park created breccia, as well as fractures that filled with copper, gold, and silver. Big Manitou Falls, Wisconsin's tallest waterfall, stands at 165 feet high and highlights the unique geology of the park.

The remainder of the park has a lake with a beach, nature center, camping, and miles of hiking trails with potential for wildlife sightings.

Interstate State Park

Established in 1900, Interstate State Park is Wisconsin's oldest state park. Located along the St. Croix National Scenic Riverway and encompassing portions of the Ice Age Trail, hikers, campers, and paddlers, among others, can rejoice in the park's natural wonders as they explore trails that twist and turn through the riverway. Fishers, hunters, and trappers will also find ample opportunity to pursue a variety of wildlife.

The Ice Age Interpretive Center features a film, photographs, murals and information about the great glaciers. At the end of the Ice Age, as the glaciers melted, the water shaped a deep, steep-walled gorge known as the Dalles of the St. Croix. This area has been designated a State Natural Area, along with the Interstate Lowland Forest and Centennial Bedrock Glade.

Table 3. Selected additional properties in the Great Northwest Region.

County	Property Name	Acres
Douglas	Amnicon Falls State Park	826
Bayfield	Bibon Swamp Natural Area	9,749
Barron, Polk	Cattail State Trail	228
Burnett	Fish Lake Wildlife Area	13,443
Burnett, Douglas, Polk	Gandy Dancer State Trail	809
Douglas	North Country National Scenic Trail	708
Douglas	Saunders State Trail	207
Bayfield	South Shore Lake Superior Fish and Wildlife Area	7,964
Polk	State Ice Age Trail Areas	1,356
Douglas	St. Louis River Stream Bank Area	6,864
Burnett	State Owned Islands	77
Polk	Stower Seven Lakes State Trail	177
Polk	Straight Lake Wilderness State Park	1,717
Barron, Price, Sawyer, Washburn	Tuscobia State Trail	820
Barron, Douglas, Washburn	Wild Rivers State Trail	1133

LAKE WINNEBAGO WATERS

The Department of Natural Resources owns over 150,000 acres in the Lake Winnebago Waters Region. Brief descriptions of the larger properties are provided here.

Navarino Wildlife Area

The Navarino Wildlife Area is comprised of about 15,000 acres of sandy uplands and ridges with marshy depressions. The area is filled with open fields, swamp conifer, lowland scrub, bog, bottomland hardwoods, pine plantations, and aspen and oak forests, providing habitat for a diversity of species.

Additionally, the property provides picnic areas, a nature center, hiking trails, groomed ski trails, and a canoe launch for visitors to enjoy.

Glacial Habitat Restoration Area

Throughout Columbia, Dodge, Fond du Lac, and Winnebago counties, a series of glacial habitat restoration areas exist to restore, create, and maintain habitat for waterfowl, wild pheasants, and non-game songbirds. Accordingly, these stretches of open prairie, woodlands, and wetlands attract a large community of both resident and migratory birdlife and are fantastic birding destinations. The areas are also open to hunting during permitted seasons.

White River Marsh Wildlife Area

On March 30, 1962, the Wisconsin Conservation Commission approved the first Land Acquisition on the White River Marsh. The area was largely farmed and wetlands were drained. Today, the 12,000-acre White River Marsh Wildlife Area fosters a diverse landscape of open marsh, wet meadow, swamp hardwoods, tamarack swamp, upland prairie, oak savanna, and shrub carr. Hiking and cross-country skiing without a designated trail are available for intrepid recreators.

Grand River Marsh Wildlife Area

In the 1930's and 1940's, the area that would become the present-day Grand River Marsh Wildlife Area was admired for its wildlife and waterfowl habitat. Local sportsman's clubs supported its conversion into a wildlife refuge, ultimately culminating in state acquisition on February 21, 1958. The uplands and marsh were farmed and grazed; marsh hay, including reed canary and wire grass, was an important crop.

To explore the area, visitors are welcome to bike, hike, canoe, or cross-country ski around the property. Hunting for pheasant is especially popular.

Killsnake Wildlife Area

In 1956, Manitowoc County purchased the first land for the area, initially set up as a goose satellite area. Over the years, the property has transformed into an area for both agriculture and prairie restoration. Acres of prairie grasslands, uplands, bottomland hardwood forest, cedar swamp, tamarack and bog, and agriculture span the property, providing habitat for birds ranging from raptors to sandhill cranes to bobolinks. The confluence of several rivers, including the Manitowoc and Killsnake Rivers, also boasts a wealth of archaeological history.

Hartman Creek State Park

Along the stunning, spring-fed Chain O' Lakes, Hartman Creek State Park is 1,500 acres of peaceful and rejuvenating natural beauty. Initially home to a hops house, the park area eventually transitioned to raising dairy and to, most recently, fish. On July 22, 1966, Hartman Creek State Park was officially opened.

Hiking, biking, and horseback riding trails meander through the park's numerous lakes. On the water, paddlers and swimmers alike are welcome to explore and or relax on the beach. Fishing for largemouth bass, perch, bluegill, and other panfish are popular since the area was once used as a fish hatchery.

High Cliff State Park

Lining the eastern shore of Lake Winnebago, the Niagara Escarpment's limestone cliffs of High Cliff State Park offer breathtaking views of the surrounding areas. A 40-foot observation tower allows for climbers to see as far as Appleton, Oshkosh, Neenah, Menasha, and Kaukauna.

The park is of significance to the nomadic Siouan Indians, who built a number of effigy mounds throughout the park, including four panther-shaped mounds, two buffalo-shaped mounds, conical mounds, and a linear mound. A 12-foot statue of Winnebago Indian Chief Red Bird, perched upon a granite rock, watches over the lake.

Beyond historical and cultural significance, the area also has exceptional natural beauty. Squirrels, raccoons, skunks, opossums, and other critters live in the area. The High Cliff Escarpment State Natural Area rests within the park, lauded for its cliff environments, undisturbed wet-mesic forest, and over a mile of Lake Winnebago shoreline. The park is also well known for its warbler migration in the spring.

Table 4. Selected additional properties in the Lake Winnebago Waters Region.

County	Property Name	Acres
Calumet	Brillion Wildlife Area	4824
Fond Du Lac	Campbellsport Drumlin State Park	10
Fond Du Lac	Eisenbahn State Trail	154
Fond Du Lac	Eldorado Wildlife Area	6379
Calumet	Fox River State Trail	84
Calumet, Winnebago	Friendship State Trail	10
Fond Du Lac	Mascoutin Valley State Trail	45
Outagamie	Newton Blackmour State Trail	291
Waushara	Poygan Marsh Wildlife Area	3617
Winnebago	Rat River Wildlife Area	4554
Waupaca, Waushara	State Ice Age Trail Areas	779
Waupaca	Tomorrow River State Trail	192
Waushara	White River Fishery Area	3436
Fond Du Lac	Wild Goose State Trail	200
Shawano, Outagamie	Wiouwash State Trail	229

MISSISSIPPI RIVER CORRIDOR

The Department of Natural Resources owns approximately 140,000 acres in the Mississippi River Corridor Region. Brief descriptions of the larger properties are provided here.

Tiffany Wildlife Area

Over 13,000 acres in size, the Tiffany Wildlife Area contains one of Wisconsin's largest, continuous bottomland hardwood forests. Beaver dams and old river meanders have shaped an intricate network of ponds and wetlands. Wildlife such as deer, ruffed grouse, and beaver can be seen throughout the area.

This forested expanse, including a diverse range of oaks, creates a fascinating landscape for hikers, paddlers, hunters, and wildlife lovers to explore.

Muddy Creek Wildlife Area

Also known affectionately as the Elk Mound Swamp, the 4,100-acre Muddy Creek Wildlife Area follows the Muddy Creek near the village of Elk Mound. A number of wooded and prairie islands are scattered across the predominantly marsh and sedge meadow wetland. The southern end of the property is a State Natural Area, featuring a transitional zone between northern and southern sedge meadows.

Historically, landowners have attempted to drain the marsh, leaving remnants of linear ditches strewn throughout the marsh. Beavers have made use of these ditches to create impoundments and further shape the landscape. Today, the area is subject to a variety of management techniques to provide food and habitat for both local and migrating wildlife. The diversity of visiting wildlife provides opportunities for birding and hiking.

Kickapoo Wildlife Area

Featuring a stunning array of ridges and valleys iconic to the driftless area, the Kickapoo River Wildlife Area is comprised of over 1,000 acres of upland forests. These forests are among the largest and most intact of the driftless area, leading to the area's designation as an Important Bird Area for forest and savanna birds alike. These include the red-shouldered hawk, Acadian flycatcher, wood thrush, Bell's vireo, bobolink, and eastern meadowlark.

Ample opportunity for birding and wildlife viewing exist. Hunting is also allowed, especially noted for waterfowl, woodcock, deer, wildlife turkeys, pheasants, and furbearers.

Wildcat Mountain State Park

The area surrounding Wildcat Mountain State Park has a rich history. The tale begins with bluffs full of white pines along the Kickapoo River that eventually transitioned into a productive lumber industry. As the lumber industry subsided, the ginseng business, both foraged and in "seng gardens", grew. The present-day park office was once a ginseng garden.

In 1948, through donations from Vernon County and Amos Theodore Saunders, Wildcat Mountain State Park was established to allow people to explore and appreciate the unspoiled woods of the Upper Kickapoo. As characteristic of the driftless area, the park is filled with winding, steep-sided valleys. This landscape provides for scenic views along hiking and horseback riding trails. Canoeing, kayaking, and fishing are also popular along the Kickapoo River. Wintertime reveals a network of cross-country ski, snowshoe, and snowmobile trails for visitors to wander.

Willow River State Park

The Willow River State Park spans almost 3,000 acres of prairie, forests, and gorgeous river views. Hiking trails encircle the Willow Falls, attracting thousands of visitors each year. In addition to breathtaking views, the park offers picnic areas, playgrounds, and grills for a relaxing summer day in the outdoors. During the wintertime, snowshoeing, dog sledding, ice fishing, and cross-country skiing are common activities.

Wyalusing State Park

Established in 1917, Wyalusing State Park was one of the first state parks to be created. It was conceived from a local and statewide movement to designate a park at the junction of the Mississippi and Wisconsin Rivers. Layers of sedimentary rock – dolomite, shale, and sandstone – formed bluffs and ridges that now tower above the rivers. The park provides opportunities to adventure on the water as well as absorb the gorgeous landscape of the driftless region.

Over 14 miles of hiking trails traverse the rocky landscape, coupled with two mountain biking trails. Several picnic areas and playgrounds are also available. Boating and fishing are popular along the river backwaters, and offer fantastic fishing for panfish, bass, northern pike, and walleye. In addition to scenic river views, the Lawrence L. Huser Astronomy Center, dedicated in 2003 to Lawrence Huser, also offers humbling views of the night sky.

During the winter, a number of frozen waterfalls dot the park for particularly audacious hiking and snowshoeing visitors.

Kinnickinnic State Park

In the 1960's, as the Twin Cities metropolitan area continued to expand, a number of landowners wanted to preserve the natural beauty of the local landscape. Their impressive commitment led three families to donate 45 acres to the Department of Natural Resources, culminating in the creation of Kinnickinnic State Park.

Resting at the confluence of the St. Croix and Kinnickinnic Rivers, Kinnickinnic State Park provides a diversity of opportunities for both peace-seeking and rambunctious visitors. The Kinnickinnic River Valley hosts a cold-water trout stream with an excellent brown trout population and sanctuary for incredible white pines and towering limestone cliffs. Hundreds of birds, as well as scattered deer, raccoons, mink, fox, squirrels, and rabbits may be seen throughout the park. Miles of hiking trails offer wildlife viewing opportunities. Additionally, the confluence yields a stunning sand delta that is suitable for swimming, boating, and fishing.

Perrot State Park

Perrot State Park is named after Nicholas Perrot, a French explorer who fostered connections between local tribes and European settlers. During his explorations, Perrot and his crew were in search of a winter camp – which led them to stumble upon the woods and bluffs of the present-day Perrot State Park. The site of Perrot's first camp is recognized at the park's entrance.

Today, the park is filled with majestic bluffs characteristic of the driftless region. Thousands of visitors explore these areas, appreciating the natural, awe-inspiring beauty of the Mississippi River Valley. Many of the hiking trails have steep climbs with steps or stairways leading up to scenic outlooks. Over the summer, over 100 kinds of birds can be seen along the trails, making Perrot State Park a popular stop along the Great Wisconsin Birding and Nature Trail. As the weather warms, big blue and green dragonflies buzz across trails and prairies transition from the fragrant, springtime shooting stars to the blazing compass plants of autumn. For those looking for more water-based recreation, paddling opportunities are plentiful on the Trempealeau River.

Table 5. Selected additional properties in the Mississippi River Corridor Region.

County	Property Name	Acres
Buffalo, Trempealeau	Buffalo River State Trail	454
Dunn	Chippewa River State Trail	338
St. Croix	Cylon Wildlife Area	2374
Dunn, Pepin	Dunnville Wildlife Area	4322
Grant	Fenley State Recreation Area	291
La Crosse, Trempealeau	Great River State Trail	256
Vernon	Hillsboro State Trail	66
Dunn	Hoffman Hills State Recreation Area	707
La Crosse	La Crosse River State Trail	361
St. Croix	Lower St Croix State Riverway	202
Buffalo	Merrick State Park	322
Grant	Nelson Dewey State Park	756
Grant	Pecatonica State Trail	242
Dunn	Red Cedar State Trail	427
St. Croix	Ten Mile Creek Wildlife Area	1710
La Crosse, Trempealeau	Van Loon Wildlife Area	3891
Buffalo	Whitman Dam Wildlife Area	2190

WESTERN SANDS

The Department of Natural Resources owns approximately 221,000 acres in the Western Sands Region. Brief descriptions of the larger properties are provided here.

Black River State Forest

The Black River State Forest provides many recreational opportunities while also acting as an important area for wildlife habitat, native biological diversity, soil and water quality, aesthetics, and timber production. In 1957, the approximately 68,000-acre forest was established. It encompasses over 12 miles of the swift Black River and its east fork. Remnants of Cambrian sandstone form buttes, hills, knolls, ridges, and pediments through a forest of jack pine, oak, aspen, and several rare and unique forest communities. This unique biological landscape is home to a number of waterfowl, fish, and the Karner blue butterfly.

In addition to being prized for its biological diversity, the forest is also home to a number of recreational opportunities. Hiking and biking trails wind through the forest, as well as ATV, UTV, and motorcyclist opportunities connected to the Jackson County trail system. Day visitors are welcomed with picnic facilities complete with grills, tables, and pit toilets. Hunters may find a range of game, from beavers to black bears to squirrels, within the forest.

Meadow Valley Wildlife Area

Surrounded by a flat expanse of marsh and low sandy ridges, the Meadow Valley Wildlife Area is located in the bed of the ancient Glacial Lake Wisconsin. The land was formerly logged for its white and red pines, but unpredictable growing seasons, poor soil, and large amounts of drainage taxes eventually drove away most loggers. In 1940, the area was leased by the federal government to the State of Wisconsin and is currently administered under a cooperative agreement with the U.S. Fish and Wildlife Service.

Today's oak, aspen, pine, and mixed forests provide ideal habitat for ruffed grouse, woodcock, deer, squirrels, wildlife turkey, and furbearers. Hiking, berry picking, and observing wildlife are popular recreational activities.

Mead Wildlife Area

In 1959, the Consolidated Paper Corporation of Wisconsin Rapids donated 20,000 acres to the State of Wisconsin, forming the basis of the Mead Wildlife Area. Today, it is one of the largest wildlife areas in Wisconsin, topping just over 33,000 acres with a diverse landscape of open marshes, hardwood and aspen forests, and grasslands. This diversity creates habitat for an assortment of wildlife ranging from deer and bobcats to herons and prairie chickens.

In addition, wildlife habitat, the area also provides a range of recreational opportunities. These include hunting, trapping, hiking, birding, dog training and trialing, gathering, and cross-country skiing.

Wood County Wildlife Area

Similar to the Meadow Valley and Sandhill Wildlife Areas, the Wood County Wildlife Area rests on the bed of Glacial Lake Wisconsin and is comprised of large expanses of wetland dotted with forested uplands and islands. Pioneer farmers logged and burned the initial land, but high-water tables precluded their progress. In the early 1900's, inhabitants attempted to drain the area – resulting in a series of drainage pipes that are still present today. The poor soils, harsh frosts, and high taxes eventually forced the land into tax delinquency and the county took ownership over the land. Ultimately, the county leased the land to the state for wildlife production and public recreation.

The predominant game species include white-tailed deer, ruffed grouse, woodcock, squirrels, rabbits, snowshoe hares, ducks, and geese. The primary types of recreation available include birding, camping, cross country skiing, hiking, hunting, trapping, wild edibles gathering, and wildlife viewing.

Buena Vista Wildlife Area

The Buena Vista Wildlife Area was purchased for grassland habitat management for the greater prairie chicken; today, it is home to one of the most extensive grasslands east of the Mississippi River and the largest concentration of greater prairie chickens in Wisconsin. The area is also designated an Important Bird Area.

Accordingly, the area provides excellent birding opportunities. Hunting for woodcock, duck, goose, grouse, and mourning dove are especially popular. Cross country skiing, hiking, trapping, wild edibles gathering, and wildlife viewing are also common activities.

Sandhill Wildlife Area

Sitting on the bed of ancient Glacial Lake Wisconsin, the over 9,000-acre Sandhill Wildlife Area is named for its soft, rolling sandy ridges. Oak, aspen, and jack pine forests along with large marshes and many flowages create habitat for American bison, white-tailed deer, ruffed grouse, Canada geese, ducks, loons, bald eagles, sandhill cranes, and more.

Observation towers give a comprehensive view of the property, interlaced with a series of biking, skiing, and hiking opportunities. Birding, hunting, trapping, wild edible gathering, and wildlife viewing are also popular. An auto tour is available to those driving through the area.

Buckhorn State Park

At the intersection of two wildlife areas, the Wisconsin River, and the Yellow River, Buckhorn State Park sits at a unique confluence of habitat and recreational areas. Before the 1830's, the area was part of Ho Chunk (Winnebago) Indian land and considered "unbroken wilderness". Through a history of logging, agriculture, and dam creation, the present landscape was formed, creating a peninsula with a number of finger-like sloughs. In 1974, the Department of Natural Resources purchased the land to return to "unbroken wilderness".

A diversity of wildlife inhabits the area, including sandhill cranes, muskrats, otters, mink, deer, coyotes, hawks, and more. There is a scenic vista where visitors can walk out into the desert-like regions of the park that were once Glacial Lake Wisconsin. Additionally, several areas are designated for prairie and barrens restoration.

Hiking trails wind through the wetlands, oak woods, jack pine thickets, shoreline, and prairie. Picnic areas and volleyball nets are also available for visitors. Located on a peninsula, Buckhorn State Park's opportunities for water recreation are very popular. Visitors may sail along the open waters of the Castle Rock Flowage, play along the sandy swimming beach, and test their luck fishing in the surrounding waters.

Chippewa Moraine State Recreation Area

Cozied up alongside the Ice Age Trail, the Chippewa Moraine State Recreation Area provides a plethora of hiking, snowshoeing, camping, fishing, and bird watching opportunities. As one of the nine units of the Ice Age National Scientific Reserve, the area provides both scientific and recreational opportunities that showcase the region's unique geology. Ancient glaciers that formed, pushed, and melted in the area ultimately culminated in a 10-mile wide moraine, spotted with lake plains, kettles, and hummocks that characterizes the area today.

Motorized vehicles, bicycles, and horses are prohibited on the property, but over 23 miles of hiking trails wind through the area.

Brunet Island State Park

Situated on the peaceful Chippewa and Fisher rivers, Brunet Island State Park has calm lagoons and channels that are well-suited for canoeing and wildlife watching. Gigantic hemlocks, deer, and grouse inhabit the area and allow for wildlife watching experiences as visitors wander the trails that connect with the Ice Age Trail. However, underlying the serene landscape is a pioneering tale of two impressive folks in a budding industry.

Jean Brunet, a Frenchman, came to America in 1818. He established the first dam and sawmill in Chippewa Falls, opening the region's doors to economic opportunity. After he passed away, Ezra Cornell purchased large amounts of land in the area and expanded the economic prosperity of the region by creating a permanent dam used for a stacker to supply a paper, carboard, and wallboard mill. The Northern States Power Company donated the island to the state in in 1936, dedicated to Brunet's memory in 1940. Eventually, in 1971, new technology replaced the stacker and the pond beneath the stacker was filled in, which created the present-day park.

Rib Mountain State Park

Located on one of the highest points in Wisconsin, Rib Mountain State Park is filled with wooded acres, major vistas, and rock outcroppings. The mountain is a four-mile long ridge of ancient quartzite that is around 1.7 billion years old. The iconic ridge has been used by the early Chippewas as a guide and by intrepid pioneers as a potential mine. In 1922, the Wausau Kiwanis Club purchased the land for its recreation potential and donated the land to the Wisconsin Conservation Department, the predecessor of the Department of Natural Resources. In 1927, through a few additional land purchases, Rib Mountain State Park was officially created.

Through years of hard work by the Civilian Conservation Corps and other groups, the mountain has transformed from a thick forest patch into a popular recreation destination. Hiking trails traverse the unique rock formations in the area and an observation tower offers a spectacular perspective on the surrounding land. Camping is no longer available, but the park maintains its status as a fantastic day-use area, complete with an amphitheater with breathtaking views, picnic areas for a relaxing lunch, and gazebos and shelters where reunions and gatherings create memories for a lifetime.

Lake Wissota State Park

Just northeast of Chippewa Falls, Lake Wissota State Park offers over 1,000 acres of forest and prairie alongside a 6,300-acre man-made lake. For campers looking for a more private experience, over 100 secluded, wooded campsites are in the park. A network of trails for hiking, biking, and horseback riding provide ample opportunities for visitors to explore the property. In the summertime, the lake allows for swimming, boating, and fishing. Beachgoers also have an opportunity to enjoy the sunshine on the swimming beach.

During the winter, miles of cross-country ski and snowshoe trails attract visitors seeking scenic lake views and peaceful adventures. Local snowmobile trails also connect with trails on the property.

Elroy-Sparta State Trail

Lauded as one of the most popular trails in the country, the Elroy-Sparta Trail rose to eminence as the first rail-to-trail in the United States. Weaving 32.5 miles through central Wisconsin, the trail traverses three rock tunnels, five small towns, and an assortment of wetlands, prairies, farmland, and unglaciated areas. Biking and hiking are popular along the trail, with snowmobiling and cross-country skiing available during the wintertime.

Two campgrounds are available for visitors, each with fire rings, picnic tables, hand pumps, and vault toilets. Hunting opportunities are also available along the trail and campgrounds during designated seasons.

Table 6. Selected additional properties in the Western Sands Region.

County	Property Name	Acres
Eau Claire, Jackson	Buffalo River State Trail	454
Chippewa	Chippewa Moraine Ice Age Reserve	3724
Chippewa, Eau Claire	Chippewa River State Trail	338
Adams	Colburn Wildlife Area	5020
Adams, Juneau	Dells of the Wisconsin River State Natural Area	1406
Portage	Dewey Marsh Wildlife Area	6055
Monroe	La Crosse River State Trail	361
Marathon	Mc Millan Wildlife Area	5870
Juneau, Monroe	Mill Bluff State Park	1600
Marathon	Mountain Bay State Trail	239
Chippewa	Old Abe State Trail	254
Adams	Quincy Bluff and Wetlands State Natural Area	12578
Adams	Roche-A-Cri State Park	492
Juneau	Rocky Arbor State Park	244
Chippewa, Marathon, Portage	State Ice Age Trail Areas	2277
Portage	Tomorrow River State Trail	186

LOWER LAKE MICHIGAN COASTAL

The Department of Natural Resources owns approximately 94,000 acres in the Lower Lake Michigan Coastal Region. Brief descriptions of the larger properties are provided here.

Kettle Moraine State Forest – Northern Unit

During the 18th and 19th centuries, the area of the present-day Kettle Moraine State Forest was largely agricultural. In 1920, a growing Wisconsin population created a need for large acres of public land for outdoor recreation and forestry. In 1937, the Kettle Moraine State Forest was created – the Northern Unit being the first and largest unit.

Touching Sheboygan, Fond du Lac, and Washington counties, the Kettle Moraine State Forest Northern Unit is a multi-use property stretched over 30,000 acres. Today, the forest provides a number of services, including recreation, sustainable forest products, water quality and soil protection, terrestrial and aquatic wildlife, native biological diversity, and aesthetics.

The forest also has over a dozen lakes and ponds, the majority of which are kettles formed during the Wisconsin glaciation. These lakes range in size from 477 to less than seven acres. Many trails wind through this spotted landscape, including 31 miles of the Ice Age Trail, 41 miles of bridle trail for horseback riding, and 60 miles of snowmobile trails.

Kettle Moraine State Forest – Southern Unit

Spanning over 22,000 acres, over 100 miles of mountain biking, horseback riding, snowmobiling, and hiking trails weave through the Kettle Moraine State Forest Southern Unit. The landscape offers plenty to explore, including glacial

hills, kettles, lakes, prairie restoration sites, pine woods, and hardwood forests. The Scuppernong River Habitat Area is the largest wet prairie east of the Mississippi River, and provides over 3,500 acres of refuge for wildlife. Eight other state natural areas are scattered throughout the forest. Coyotes, red foxes, sandhill cranes, and Cooper's Hawks find their home in the landscape, as well as a number of rare species.

The Southern Unit is also unique in its historical significance – the unit has three restored log cabins and American's largest outdoor museum of rural life, Old World Wisconsin. Each cabin tells the stories and journey of those who lived in the cabin.

Theresa Marsh Wildlife Area

Situated in northwestern Washington and northeastern Dodge counties, the Theresa Marsh Wildlife Area provides over 5,500 acres of wetlands, grasslands, woodland, and agricultural land. The marsh was once a glacial lake with a southern outflow. Additional glacial activity shaped the marsh towards the western outlet that exists today. The marsh is largely managed for wildlife production, recreation opportunities, and assistance in waterfowl migration. There are two waterfowl refuges that provide food and resting areas for long distance migrants, and the marsh is especially important for dabbling ducks, including blue-winged teal and wood ducks.

Hunters, birders, and other wildlife enthusiasts spend time within the unique wetland and grassland mosaic, reveling in the assortment of waterfowl attracted to the area.

Richard Bong State Recreation Area

Initially the future site of a jet fighter base, the Richard Bong State Recreation Area has transformed into a rolling landscape for hikers, bikers, motorized recreators, and others. The area is named after Major Richard I. Bong of Poplar, WI, who was an air ace during World War II. However, three days before the runway concrete was to be poured, the air base was abandoned and the inception of the Richard Bong State Recreation Area followed.

The recreation area is made up of grassland, savanna, wetlands, and scattered woodland. Springtime yields beautiful blooms such as white bloodroot and lavender hepatica, flowering into a prairie blazing with color in the summertime.

A special use zone is designated in the park for flying model airplanes, rockets, hang gliders, and hot air balloons. The space is also used for dog training, falconry, and motorized trail recreation. The property is also home to Wolf Lake and an urban fishing pond, providing fishing and swimming as well as picnicking opportunities with a view.

Kettle Moraine State Forest – Lapham Peak Unit

The Lapham Peak Unit of the Kettle Moraine Forest is well-known for its beautiful glaciated topography. Bird and wildlife are present on all trails and guided bird hikes are held each year. Miles of trails provide backpacking, hiking, and off-road biking opportunities. The unit also boasts several prairie restoration sites, a butterfly garden, and a 45-foot observation tower.

In the wintertime, the forest is a popular destination for those who cross-country ski and snowshoe. Over 17 miles of ski trails exist, with 2.5 miles of trails lighted for night skiing.

Kettle Moraine State Forest – Pike Lake Unit

Nestled in the center of the Kettle Moraine chain, the Pike Lake Unit of the Kettle Moraine State Forest mirrors the glacial topography of the other units. Within the unit is a 522-acre, spring-fed kettle that offers an abundance of walleye pike fishing, after which the unit was named. Swimming, boating, and canoeing are permitted on the lake, making for a refreshing summer day trip. Wildflower also paint the trails with color in the summertime, mesmerizing hikers and wildlife alike. Visitors can also climb up Powder Hill, a large glacial kame, for a comprehensive view of the landscape.

Wintertime yields 2.5 miles of cross-country ski trails groomed for both traditional and skate skiing. Winter hiking and snowshoeing are also permitted on parts of the property.

Harrington Beach State Park

Stretching over a mile of coastline along Lake Michigan, Harrington Beach State Park provides a myriad of water related opportunities from sunbathing to swimming. The property's over 700 acres cover a diversity of white cedar and hardwood swamps, old field grasslands with restored wetland ponds, and an iconic limestone quarry lake. Early bloomers include the marsh marigold, and transition into a summer bloom of Queen Anne's lace, asters, and goldenrod. Butterfly and waterfowl migrants pass through the area, pausing to recharge on their long journey.

Dedicated on July 21, 2007, the Jim and Gwen Plunkett Observatory features a roll-off roof that reveals a 20-inch telescope weighing over 2000 pounds. The telescope has four foci: two Newtonian, one Cassegrain, and one Coude – and provides for a world of interstellar exploration.

Big Foot Beach State Park

Situated on the breathtaking Geneva Lake, Big Foot Beach State Park offers camping, picnicking, and hiking opportunities. Forest and open meadow provide a trail network through a calming landscape. On the water, swimming, boating, and fishing are available. In the winter, the snowshoeing, winter hiking, and cross-country skiing opportunities are popular.

Kohler-Andrae State Park

Shaped by both massive glaciers and ancient seas, Kohler-Andrae State Park offers an amalgam of river marsh, pine and hardwood forests, long beaches, and majestic sand dunes along Lake Michigan. White-tailed deer, red foxes, ground squirrels, and muskrats can be seen wandering through the dunes and marshes. Over 150 birds live in or migrate through the park, providing a spectacular site for viewing diving ducks, hawks, and cranes. The park's hiking trails allow visitors to take a respite from the surrounding urban areas.

Kohler-Andrae is comprised of two separate parks, with John Michael Kohler State Park to the North and Terry Andrae State Park encapsulating the pine dunes to the South. Today, the two properties are considered separate, but managed as one unit. The park hosts an array of campgrounds, picnic areas, a bath house, roads, and a nature center.

Lakeshore State Park

Located in downtown Milwaukee, Lakeshore State Park serves as a pause from the city's hustle and bustle. Hikers, bikers, and skaters can enjoy a view of the Milwaukee skyline while exploring the park's short grass prairies. For boaters, the park has a 20-slip marina for mooring boats up to 60 feet long and opportunities for kayaking within the lagoons. In the wintertime, hiking and snowshoeing are permitted, with possible snowy owl and bunting sightings.

Table 7. Selected additional properties in the Lower Lake Michigan Coastal Region.

County	Property Name	Acres
Racine	Burlington to Kansasville State Trail	89
Ozaukee	Cedarburg Bog State Natural Area	1677
Washington	Eisenbahn State Trail	11
Milwaukee	Forestry Education and Awareness Center	67
Milwaukee	Hank Aaron State Trail	64
Milwaukee	Havenwoods State Forest	473
Washington	Jackson Marsh Wildlife Area	2526
Washington	Kettle Moraine State Forest-Loew Lake Unit	1097
Walworth, Waukesha	Kettle Moraine State Forest-Mukwonago River Unit	1013
Jefferson, Waukesha	Paradise Valley Wildlife Area	1773
Sheboygan, Walworth, Washington, Waukesha	State Ice Age Trail Areas	827
Walworth	Turtle Valley Wildlife Area	1852
Waukesha	Vernon Wildlife Area	4360
Waukesha	Glacial Drumlin State Trail	278
Racine, Walworth	White River State Trail	157

SOUTHERN GATEWAYS

The Department of Natural Resources owns approximately 206,000 acres in the Southern Gateways Region. Brief descriptions of the larger properties are provided here.

Lower Wisconsin State Riverway

In 1989, the Lower Wisconsin State Riverway was established by a cooperative group comprised of citizens, environmental groups, politicians, and the DNR. Its goal was to serve as a public use area for unique river corridor recreation, maintain the natural and scenic landscape, and promote long-term natural resources management of the area.

The riverway stretches 95,000 acres, with over 45,000 acres in state ownership, and is comprised of one of the longest stretches of free-flowing rivers in the Midwest. Visitors from Wisconsin and beyond flock to the corridor to embrace its characteristic broad waters, islands and sandbars, sloughs, wetlands and floodplain forests, prairies, and flanking hills and bluffs. Recreational activities are available in a lightly developed setting.

Horicon Wildlife Area

Situated in southeast Wisconsin at a size of 33,000 acres, Horicon Marsh is the nation's largest freshwater cattail marsh; it has been formally recognized as a Wetland of International Importance by the Ramsar Convention of the United Nations. A wildlife education program was started in the mid-1980's, and still remains strong today with programs designed to share native wildlife with a wide range of individuals.

In the early 1900's, the area was ditched and drained for agriculture. In the 1920's and 40's, both the state and federal management units were established as waterfowl nesting and migratory resting areas. Redhead ducks, mallards, and teals flock in the area. The busiest times of year are during the spring and fall migrations, during which over 200,000 birds pass through the marsh. The expansive wetland also provides habitat for different kinds of mammals, fish, frogs, turtles, snakes, insects, and plants.

One of the best ways to explore the marsh is via canoe or boat. Four boat landings provide access to the marsh, and canoes are only permitted on the state managed parcel. The Horicon Marsh Canoe Trail connects two landings and has an interpretive guide to help direct that trip.

Devil's Lake State Park

Established in 1911, Devil's Lake is the third oldest state park in Wisconsin, and carries a chronicle of stories and legends for a lifetime. The views from its 500-foot quartzite bluffs are spectacular, featuring the esteemed 360-acre Devil's Lake. Millions of visitors flock from Wisconsin and beyond to soak in these views, enjoy the water, and traverse the prairie and woodland area at the base of the bluffs. Devil's Lake is Wisconsin's most visited state park.

The unique geology and topography of Devil's Lake State Park make it a hotspot for a diversity of recreational activities. Rock climbing and scuba diving are two uncommon activities in state parks, but very prevalent at Devil's Lake. Furthermore, lakeshore picnic areas, sandy swimming beaches, and 29 miles of hiking trails provide a plethora of opportunity for visitors both old and young, adventurous and timid.

As the lake freezes in the winter, visitors turn to ice fishing, dog sledding, igloo building, snowshoeing, and skiing. Brown trout, northern pike, and other fish inhabit the chilly waters during this season.

Pine Island Wildlife Area

Located just west of Portage, the Pine Island Wildlife Area is comprised of over 5,400 acres of wetland, grassland, oak-savanna, and woodland habitats. The area is nestled in the floodplains of the Wisconsin and Baraboo Rivers, encompassing several islands of the Wisconsin River. One of the largest islands used to harbor a significant stand of white pine, hence the name "Pine Island". However, over time, these pines were removed for the construction of barns.

From a natural perspective, the 1940's and 50's saw several hundred Canada geese that consistently used the area. Today, it is home to many endangered species of reptile, bird, and insect, and more common species such as whitetail deer and wild turkey. Pine Island has also recently been established as an Important Bird Area due to its impressive grasslands.

Governor Dodge State Park

With over 5,000 acres of steep hills, bluffs, deep valleys, two lakes, and a waterfall, Governor Dodge State Park has found a warm welcome in the scenic driftless area of southwestern Wisconsin. Over 40 miles of hiking trails and 8 miles of off-road bicycling trails provide plenty of non-motorized opportunity for visitors to explore the park's rugged terrain. Fall foliage brings flocks of visitors to admire the warm colors and calm waters.

The park is home to two lakes – Cox Hollow and Twin Valley. These provide opportunities for water-related recreation, such as swimming, boating, canoeing, kayaking, and fishing. The park has also made itself an equestrian hotpot, offering 22 miles of bridle trails and a number of horse campsites.

In the fall, hunting and trapping are permitted during the standard hunting and trapping time frame. Winter time reveals over 12 miles of ski, hiking, and snowshoeing trails. A 15-mile snowmobile trail connects with the 40-mile Military Ridge trail to provide a maze of paths to explore. The rugged terrain also makes the park a playground for visitors with sleds or toboggans, provided there is adequate snowfall.

Mirror Lake State Park

Near the Wisconsin Dells, this 2,200-acre parcel contains a diversity of shoreline, wooded area, and cliffs that provide gorgeous views. Dell Creek winds through the park and flows into Mirror Lake, the park's centerpiece whose surface rarely sees ripples. Over time, the creek cut away at the landscape's thick, soft sandstone; ultimately, the creek helped shaped the incredible geology of the park. Surrounding the lake are pine and oak woods, further encircled by sandy prairies and former farm fields. Common mammals include deer, raccoons, squirrels, bats, chipmunks, and muskrats. The marshes, open fields, and lakeshore topography also provide habitat for a variety of bird life.

To explore this unique geology, visitors may embark on adventures on over 19 miles of hiking trails and nine miles of off-road biking trails. In the winter, cross-country ski trails are available. Visitors may also explore via water through boating, canoeing, kayaking on the slow-no-wake lake, and swimming from the beach. Fishing, hunting, and trapping are also permitted at the park during designated times.

Sauk Prairie State Recreation Area

During World War II, the Sauk Prairie Recreation area was designated as an army ammunition plant for manufacturing nitrocellulose-based propellants. Today, the land is decommissioned and used for hunting, trapping, birding, photography, mushroom and berry picking, and nature study. (property webpage). The grassland that resulted from massive land use changes through the war provides a haven for many birds, including meadowlarks, bobolinks, bobwhite quail, and dickcissels. Conservation and research groups have also used the land for scientific purposes.

Blue Mound State Park

Resting on top of the highest point in southern Wisconsin, Blue Mound State Park has stunning views of the driftless region and an observation tower from which visitors can see miles and miles.

The forest and surrounding prairies of the park are home to squirrels, chipmunks, woodchucks, and raccoons. White-tailed deer are the largest mammal, and tiny spotted fawns can be seen in the summer months. These prairies also harbor

a spectacular flower show from April through September, with blood root, mayapple, anemones, buttercups, violets, and wild geranium leading the spring blossom. The autumn season reveals maple and oak trees with brilliant yellow and deep crimson leaves.

Three hiking-only trails traverse the park, along with 15.5 miles of challenging off-road, single-track bicycle trails. Groomed cross-country ski trails are popular in the winter, as is sledding and snowshoeing. In the summertime, picnic areas, a horseshoe court, sandboxes, playgrounds, and an aquatic center provide plenty of amenities for visitors to explore. Camping is comprised of about 77 wooded sites, 12 bike/hike-in sites, and a rustic accessible cabin for people with disabilities.

Yellowstone Lake State Park

Tucked in the depths of the driftless area, Yellowstone Lake State Park is a 1,000-acre sanctuary for the 455-acre Yellowstone Lake. The lake is a common stopover for many different types of waterfowl – including wood ducks, mallards, and Canadian geese. During the summer, the lake is also home to over 4,000 little brown bats, nestled in bat houses throughout the park. These houses act as nurseries, where the bats raise their pups.

Adjacent to the much larger Yellowstone Wildlife Area, which provides shooting and horseback riding opportunities, Yellowstone Lake State Park provides miles of trails for hiking, biking, and exploring. The lake provides opportunities for fishing, boating, canoeing, kayaking, and swimming. Hunting and trapping are also permitted during the standard season.

Wintertime may reveal visitors adventuring on groomed and tracked cross-country ski trails, or on snowmobile trails that connect with Lafayette County trails.

Governor Nelson State Park

Located a short drive away from the heart of Madison, Governor Nelson is a day use park that offers a sand beach, boat launch, fish cleaning facility, picnic areas, and playground equipment. Although much of the historic prairie and oak savanna of southern Wisconsin has been converted, Governor Nelson State Park houses a number of prairie restoration efforts in the open grass and marsh areas of the park. Animals and wildlife are abundant along the trails in these areas. The park also holds historical and cultural significance, as Native American effigy mounds can be seen on the trails.

In the winter, the park provides a haven for diagonal and skate skiers, providing trails from easy to moderate difficulty. When snow conditions are favorable to cross-country skiing, the trails are closed to hikers.

Lake Kegonsa State Park

Lake Kegonsa State Park is home to the peaceful Lake Kegonsa, which gets its name from the Ho-Chunk (Winnebago) Indians who called it the “Lake of Many Fishes”. The lake today is over 3,000 acres, 30 feet deep, and home to a number of fish. A part of the famous “4-Lakes” of the Madison area – including Mendota, Monona, Waubesa, and Kegonsa, Lake Kegonsa was similarly covered by a glacier and ultimately formed when glacial debris was deposited as the glacier receded.

The restored prairie surrounding the lake is home to a variety of native prairie plants, flowers, birds, and wildlife. It is managed by controlled burning. The prairie has more than five miles of hiking trails. These trails also run along the

lakeshore, providing access to boating, kayaking, canoeing, swimming, and fishing opportunities. Hunting and trapping is limited to archery only.

Winter time offers an abundance of recreation at Lake Kegonsa State Park. Cross-country ski trails are groomed and tracked. Other trails provide hiking and snowshoeing opportunities. On the lake, ice fishing is excellent and panfish and walleyes are often caught. A hill is also available for sledding.

Aztalan State Park

Aztalan State Park is designated as a National Historic Landmark. It contains one of Wisconsin's most important archaeological sites – an ancient Middle-Mississippian village that flourished from A.D. 1000 to 1300. The large, flat-topped pyramidal mounds and stockades are visible today; portions of the stockade and two mounds have been reconstructed. The area remains dotted with artifacts such as clay pots, arrow points, figures of a Mississippian deity, shell beads, and other stone and copper decorations.

On this sacred land, there exists opportunity for non-invasive recreation. Hiking and picnicking is available during the summer, transitioning to snowshoeing and cross-country skiing in the winter. The nearby Crawfish River allows fishing, boating, canoeing, and kayaking. For wildlife enthusiasts, hunting and trapping are permitted during the fall.

Table 8. Selected additional properties in the Southern Gateways Region.

County	Property Name	Acres
Sauk	400 State Trail	410
Dane, Green	Badger State Trail	534
Columbia, Sauk	Baraboo Hills State Recreation Area	3193
Lafayette	Belmont Mound State Park	274
Green, Dane	Cadiz Springs State Recreation Area	1031
Dane	Cross Plains State Park	157
Columbia	French Creek Wildlife Area	3506
Dane, Jefferson	Glacial Drumlin State Trail	725
Jefferson	Holzhueter Farm State Park	3
Columbia	Mackenzie Center	619
Dane, Iowa	Military Ridge State Trail	516
Dodge	Mud Lake Wildlife Area	4720
Sauk	Natural Bridge State Park	530
Green	New Glarus Woods State Park	415
Lafayette	Pecatonica State Trail	242
Columbia	Peter Helland Wildlife Area	3544
Columbia, Dane, Rock, Sauk	State Ice Age Trail Areas	1125
Dane, Green	Sugar River State Trail	265
Iowa	Tower Hill State Park	77
Dodge, Jefferson	Waterloo Wildlife Area	4526
Lafayette	Yellowstone Wildlife Area	4048