NORTHEAST SANDS REGIONAL MASTER PLAN

PROPOSED MASTER PLAN AND ENVIRONMENTAL ANALYSIS

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La Salle Falls, Pine River; photo by WDNR
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LIST OF ACRONYMS AND DEFINITIONS

ACRONYMS

COA  Conservation Opportunity Area
CTH  County Highway
DBH  Diameter at Breast Height
DNR  Department of Natural Resources
EL   Ecological Landscape
FERC Federal Energy Regulatory Commission
NES  Northeast Sands
NHC  Natural Heritage Conservation
ROA  Recreation Opportunities Analysis
SCORP Statewide Comprehensive Outdoor Recreation Plan
SGCN Species of Greatest Conservation Need
SNA  State Natural Area
STH  State Highway
ULMC Upper Lake Michigan Coastal recreation region

DEFINITIONS

Deed acres: Acreage derived from DNR Land Record System based off the acquisition deed and described in the legal description. The acres described in a deed often differ by a small amount from the acres calculated using Geographic Information Systems (GIS) software.

GIS acres: Acreage calculated from DNR spatial datasets using a Geographic Information System (GIS). When applied to DNR Managed Lands, there will usually be slight differences between GIS acres and deed acres due to different methods of collecting and recording parcel geometry.

Additional definitions for terms commonly used in master plans can be found in the Common Elements Glossary.
CHAPTER 1: INTRODUCTION AND OVERVIEW

PURPOSE AND MANAGEMENT AUTHORITY

The purpose of this master plan is to guide management of Department of Natural Resources (DNR; also referred to as “department”) properties within the Northeast Sands Ecological Landscape (NES EL). The department develops master plans to describe and direct how its properties will be used, managed, and developed. A master plan establishes the levels and types of public uses that are permitted on a property as well as the authorized resource management and facility development that will take place there. All DNR properties are required to have a master plan (NR 1.60, Wisconsin Administrative Code). Master plans are developed according to guidelines set forth in Wisconsin Administrative Code Chapter NR 44, which is known as the ‘master plan rule’. Only management activities and techniques, recreational uses, and facilities identified or referenced in this master plan are authorized.

REGIONAL PLANNING APPROACH

The department has embarked on a regional approach to master planning, utilizing 16 regions known as Ecological Landscapes (Figure 1.1). These 16 regions are distinct areas of the state that each have different ecological attributes and management opportunities, and can be used to identify the best areas of the state to manage for various natural communities, key habitats, aquatic features, and native plants and animals. All 16 Landscapes are described in a DNR reference compendium, The Ecological Landscapes of Wisconsin (WDNR 2015a), which provides a detailed assessment of ecological and socio-economic conditions for each Landscape, highlights management opportunities for significant or unique habitats and ecological features, and describes important considerations for planning and management.

This ecological information is combined with recreation information from the Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the Recreation Opportunities Analysis (ROA). The SCORP periodically evaluates status, trends, demand, and needs for outdoor recreation throughout the state, and is the primary source of information on outdoor recreation in Wisconsin. The ROA is a recent assessment that identified recreational needs and shortages in different regions of the state as well as the potential role of department properties in helping meet those needs. The recreation regions were defined in the 2005-2010 SCORP (WDNR 2006), and are shown in Figure 1.2.
CHAPTER 1: Introduction and Overview

Utilizing these comprehensive sources and tools for planning creates efficiencies by integrating and focusing the work and financial resources of multiple department programs. It also ensures that the public uses, facility development, and resource management described, established, and authorized in master plans is consistent with regional needs and demands, ecological capabilities, management opportunities, and department priorities.

A regional master plan for an Ecological Landscape includes all department properties within that Landscape. Some properties already have NR44-compliant master plans; those plans are incorporated into the regional plan by reference. Properties that fall within more than one Landscape typically (though not always) are assigned to the Landscape containing the majority of their acreage.

TRIBAL RESOURCES ON CEDED TERRITORY

A portion of the NES is included in the Ceded Territory of the state (Figure 1.3). Seven properties included in the NES plan lie within the Ceded Territory.

Native American tribes are independent, sovereign nations, as they were prior to the arrival of Europeans in North America. The Ojibwe Tribes ceded lands in the northern one-third of Wisconsin to the United States government in the Treaties of 1837 and 1842. In those Treaties, they reserved their rights to hunt, trap, fish, and gather within various publicly-owned lands. Treaty rights are currently being exercised and implemented by the Ojibwe Tribes within the Ceded Territory.
CHAPTER 1:
Introduction and Overview

INTRODUCTION TO THE REGION AND PROPERTIES

The NES EL is located in northeastern Wisconsin, and includes portions of Florence, Marinette, Oconto, Menominee, and Shawano counties (Figure 1.4). It encompasses 1,542 square miles (987,176 acres), or 2.8 percent of Wisconsin’s land area. It is largely rural with extensive forest cover. Rivers are also prominent here, including several with a remote and wild character, as well as numerous high-quality coldwater streams. There are extensive public lands holdings, including state, county, and federal lands. The NES also includes the eastern portion of the Menominee Reservation.

The department properties within the NES include a State Forest, State Natural Areas, a State Park, a State Recreation Area, State Trails, Wild Rivers, Wildlife Areas and Fishery Areas, and numerous small parcels acquired through a variety of statewide acquisition authority programs. The Pine-Popple Wild Rivers property is being included in the NES regional plan despite the majority of its acreage falling within an adjoining Landscape (the North Central Forest). The Haley Creek Swamp State Natural Area, which is within and adjacent to the property boundary of the Pine-Popple Wild Rivers, is also being included.

The following properties within the NES EL already have NR 44-compliant plans:

- Governor Earl Peshtigo River State Forest (approved in 2007, with subsequent variances)
- Governor Thompson State Park (approved in 2004, with a subsequent variance)
- Menominee River State Park and Recreation Area (approved in 2017)

These plans are available on the Completed Plans page of the DNR website, and are incorporated into this regional plan by reference. These three plans will now be on the same update schedule as the NES plan.

Two State Trails, the Mountain Bay State Trail and the Nicolet State Trail traverse the NES EL. The trails are operated and maintained by the counties through which they pass, under management agreements with DNR’s Bureau of Parks and Recreation. These partners are responsible for planning uses on the trails, and as such, the trails are not included in this plan.

The properties included for active planning in the NES EL regional plan are listed in Table 1.1, organized by property type. Larger properties are shown in Map A. The table and map do not include multiple small, scattered acquisition authority parcels – Scattered Forest Lands, State Owned Islands, Statewide Habitat Areas, and Statewide Public Access – which comprise approximately 163 acres. In total, this plan establishes or updates management (including real estate actions) for some 53,765 acres of state-owned and managed land. Consult the Property Types and Designations Common Element for descriptions of the various property types and statutory designations (see p. 10 for an overview of Common Elements).
Table 1.1. Northeast Sands Ecological Landscape Master Plan Properties.

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**SIGNIFICANCE OF THE REGION AND PROPERTIES**

The NES EL has the highest proportion of forest cover of any EL in the state, with over 75 percent of the Landscape in forest. These extensive forests are a defining feature of this Landscape, playing a significant role in maintaining high water quality, supporting viable populations of many native plants and animals, and presenting opportunities to manage for large habitat blocks and for varied structural conditions and successional stages. The NES supports several high-biodiversity-value forest communities, including dry, dry-mesic, mesic, and wet-mesic types. Many of these communities are found along the corridors of some of the Landscape’s major rivers, including the Menominee, Peshtigo, Oconto, Pine, and Pike rivers. These rivers also protect diverse aquatic and wetland habitats such as springs, bogs, fens, and sedge meadows.
Wetlands make up 20 percent of the NES EL, the sixth highest percentage of all ELs, with conifer swamps especially prominent. The NES is one of only three ELs in the state with management opportunity for the globally imperiled pine barrens community, and offers the best opportunity in the state to manage for bracken grasslands. Exposures of bedrock, including cliffs, glades, and talus slopes, are locally common and prominent in the NES and support rare plants and animals, including some bedrock specialists.

Recreationally, the extensive public land holdings, as well as private lands open to public recreation, give the NES an abundant land and water base for public recreation. These lands support a wide variety of recreational activities, including hunting, fishing, trapping, motorized and non-motorized trail activities, paddling, camping, wildlife watching and nature appreciation, and scenic viewing. The many high-quality, scenic rivers and streams make water-based pursuits a special attraction. The Menominee, Peshtigo, Pike, and Pine-Popple rivers are very popular for paddling and fishing, drawing thousands of visitors each year. The Roaring Rapids section of the Peshtigo River is considered the finest whitewater paddling opportunity in the Midwest. The numerous high-quality trout streams that flow into the major rivers offer excellent trout fishing. Many waterfalls and rapids exist in the northern portion of the NES, adding to the scenic appeal. Hunting, especially for deer and ruffed grouse, is another major draw. Hiking, bird watching, swimming, and bicycling also are popular activities.

The properties to be planned within the NES are major contributors to the ecological and recreational significance of the Landscape. Collectively, the properties present opportunities to protect, manage, and restore all the major ecological features of the NES: extensive forests, high-biodiversity-value forest communities; barrens and bracken grasslands; river/stream corridors and other aquatic and wetland habitats; and bedrock features. The Pine-Popple and Pike Wild Rivers, three of only five state-designated Wild Rivers in Wisconsin, feature densely forested corridors with diverse forest communities and significant tracts of older forest, including hemlock-hardwoods, drier pine-oak-aspen, lowland hardwoods, and conifer swamps. Spread Eagle Barrens and Dunbar Barrens offer opportunity to manage for globally imperiled pine barrens and Spread Eagle is the best place in the state for bracken grasslands. The Wildlife and Fishery Areas contain extensive forests of aspen, oak, and pine, and wetland complexes of conifer and hardwood swamps, shrub wetlands, and sedge meadow. Three of the Wildlife Areas contain an embedded State Natural Area.

Similarly, the properties contain regionally significant recreational resources. All the major properties offer extensive tracts for hunting and trapping. The Pine-Popple and Pike rivers feature outstanding paddling and fishing, as well as scenic enjoyment of their many rapids, waterfalls, and bedrock outcrops. Various coldwater streams on the properties are excellent for trout fishing. The properties also offer opportunity for hiking, cross-country skiing and snowshoeing, wildlife viewing, and gathering of wild edibles. Several properties may have potential to meet recreational shortages and high-ranked recreation needs as identified in the ROA.

**OVERVIEW OF THE PLAN**

The NES EL master plan describes how the properties in this region will be managed, used, and developed. The proposed management actions in the plan reflect the significant ecological opportunities and recreational resources of the NES and support the department’s regional habitat management and recreational priorities and goals. The plan focuses on maintenance and enhancement of upland and lowland forested habitats, rare natural communities, and high-quality surface water and aquatic resources through a variety of active and passive management techniques. Recreation management
emphasizes the traditional outdoor activities of hunting and fishing as well other nature-based pursuits such as paddling, hiking, camping, and enjoyment of outstanding wild and scenic resources along three state-designated wild rivers. The plan also recognizes the importance of working with external partners, including other government entities, private landowners, and non-profit conservation groups to achieve common goals.

The NES plan includes management and/or real estate updates for three properties with existing NR 44-compliant plans.

**RESOURCE MANAGEMENT**

Resource management in the NES EL plan emphasizes protection and maintenance of both upland and lowland deciduous and coniferous forest types and globally imperiled pine barrens and rare bracken grassland natural communities through a combination of standard habitat management practices and native community management. The plan calls for wild/scenic resources management along the corridors of the three state-designated wild rivers. A new State Natural Area is being proposed on the Pine-Popple Wild Rivers property. Fisheries management focuses on maintenance and enhancement of existing high-quality coldwater fisheries.

**RECREATION MANAGEMENT**

Hunting, fishing, trapping, paddling, and scenic enjoyment, pursued mainly in remote and rustic settings, are the primary recreational uses of the NES EL properties. The plan supports these activities primarily through habitat management, fish stocking, and maintenance of existing facilities. The plan recommends modest recreational enhancements, including additional boat access, parking areas, signage improvements, relocation of some existing facilities, a new walking trail for scenic enjoyment of the Pine River, and new or expanded facilities on Governor Thompson State Park and Governor Earl Peshtigo River State Forest.

**EXTERNAL PARTNERSHIPS**

Partnerships are critical to the department’s work. DNR collaborates with various government entities, private landowners, and other organizations to manage and restore habitat, monitor wildlife populations, control invasive species, and maintain recreational facilities. These partners include Florence County, Marinette County, Oconto County, The Nature Conservancy, Trout Unlimited, Turtles for Tomorrow, U.S. Forest Service, and We Energies. The NES EL plan acknowledges the importance of these partnerships and calls for continuing collaboration to achieve resource management and public use objectives.

**REAL ESTATE RECOMMENDATIONS**

Real estate recommendations in the NES EL plan include project boundary adjustments, property re-designations, acquisition goal adjustments, designation of administrative owners, and establishment of official property names, including for Scattered Statewide Acquisition Authority parcels. These are all considered routine “clean-up” actions related to accurate mapping of boundaries, clarification of administrative responsibility, improving management efficiency, and improving customer service by establishing official names for currently unnamed properties. The majority of proposed boundary expansions are to encompass land already owned by the department.
CHAPTER 2: MANAGEMENT, DEVELOPMENT, AND USE

VISION AND GOALS

VISION

The Northeast Sands Ecological Landscape (NES EL) properties are vital contributors to the preservation and management of the unique and outstanding ecological features and opportunities of this EL, including: extensive forests and important forest communities such as jack pine, scrub oak, and white cedar; pine barrens and bracken grasslands; high-quality aquatic habitats including the Pine, Popple, Pike, and Oconto rivers and their tributaries, extensive wetlands, and undeveloped lakes; and bedrock features such as outcrops, glades, cliffs, and talus slopes. The properties’ habitats and natural communities support abundant and diverse wildlife, including deer, bear, ruffed grouse, rare birds and invertebrates, and high-quality warmwater and coldwater fisheries. Extensive forests are essential to maintaining high water quality, and support the forest products industry, an important contributor to the economy of the NES counties. The properties provide abundant hunting, fishing, trapping, paddling, wildlife watching, and other nature-based outdoor recreation opportunities. Visitors are attracted by the dramatic scale of forested landscapes and outstanding water resources, including three of Wisconsin’s five state-designated Wild Rivers, and by the variety of recreational uses and unique experiences offered by the properties. The NES EL properties will contribute to landscape-scale habitat, wildlife, and recreation management in collaboration with other public land management agencies, local governments, Native American Nations, private conservation partners, landowners, and citizens.

GOALS

• Protect, manage, and restore the major natural communities, habitats, and natural features of the NES EL using the principles of ecosystem management and sustainable forestry.
• Provide opportunities for hunting, fishing, trapping, paddling, wildlife viewing, scenic enjoyment, and other nature-based activities that are compatible with the properties’ statutory designations and capabilities and consistent with habitat management priorities and regional recreation goals.
• Maintain and enhance ecological connectivity and compatible management of habitats and natural communities at a landscape scale, and promote their sustainability in association with other nearby public lands, and private lands managed for sustainable resource production and public recreation.
• Protect, manage, and enhance habitats and structural conditions for diverse wildlife, including game species, barrens- and bracken grassland-dependent species, breeding neotropical migrant birds and forest raptors, wetland-dependent species, coldwater and warmwater fish, and both aquatic and terrestrial invertebrates.
• Contribute to local and regional economies through management of nature-based recreation and sustainably produced forest products.
• Promote the protection and maintenance of groundwater and surface water quality and quantity for current and future users.
LAND MANAGEMENT CLASSIFICATIONS

The department properties within the NES include a State Forest, State Natural Areas, a State Park, a State Recreation Area, State Wildlife and Fishery Areas, Wild Rivers, and numerous small parcels acquired through a variety of statewide acquisition authority programs. Three properties with existing NR 44-compliant plans are incorporated into this regional plan by reference.

To organize and coordinate management actions, the department delineates “management areas” on its properties. The number of management areas varies according to the size and complexity of the property. Small properties (e.g., a 200-acre State Natural Area) may have only a single management area while large, complex properties (e.g., a large state forest or park) may have a dozen or more.

Each management area is assigned one of seven land management classifications (LMCs) defined in NR 44 based on its identified resource management and public use objectives. Decisions about the desired habitats and management strategies as well as the desired recreational opportunities and experiences are determined first for each management area, and an appropriate LMC is assigned subsequently. Most management activities or recreational uses are allowed within the different LMCs as long as the activities and uses are described in the master plan and are compatible with the area’s ecological capability.

Land management classification assigned in this plan are mapped to project boundaries. This ensures that parcels purchased after this plan’s approval have management objectives assigned. Parcels outside a project boundary that are purchased after this plan’s approval will be assigned a LMC following the process described in NR 44.

The department lands for which the NES plan is proposing new LMCs have been assigned one of the classifications described below. Areas assigned Recreation Management Area, Scenic Resources Management Area, and Wild Resources Management Area classifications are required to also have a recreational use setting subclassification. Total acres of land management classifications for the NES properties, including those with existing NR 44-compliant plans, are listed in Table 2.1. Land management classifications are depicted on the Land Management Classifications theme in the Property Planning Viewer, a master planning web mapping application accessible through the Property Planning page on the DNR website.

Table 2.1. Land Management Classifications of the Northeast Sands EL Properties.

<table>
<thead>
<tr>
<th>Land Management Classification</th>
<th>Proposed in NES Plan GIS Acres</th>
<th>Approved in Existing NR 44 Plans GIS Acres</th>
<th>Totals for NES Plan Properties GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area</td>
<td>21,063</td>
<td>2,016</td>
<td>23,079</td>
</tr>
<tr>
<td>Native Community Management Area</td>
<td>16,210</td>
<td>3,391</td>
<td>19,601</td>
</tr>
<tr>
<td>Scenic Resources Management Area</td>
<td>6,932</td>
<td>419</td>
<td>7,351</td>
</tr>
<tr>
<td>Wild Resources Management Area</td>
<td>5,612</td>
<td>0</td>
<td>5,612</td>
</tr>
<tr>
<td>Special Management Area</td>
<td>226</td>
<td>156</td>
<td>382</td>
</tr>
<tr>
<td>Forest Production Area</td>
<td>44</td>
<td>11,486</td>
<td>11,490</td>
</tr>
<tr>
<td>Recreation Management Area</td>
<td>28</td>
<td>3,933</td>
<td>3,961</td>
</tr>
</tbody>
</table>
CHAPTER 2: Management, Development, and Use

Forest Production Area (FPA) (NR 44.06(4)): The primary objective of a FPA is the sustainable production of timber and other forest products. The specific objective for a given FPA can vary depending on site capability, timber types, markets, societal needs, associated benefits, desired future forest conditions adjacent land uses, and local economic conditions.

Habitat Management Area (HMA) (NR 44.06(5)): The primary objective for HMAs is to provide integrated upland, wetland, and/or aquatic habitat management that meets critical life-cycle needs for a variety of plant and animal species. Typically, the emphasis is to provide habitats needed to sustain productive game species populations. Areas that initially do not have desired habitat conditions but have a high potential to be restored may be included under this classification.

Native Community Management Area (NCMA) (NR 44.06(6)): NCMA is managed to perpetuate native plant and animal communities, whether upland, wetland, or aquatic, and protect the biological diversity of native ecosystems. A native community is a distinct and reoccurring assemblage of indigenous flora and fauna associated with a particular set of physical characteristics. Areas that initially do not have the desired community conditions but have a reasonable potential to be restored may be included in this classification.

Recreation Management Area (RMA) (NR 44.06(8)) with Type 4 Recreational Use Setting: Lands in this classification are managed to provide and maintain land and water areas and facilities for outdoor public recreation and education. The Type 4 Setting is managed to provide areas offering opportunities for intensive recreational use. Access is readily available and facilities, when present, generally provide a relatively high level of user comfort and convenience.

Scenic Resources Management Area (SRMA) (NR 44.06(9)) with Type 2 and Type 3 Recreational Use Settings: Lands in this classification are managed to protect, maintain, and enhance for long-term public enjoyment lands or waters having unique aesthetic qualities or outstanding scenic beauty, and lands where managing for aesthetics is a primary concern due to significant or special public use of the area. The SRMA classification typically is applied to lands or waters with outstanding scenic attractions (e.g., scenic lakes, rivers, highways, trails, vistas, etc.). Vegetation management may vary from passive to active depending on the long-term scenic objective and ecological capability. Examples of potential vegetation management activities include timber harvesting, planting, herbicide application, mowing, burning, installation of fish habitat improvement devices, and erosion control. The Type 2 Setting is managed to provide a remote or somewhat remote area with little development and a predominantly natural-appearing environment offering opportunities for solitude and primitive, non-motorized recreation. Facility development is minimal, and access is generally limited to primitive roads and trails. The Type 3 Setting is managed to provide easily accessible areas with modest recreational facilities offering opportunities at different times and places for a variety of dispersed recreational uses and experiences. Facilities generally are simple, with a modest level of user convenience and comfort.

Special Management Area (SMA) (NR 44.06(7)): Lands in this classification are managed to provide and maintain areas or facilities for special uses not included under other land management classifications.

Wild Resources Management Area (WRMA) (NR 44.06(10)) with Type 1 and Type 2 Recreational Use Settings: WRMAs are managed to provide and maintain water and land areas where natural ecological processes predominate and evidence of human impact is low. There is little or no visible resource...
CHAPTER 2:
Management, Development, and Use

management activity, and facility development is limited to primitive recreational uses. The WRMA classification is applied to undeveloped areas or areas that have the potential to be restored to a substantially wild-appearing condition. Management activities are limited to protecting or enhancing the outstanding natural or aesthetic values of the area or restoring the wild character of the area. The Type 1 Setting is managed to provide a remote, wild area where the recreational user has opportunities to experience solitude, challenge, independence, and self-reliance. Access is generally highly limited, with only few primitive hiking or portage trails, and facilities are minimal to non-existent. The Type 2 Setting is described under Scenic Resources Management Area (above).

COMMON ELEMENTS

OVERVIEW

DNR properties, while diverse in physical characteristics and resources, are governed under the same state statutes, administrative codes, and processes, and share many standard practices for resource and facility management. Accordingly, the department has developed a set of Common Elements describing policies, practices, and procedures commonly used by the department that apply broadly to many situations addressed in master plans. Common Elements are based on existing department codes, policies, handbooks, and standard practices, and apply to all properties unless otherwise noted in an individual property’s management plan. There are three main categories of Common Elements: Master Planning Process, Components of Master Plans, and Background and Supporting Information. Common Elements may be accessed from the Property Planning page on the DNR website.

COMMON ELEMENTS FOR MANAGEMENT OF DNR PROPERTIES

While all three categories of Common Elements are important in planning department properties, those in the Components of Master Plans category are most relevant to this chapter. They include: General Property Management Practices; Real Estate Management; Habitats and their Management; and Recreation Facilities and their Management.

The General Property Management Practices Common Elements are divided into three sections: General Administration, Property Access, and Resource Management. The General Administration section includes information on funding constraints, facility management and inspections, public health and safety and emergency management, refuse management, and research. The Property Access section covers road management, disabled accessibility, and closures. The Resource Management section covers: endangered/threatened/special concern species protection; cultural resources; tribal consultation; wild edibles and forest products for personal use; water quality issues; forest certification; forest inventory and management planning; forest pest control; fire suppression; response to catastrophic events; prescribed fire; invasive species control; chemical use; and non-metallic mining.

The Real Estate Management Common Element includes information on land acquisition and sales; easements, access permits, and land use agreements; payment in lieu of taxes; project boundaries; acquisition authority and acquisition goal; property naming; and parcel re-designation.

The Recreation Facilities and their Management Common Elements include descriptions of recreation activities that are pursued on DNR lands as well as descriptions of the facilities that support those activities.
CHAPTER 2:  
Management, Development, and Use

General property management, real estate management, and recreation management are largely similar across department properties, no matter their resources. Habitat management, however, can vary widely given the diverse resources and situations that may exist both within a property and across different properties in a region. **Table 2.2 shows the Habitats and their Management Common Elements that apply to properties in the NES plan.** Property-specific sections included in this chapter identify situations where management that supplements or replaces the management described in Common Elements is proposed.

**Table 2.2. Habitat Management Common Elements for the NES EL Properties.**

<table>
<thead>
<tr>
<th>Habitats and their Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Habitat Management</td>
</tr>
<tr>
<td>• General Fisheries Management</td>
</tr>
<tr>
<td>• General Wildlife Habitat Management</td>
</tr>
<tr>
<td>• General Forestry Management</td>
</tr>
<tr>
<td>Upland Deciduous Forest</td>
</tr>
<tr>
<td>• Aspen</td>
</tr>
<tr>
<td>• Oak</td>
</tr>
<tr>
<td>• Northern Hardwoods</td>
</tr>
<tr>
<td>• Red Maple</td>
</tr>
<tr>
<td>• White Birch</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
</tr>
<tr>
<td>• Balsam Fir/White Spruce</td>
</tr>
<tr>
<td>• Conifer Plantation</td>
</tr>
<tr>
<td>• Jack Pine</td>
</tr>
<tr>
<td>• Red Pine</td>
</tr>
<tr>
<td>• White Pine</td>
</tr>
<tr>
<td>Shrub/Savanna</td>
</tr>
<tr>
<td>• Barrens</td>
</tr>
<tr>
<td>• Upland Shrub</td>
</tr>
<tr>
<td>Forested Wetland</td>
</tr>
<tr>
<td>• Black Spruce</td>
</tr>
<tr>
<td>• Bottomland Hardwood</td>
</tr>
<tr>
<td>• Ephemeral Pond</td>
</tr>
<tr>
<td>• Forested Seep</td>
</tr>
<tr>
<td>• Swamp Hardwoods</td>
</tr>
<tr>
<td>• Tamarack</td>
</tr>
<tr>
<td>• White Cedar</td>
</tr>
<tr>
<td>Shrub Wetland</td>
</tr>
<tr>
<td>• Wetland Shrub – Alder</td>
</tr>
<tr>
<td>• Wetland Shrub – Dogwood</td>
</tr>
<tr>
<td>Open Wetland/Marsh</td>
</tr>
<tr>
<td>• Emergent Wetland</td>
</tr>
<tr>
<td>• Muskeg/Open Bog</td>
</tr>
<tr>
<td>• Sedge Meadow</td>
</tr>
<tr>
<td>Open Water</td>
</tr>
<tr>
<td>• Coldwater Streams</td>
</tr>
<tr>
<td>• Lakes</td>
</tr>
<tr>
<td>• Warmwater Rivers &amp; Streams</td>
</tr>
<tr>
<td>Upland Grass</td>
</tr>
<tr>
<td>• Surrogate Grasslands</td>
</tr>
<tr>
<td>Taxa-specific</td>
</tr>
<tr>
<td>• Bat Hibernacula</td>
</tr>
<tr>
<td>• Herp Hibernacula</td>
</tr>
<tr>
<td>• Migratory Bird Stopover</td>
</tr>
<tr>
<td>• Mussel Habitat</td>
</tr>
<tr>
<td>• Turtle Nesting Site</td>
</tr>
<tr>
<td>Practices: Refer to individual habitat Common Elements for applicable practices</td>
</tr>
</tbody>
</table>

Northeast Sands  
Proposed Regional Plan  
11
LAND COVER AND HABITAT CLASSIFICATIONS

The department uses different classification systems and data sources to describe and estimate land cover on DNR properties and to plan and perform habitat management activities. The habitat classification system used for master planning is described in the Habitat Classifications used in Master Plans Common Element. Property land cover information is included in most property-specific sections of this plan, and is depicted on the Existing Land Cover theme in the Property Planning Viewer. Smaller properties such as state-owned islands or public access sites may have only generalized land cover information.

FOREST CERTIFICATION

All DNR-managed lands, including State Fishery Areas, Parks, Natural Areas, and Wildlife Areas, have been audited by an independent third party to the Forest Stewardship Council® and Sustainable Forestry Initiative® forest management standards (license codes FSC®C006979 and SFI®-00059) and are recognized as well managed. These certifications emphasize the state’s commitment to responsible management and conservation of its forested lands that support economic activities, protect wildlife habitat and water quality, and provide recreational opportunities.

DEPARTMENT ROADS INVENTORY

Section 23.116, Wisconsin Statutes, directed the department to inventory and map all roads on department properties and indicate which roads are open for public motorized vehicle use and, for seasonal roads, when. The department has undertaken this inventory for all properties in the NES. Roads open to the public seasonally or year-round are shown on the department’s Property Planning Viewer in the Existing Road Infrastructure theme. Roads managed by the department are assigned one of four development level classes. These classes reflect a range of development levels and maintenance standards. The road classes are defined in NR 44.07(3) and are described in the NR 44 Road and Trail Standards Common Element.

GENERAL RECREATION MANAGEMENT AND USES

All department-owned lands within the NES properties are open to traditional outdoor recreational uses including hunting, fishing, and trapping, except in refuges as posted. Other activities allowed on these lands include wildlife viewing, hiking, paddling, cross-country skiing, snowshoeing, collection of wild edibles, and nature study. Individual properties may offer additional recreational opportunities (e.g., motorized or non-motorized trail activities, camping, etc.).

Descriptions of recreation activities pursued on DNR lands as well as descriptions of supporting facilities are provided in the Recreation Facilities and their Management Common Elements.

Edible fruits and nuts, wild mushrooms, wild asparagus, and watercress may be removed by hand without a permit for personal consumption by the collector. Cutting of willow branches is allowed with a permit from the property manager. Collection of native plant seeds by nurseries, government agencies, conservation organizations, and schools for the purposes of propagation of local genotypes or restoration is allowed only by a permit from the Bureau of Natural Heritage Conservation. Collection of seeds, roots, or other plant parts is otherwise prohibited.
Foot travel (including skiing and snowshoeing) is allowed on all service roads, dikes, berms, and firebreaks unless restricted during habitat management activities (e.g., temporary closure during a prescribed burn) or due to safety concerns (e.g., flooding).

Motorized vehicle access is available on designated public access roads and parking lots. Snowmobiles and ATVs/UTVs are allowed only on trails or routes designated for their use. There are allowances for motorized use by individuals with mobility impairments under the power-driven mobility device regulations of the Americans with Disabilities Act. For more information on these allowances, please refer to the ‘Disabled Accessibility’ paragraphs in the General Property Management Practices: Property Access Common Element.

Information on rules governing public use of department-owned lands is found in Chapter NR 45, Wisconsin Administrative Code.

GENERAL RECREATION AND PUBLIC USE OBJECTIVES

- Provide opportunities for high-quality nature-based recreational activities as appropriate to and compatible with property designations and capabilities.
- Accommodate research and educational activities that are consistent with the primary management purposes of the properties and with user safety.
- Improve accessibility for mobility-impaired individuals where feasible.

GENERAL RECREATION AND PUBLIC USE PRESCRIPTIONS

- Install, maintain, and monitor parking areas, access roads, boat access sites, and signage consistent with department rules and policies, and as appropriate to the property designation.
- Post property boundaries with signs to assist visitors in finding and staying on DNR lands. Post other property regulatory and informational signs at parking areas and access points as appropriate.
- Maintain important scenic vistas and view sheds.
- Schedule impactful resource management activities to minimize visual, auditory, and access impacts to visitor use.
- Maintain constructed trail and road integrity during resource management activities. If trails or roads are damaged by such activities, restore as needed.
- Manage for large trees in higher-intensity-use recreation areas (e.g., campgrounds, picnic areas, etc.) to provide shade and for aesthetic considerations.
- Anticipate when tree replacement will be needed and plant new trees that are ecologically appropriate for the property’s geographical location.
- Support research activities as appropriate to the property designation through the Scientific Collector’s Permit or Research License Application and Authorization.
- Encourage educational activities appropriate to the property designation through existing department efforts or external partnerships.
- Look for opportunities to enhance accessibility of current facilities and provide new accessible facilities as feasible and appropriate to the property designation.
CHAPTER 2:  
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Additional property-specific public use management prescriptions are included in the individual property sections of this chapter.

PROPERTY MAPS

Property maps for this plan are housed primarily in the Property Planning Viewer. Links to the different map types (DNR and Other Lands; Recreation; Roads; Land Cover; and Land Management Classification) can be found in Table A.1 and in many of the property sections. To access property maps in the Viewer without using the links in the table or the property sections, follow these steps:

1. **Open the Property Planning Viewer.**

Go to the Property Planning Viewer home page and click the Launch button.

2. **Locate the property you want to view.**

Enter the name of the property in the Search bar located in the upper right-hand corner of the viewer. Correct spelling is necessary, but entering the entire property name is not necessary.

Matching records appear in the Search Results pane. In this example, a search for “Peshtigo Brook” returns one State Natural Area, two DNR Project Boundaries, and one feature for DNR Managed Land.

Click on the type of feature you want. In most cases, this will be DNR Project Boundary.

Finally, click on the name of the property you want to view, and the map will automatically zoom to that property. There may be more than one DNR Project Boundary result for the same property, as in this example. You may have to click through multiple results to view the full extent of the property.
CHAPTER 2:
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When you click on a search result, the Viewer highlights the feature on the map. To clear the highlight and improve the visibility of map layers and features, click the “Locate & Identify” tab on the top menu bar, then click “Clear Selected”.

3. Choose a map theme.

The default map theme is DNR and Other Lands. To view a different map theme, click the “Home” tab on the top menu bar and then click “Show Layer List”.

Then, select a theme from the Layers drop-down menu.

To learn more about additional capabilities in the Property Planning Viewer, click the ‘User Guide’ button on the Additional Resources tab in the top menu bar.
PDF maps have also been prepared for properties for which the NES plan is proposing more than one land management classification. These properties are: Amberg, Miscauno, Peshtigo Brook, and Town Corner Wildlife Areas; Spread Eagle Barrens State Natural Area; and the Pike and Pine-Popple Wild Rivers. Access these maps on the Northeast Sands Regional Master Plan webpage, in the ‘Maps’ tab. Maps for real estate action items can also be found here.

Fishing at Governor Thompson State Park; photo by WDNR
FISHERY AND WILDLIFE AREAS

AMBERG WILDLIFE AREA

Property Overview

Amberg Wildlife Area is located in north-central Marinette County southwest of the town of Amberg, in an area of extensive public lands, including other Wildlife Areas, the Pike Wild River, and Marinette County lands. The property was established in 1948. Much of the property consists of 90-100-year-old dense conifer swamp, primarily white cedar. This lowland forest grades to uplands in some portions of the property, which contain forests of aspen, northern pin oak, and jack pine as well as grassy openings. The Little South Branch Pike River, which flows through the northwest portion of the property, is a classified trout water.

Public Use and Recreation Facilities

Amberg Wildlife Area is open to a variety of recreational activities, including hunting, fishing, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. Hunting is the primary public use.

Roads and Parking Areas

Amberg Wildlife Area has two designated parking areas, one each in the northwestern and southwestern corners of the property. Two other spots used by the public for parking, both located along the southern property boundary, are small pull-offs that are not designated. Approximately 0.14 miles of public, non-DNR roads and 4.64 miles of DNR roads provide access to the property. Existing road infrastructure is summarized in Table 2.3 below and shown on Map B-1. No changes to road access are being proposed.

Table 2.3. Amberg Wildlife Area Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Miles of Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open DNR Roads</td>
</tr>
<tr>
<td>Primitive</td>
<td>4.64</td>
</tr>
</tbody>
</table>

Trails

A 2.2-mile segment of snowmobile trail, which connects to a regional network, traverses a portion of the property.
**Land Use Agreements**

The department maintains an agreement with a local snowmobile club for use and maintenance of the snowmobile trail.

**Current Natural Resources Management**

Originally purchased to manage for deer yard habitat, Amberg Wildlife Area is now managed for forest wildlife (primarily game species) and public hunting, and to perpetuate the rare native communities and associated species present, particularly older white cedar forest in the lowlands, grading into dry pine-oak forest in the uplands. A portion of the property is managed with prescribed fire, ground layer enhancement and timber harvesting to maintain pine-oak barrens habitat. Herbicide applications are used on a limited basis to control invasive plants and to reduce woody encroachment on endangered plants. Spotted knapweed biocontrol agents have been released on this property to establish control of knapweed and to provide a rearing location for the biocontrol agent for release at other sites within the county. The last fish survey in the Little South Branch of the Pike River recorded both juvenile and adult brook trout. Current trout fishing regulations are a minimum length of 8 inches and a daily bag limit of 3.

**Opportunities and Challenges**

Amberg Wildlife Area is encompassed within the Amberg Conservation Opportunity Area identified in the Wisconsin Wildlife Action Plan. The property has also been identified as part of a Wisconsin Important Bird Area, a site that provides critical habitat for birds, by the Wisconsin Bird Conservation Initiative.

One “Primary Site” has been identified by the department on Amberg Wildlife Area for special consideration in this planning process (WDNR 2018a). Primary Sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for forest certification.

**The Primary Site on Amberg Wildlife Area is:**
- Amberg Swamp Conifers

Illegal firewood harvesting is a problem on this property. There has also been encroachment by neighboring private landowners in the recent past, including private citizens mowing trails/roadsides where endangered plants occur. The two informal parking areas may need to be developed in the future if use by the public increases.

Emerald ash borer is projected to have a significant impact on this property’s lowland forest cover. Amberg Wildlife Area has some stands that are almost pure black ash, particularly along the river, and stands of cedar with a significant component of black ash. Ash mortality is likely to lead to a rise in the water table, which may impact a considerable proportion of the property’s white cedar and result in conversion of those stands to emergent marsh or shrub wetland. Loss of tree cover along the river may also affect the quality of the coldwater fishery.
Oak wilt is also present on Amberg Wildlife Area and is affecting northern pin oak. While this species will likely persist on the property, large, long-lived trees will be less common.

**Land Cover**

Current land cover on Amberg Wildlife Area is shown in Table 2.4 below. The most significant change to cover types on this property over the life of this plan is anticipated to be for the swamp hardwood and white cedar cover types, specifically stands that are almost pure black ash or have a large component of black ash. Significant ash mortality is expected over the next 15 years due to emerald ash borer, resulting in a rising water table and poorer growing conditions for surviving trees (e.g., white cedar). The likeliest scenario for these stands at this time is that they will convert to a non-forested cover type (emergent wetland or shrub swamp). The department is currently investigating management techniques (and associated costs) needed to establish new tree species in stands that experience complete ash mortality (D’Amato et al. 2018). Management of these stands will incorporate the best available science and techniques, focusing on maintaining potential to reforest the site and preventing infestation by exotic invasive plants such as reed canary grass.

**Table 2.4. Amberg Wildlife Area Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>147</td>
<td>13</td>
</tr>
<tr>
<td>Aspen</td>
<td>91</td>
<td>8</td>
</tr>
<tr>
<td>Oak</td>
<td>56</td>
<td>5</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>96</td>
<td>8</td>
</tr>
<tr>
<td>Jack Pine</td>
<td>74</td>
<td>6</td>
</tr>
<tr>
<td>Red Pine</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>White Pine</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>887</td>
<td>76</td>
</tr>
<tr>
<td>Black Spruce</td>
<td>132</td>
<td>11</td>
</tr>
<tr>
<td>Swamp Hardwood</td>
<td>96</td>
<td>8</td>
</tr>
<tr>
<td>Tamarack</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>White Cedar</td>
<td>648</td>
<td>55</td>
</tr>
<tr>
<td>Upland Grass</td>
<td>38</td>
<td>3</td>
</tr>
<tr>
<td>Cool-season Grass (Surrogate Grasslands)</td>
<td>38</td>
<td>3</td>
</tr>
</tbody>
</table>

**Land Management Classification**

Amberg Wildlife Area is divided into two management areas (Table 2.5 and Map B-2). The lowland conifer Primary Site is classified as Amberg Swamp Conifers Native Community Management Area. The remainder of the property is classified as Amberg Habitat Management Area.

**Table 2.5. Amberg Wildlife Area Management Areas.**

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area:</td>
<td>299</td>
</tr>
<tr>
<td>• Amberg</td>
<td>299</td>
</tr>
<tr>
<td>Native Community Management Area:</td>
<td>909</td>
</tr>
<tr>
<td>• Amberg Swamp Conifers</td>
<td>909</td>
</tr>
</tbody>
</table>
These areas are described below.

**Resource Management, Development, and Protection**

**Amberg Swamp Conifers Native Community Management Area**

This 909-acre site features an extensive forested wetland complex dominated by swamp conifers. Groves of solid white cedar occupy much of the wetland, interspersed within a semi-open swamp of white cedar, black ash, black spruce, red maple, balsam fir, and alder. Towards the southern end of the site, a black spruce swamp dominated by black spruce and tamarack occupies a long, narrow swath in the central portion of the wetland basin. A small black ash swamp occupies the northwest edge of the site along the Little South Branch of the Pike River. Uncommon breeding birds present in or adjacent to this site include Canada warbler, field sparrow, yellow-billed cuckoo, yellow-bellied flycatcher, and wood thrush. Five orchid species have been found on the site, indicating a diversity of microsites, intact hydrology, and high overall ecological integrity. The site is large and minimally impacted by roads or altered hydrology, a combination that is uncommon in northeast Wisconsin. Management for globally rare pine barrens in the surrounding uplands adds to the site’s value.

**Objectives**

- Manage the site to protect the native communities and associated species present.
- Manage the Little South Branch of the Pike River as a trout stream.

**Prescriptions**

- Apply passive management to the forested wetland communities.
- Monitor the impacts of emerald ash borer to ash trees in the conifer swamp area and respond if appropriate using the most current version of DNR’s Emerald Ash Borer Silviculture Guidelines and the best available science and techniques. Maintain the potential to reforest the site if possible and prevent conversion to reed canary grass or other invasive plants. Salvage of black ash should involve consultation between Forestry, Wildlife Management, and Natural Heritage Conservation.
- Monitor and control invasive species as time and resources allow.
- Follow the Coldwater Streams Common Element.

**Amberg Habitat Management Area**

This 299-acre management unit comprises the upland portions of the property, which are forested with aspen, northern pin oak, and jack pine, with scattered grassy openings. A portion of this upland area, including the grassy openings, is being managed as pine-oak barrens.

**Objectives**

- Maintain and enhance existing habitats for the benefit of resident and migratory wildlife and to sustain hunting and other wildlife/nature-based recreational activities.
Prescriptions


- Improve age-class diversity in aspen stands by managing for smaller patches of varying ages rather than larger, single-age blocks.

- Maintain the existing barrens area using a combination of timber sales, brush mowing, prescribed burning, and herbicide use where necessary to set back undesirable plants.

- Continue limited herbicide applications to control invasive plants and to reduce woody encroachment on endangered plants.

- Continue rearing spotted knapweed biocontrol agents to control knapweed on this property as well as for release at sites elsewhere in the county.

Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

- Maintain the two existing parking areas on the property. Monitor use levels at the undesignated access/parking spots and evaluate the need for further development. Proceed with improvements if necessary.

- Maintain the land use agreement for operation and maintenance of the snowmobile trail.

- Monitor areas of former encroachment for any recurrence. Pursue law enforcement and/or follow-up with regional or statewide Real Estate staff as necessary and feasible.
MISCAUNO WILDLIFE AREA

Property Overview

Miscauno Wildlife Area is located in northeastern Marinette County east of the town of Beecher, in an area of extensive public lands that includes other Wildlife Areas, the Pike Wild River, and Marinette County Forest lands. An embedded State Natural Area (SNA), the Miscauno Cedar Swamp, comprises the majority of the property. This SNA, designated in 1971, contains a lowland conifer forest in a steep-sided basin along the South Branch of Miscauno Creek. Tree species composition varies from nearly pure stands of pole-sized white cedar to mixtures of white cedar, balsam fir, and black spruce with black ash and elm along the creek. The presence of tamarack stumps indicates a former forest of this species, likely logged in the past. Despite this disturbance, the lowlands retain a natural condition. The surrounding uplands are forested with second-growth aspen, oak, and pine. The South Branch of Miscauno Creek runs through this property and is a designated trout water.

Public Use and Recreation Facilities

Miscauno Wildlife Area is open to hunting, fishing, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. Hunting is the primary use of the property.

Roads and Parking Areas

There are four primitive parking areas in the northern portion of Miscauno Wildlife Area. Three are designated lots and the fourth is a grassy turn-around at the end of a DNR road. Approximately 0.93 miles of public, non-DNR roads and 0.32 miles of DNR roads provide access to the property. Existing road infrastructure is summarized in Table 2.6 below and shown on Map C-1. No changes to road access are being proposed.

Table 2.6. Miscauno Wildlife Area Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Open DNR Roads</th>
<th>Miles of Roads Seasonal DNR Roads</th>
<th>Closed DNR Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>0.32</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Current Natural Resources Management

The SNA is managed to protect the white cedar swamp, primarily through passive management. Forestry practices are used to favor oaks and pines and older age structures in the upland forest through canopy and understory manipulation and extended rotations. An important secondary goal is to ensure that harvest operations do not negatively impact the wetlands.
Opportunities and Challenges

Miscauno Cedar Swamp SNA has been identified as a Wetland Gem by the Wisconsin Wetlands Association.

Miscauno Creek has been designated as an Outstanding Resource Water (ORW). These, along with Exceptional Resource Waters (ERW) are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities. ORWs receive the state’s highest protection standards.

One “Primary Site” has been identified by the department on Miscauno Wildlife Area for special consideration in this planning process (WDNR 2018a). Primary Sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for forest certification.

The Primary Site on Miscauno Wildlife Area is:
- Miscauno Cedar Swamp SNA

Land Cover

Current land cover on Miscauno Wildlife Area is shown in Table 2.7 below. Land cover is not expected to change significantly.

Table 2.7. Miscauno Wildlife Area Cover Types.

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>195</td>
<td>32</td>
</tr>
<tr>
<td>Aspen</td>
<td>68</td>
<td>11</td>
</tr>
<tr>
<td>Northern Hardwoods</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>Oak</td>
<td>54</td>
<td>9</td>
</tr>
<tr>
<td>Red Maple</td>
<td>41</td>
<td>7</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Red Pine</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>379</td>
<td>61</td>
</tr>
<tr>
<td>White Cedar</td>
<td>379</td>
<td>61</td>
</tr>
<tr>
<td>Shrub Wetland</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>Wetland Shrub - Alder</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>Open Water</td>
<td>1</td>
<td>&lt;1</td>
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<tr>
<td>Coldwater Stream</td>
<td>1</td>
<td>&lt;1</td>
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<tr>
<td>Upland Shrub/Savanna</td>
<td>8</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Upland Shrub</td>
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<td>1</td>
</tr>
<tr>
<td>Developed</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Right-of-way</td>
<td>3</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: Miscauno Wildlife Area

Land Management Classification

Miscauno Wildlife Area is divided into two management areas (Table 2.8 and Map C-2). The embedded SNA is classified as Native Community Management Area. The remainder of the property is classified as Habitat Management Area.

Table 2.8. Miscauno Wildlife Area Management Areas.

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area:</td>
<td></td>
</tr>
<tr>
<td>• Miscauno</td>
<td>87</td>
</tr>
<tr>
<td>Native Community Management Area:</td>
<td></td>
</tr>
<tr>
<td>• Miscauno Cedar Swamp SNA</td>
<td>546</td>
</tr>
</tbody>
</table>

These areas are described below.

Resource Management, Development, and Protection

Miscauno Cedar Swamp SNA Native Community Management Area

This 546-acre area encompasses the Miscauno Cedar Swamp SNA. This SNA features a Northern Wet-mesic Forest in a steep-sided basin along the South Branch of Miscauno Creek. The timber varies from nearly pure stands of pole- to saw-timber-sized white cedar to mixtures of white cedar, balsam fir, and black spruce with black ash and elm along the stream. Tamarack snags indicate a former forest of this species which was undoubtedly logged in the past. The cedar swamp helps protect the headwaters of Miscauno Creek and maintain its high water quality. The surrounding uplands are mainly an aspen-oak and pine cutover forest. The groundlayer is rich in smaller orchid species along with one-flowered pyrola, bunchberry, American starflower, yellow blue-bead-lily, gaywings, Canada mayflower, and several ferns. In the numerous headwater springs is a rich flora of mosses and lichens. Breeding bird surveys have shown that uncommon birds such as common raven, hermit thrush, brown creeper, golden-crowned kinglet, Cape May warbler, magnolia warbler, Canada warbler, scarlet tanager, and black-billed cuckoo are found during the nesting season. Although the lowlands have been logged they still retain natural conditions. The swamp was also the site of a 20-year research study looking at the effects of cedar thinning.

The SNA boundary will be reduced and modified to follow forest stand boundaries to better encompass the high-quality Northern Wet-mesic Forest and a limited extent of upland and wetland buffer to protect the site.

Objectives

- Manage this area as a Northern Wet-mesic Forest and aquatic reserve and as an ecological reference area.
- Provide opportunities for research and education on the highest quality Northern Wet-mesic Forests.
- Maintain the South Branch of Miscauno Creek as a trout stream.
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: Miscauno Wildlife Area

Prescriptions

- Use forest stand boundaries to refine the boundary of the SNA to better encompass the high-quality lowland cedar community along with a limited wetland and upland buffer.
- Manage the native Northern Wet-mesic Forest passively, allowing natural processes to determine its ecological characteristics.
- Promote old forest in the uplands by managing the dominant native species (oaks and pines) to maintain cover type and by using extended rotations. Work toward converting aspen to longer-lived species.
- Restrict other active management to control of invasive animals and plants and access to suppress fires.
- Do not salvage trees in the wetlands after a major wind event.
- Monitor the impact of emerald ash borer on ash trees in this management area and respond if appropriate using the most current version of the DNR's Emerald Ash Borer Silviculture Guidelines and the best available science and techniques. Maintain the potential to reforest the site if possible and prevent conversion to reed canary grass. Salvage of ash should involve consultation between Natural Heritage Conservation, Forestry, and Wildlife Management.
- Follow the Coldwater Streams Common Element.
- Provide opportunities for research via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).

Miscauno Habitat Management Area

This 87-acre area encompasses the southeastern corner of the property that is outside of the SNA. It consists of stands of aspen and pine (including planted pine), upland shrub, and shrub wetland. Currently, access to this area for forest management is challenging and the department is evaluating access options, including from surrounding ownerships.

Objectives

- Maintain and enhance existing habitats for the benefit of resident and migratory wildlife and to sustain hunting and other wildlife/nature based recreational activities.

Prescriptions

- Apply passive management to the stands of white cedar in this management area.
- Leave a minimum residual basal area of 80 square feet/acre when conducting forest management in stands within a 100-foot buffer around the SNA.
- Promote conversion of the pine plantation to natural pine forest through thinning and harvest.
• Allow the areas of upland shrub to succeed to forest.

**Public Use Management and Development**

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

**Prescriptions**

• Maintain the four existing parking areas on the property.

Conifer swamp; photo by WDNR
NORTH BRANCH PEMEBONWON FISHERY AREA

Property Overview

The North Branch Pembonwon Fishery Area is located on the North Branch Pemebonwon River in southeast Florence County, downstream of East Fischer Lake Parkway. This property consists entirely of five acres of public access easements on either side of the stream corridor. The North Branch Pembonwon River is a Class II trout water and the easements are used primarily for angler access. The stream corridor is forested, and access is by foot travel only.

| Current State Ownership (deed acres): | 5 |
| Fee Title: | 0 |
| Easement: | 5 |

Property Management

The department does not conduct any management on this property. The department will continue to monitor the easements for compliance.

Maps

Click the link to access the map in the Property Planning Viewer:

DNR & Other Lands

Long Slide Falls on the North Branch Pemebonwon River; photo by WDNR
PESHTIGO BROOK WILDLIFE AREA

Property Overview

The Peshtigo Brook Wildlife Area is located in central Oconto County, north of Suring. The larger area surrounding the property contains extensive public lands, including other state-owned lands, Oconto County Forest, and the Chequamegon-Nicolet National Forest. The property was established in 1953 and was originally purchased and managed for waterfowl and sharp-tailed grouse. The soils and water on the area were not conducive to waterfowl production, and sharp-tailed grouse disappeared from the area as forest succession advanced. Management eventually transitioned to an emphasis on forest wildlife.

An embedded State Natural Area (SNA), Peshtigo Brook Meadow and Woods, occupies much of the western portion of the property. This SNA, designated in 2008, features an undisturbed sedge meadow with older dry pine-oak forest stands on upland sandy ridges. This wetland is part of the larger Brazeau Swamp-Waupee Lake-Peshtigo Brook complex, the largest wetland complex in the NES EL and one of the largest in the state.

The remainder of the Peshtigo Brook Wildlife Area is forested, mostly with aspen, swamp hardwoods, and northern pin oak.

Public Use and Recreation Facilities

Peshtigo Brook Wildlife Area is open to hunting, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. Hunting is the primary public use.

Roads and Parking Areas

There is one parking area on the Peshtigo Brook Wildlife Area, located just off the property on adjacent Oconto County Forest land. Approximately 0.2 miles of public, non-DNR roads and 5.78 miles of DNR roads provide access to the property. The main DNR road (seasonally open to public vehicle traffic) overlays an undeveloped town road easement, known locally as Hawthorne Road. Existing road infrastructure is summarized in Table 2.9 below and shown on Map D-1. No changes to road access are being proposed.

Table 2.9. Peshtigo Brook Wildlife Area Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Open DNR Roads</th>
<th>Miles of Open DNR Roads</th>
<th>Seasonal DNR Roads</th>
<th>Miles of Seasonal DNR Roads</th>
<th>Closed DNR Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>2.42</td>
<td>2.42</td>
<td>0.42</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Lightly Developed</td>
<td>-</td>
<td>2.94</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Maps

Click the links to access each map type in the Property Planning Viewer:
- DNR & Other Lands
- Recreation
- Roads
- Land Cover
- Land Management Classification
Trails

Various old logging roads provide foot access to the property but there are no designated trails on the property itself. A snowmobile trail runs directly adjacent to the property’s westernmost border.

Current Natural Resources Management

The SNA is managed to maintain the sedge meadow, oak barrens, and pine-oak forest communities. The pine-oak forest stands are primarily managed passively, while tree cutting, brushing, and fire are used to maintain and enhance the sedge meadow and more open oak barrens. The forest types on the rest of the property are managed using sustainable forestry practices, maintaining a variety of successional stages and structural conditions to benefit wildlife and for forest production.

Opportunities and Challenges

Peshtigo Brook Wildlife Area is encompassed within the Brazeau Swamp Conservation Opportunity Area identified in the Wisconsin Wildlife Action Plan. It is also part of the Brazeau Swamp Wetland Gem identified by the Wisconsin Wetlands Association.

Two “Primary Sites” have been identified on Peshtigo Brook Wildlife Area by the department for special consideration in this planning process (WDNR 2018a). Primary Sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for forest certification.

The Primary Sites on Peshtigo Brook Wildlife Area are:
• Peshtigo Brook Meadow and Woods SNA
• Peshtigo Brook Floodplain and Shrub-carr

Peshtigo Brook Wildlife Area’s large size and remote location create both resource management and public use challenges. Prescribed fire is a critical management tool for maintaining the cover types on the property, but applying it on this scale is increasingly difficult. The distance from DNR stations, where staff are located and equipment stored, makes it a challenge both to work on the property and to monitor it for public use. Vehicular access to the property is gained through a single point that is only open seasonally and only when ground conditions allow use without damage to the primarily native surface road system. The department is currently working with the county and town to improve this access point when funds are available. Illegal off-road vehicle use of the property, including from neighboring private lands, is an ongoing problem.

Land Cover

Current land cover on Peshtigo Brook Wildlife Area is shown in Table 2.10 below. Land cover is not expected to change significantly.
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: Peshtigo Brook Wildlife Area

Table 2.10. Peshtigo Brook Wildlife Area Cover Types.

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>667</td>
<td>30</td>
</tr>
<tr>
<td>Aspen</td>
<td>426</td>
<td>19</td>
</tr>
<tr>
<td>Oak</td>
<td>241</td>
<td>11</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>89</td>
<td>4</td>
</tr>
<tr>
<td>Red Pine</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>White Pine</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>236</td>
<td>11</td>
</tr>
<tr>
<td>Swamp Hardwood</td>
<td>236</td>
<td>11</td>
</tr>
<tr>
<td>Shrub Wetland</td>
<td>686</td>
<td>31</td>
</tr>
<tr>
<td>Wetland Shrub – Alder</td>
<td>333</td>
<td>15</td>
</tr>
<tr>
<td>Wetland Shrub – Willow</td>
<td>353</td>
<td>16</td>
</tr>
<tr>
<td>Open Wetland/Marsh</td>
<td>496</td>
<td>23</td>
</tr>
<tr>
<td>Emergent Wetland</td>
<td>111</td>
<td>5</td>
</tr>
<tr>
<td>Sedge Meadow</td>
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<td>18</td>
</tr>
<tr>
<td>Open Water</td>
<td>15</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Lake</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Warmwater River/Stream</td>
<td>14</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Upland Shrub/Savanna</td>
<td>18</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Upland Shrub</td>
<td>18</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

Land Management Classification

Peshtigo Brook Wildlife Area is divided into two management areas (Table 2.11 and Map D-2). The embedded SNA is classified as Native Community Management Area. The remainder of the property is classified as Habitat Management Area. These areas are described below.

Table 2.11. Peshtigo Brook Wildlife Area Management Areas.

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area:</td>
<td>1,760</td>
</tr>
<tr>
<td>• Peshtigo Brook</td>
<td>1,760</td>
</tr>
<tr>
<td>Native Community Management Area:</td>
<td>477</td>
</tr>
<tr>
<td>• Peshtigo Brook Meadow &amp; Woods SNA</td>
<td>477</td>
</tr>
</tbody>
</table>

Resource Management, Development, and Protection

Peshtigo Brook Meadow and Woods SNA Native Community Management Area

This 477-acre area encompasses the Peshtigo Brook Meadow and Woods SNA. Situated on sandy outwash with scattered low sandy ridges, the site features a series of northern sedge meadows in and around upland eskers and old beach dunes. The meadow is virtually undisturbed. Herb cover is moderate to dense and dominated by lake sedge, tussock sedge and woolly-fruit sedge. Other plants include bluejoint grass, Buxbaum’s sedge, marsh fern, swamp loosestrife, marsh skullcap, water horsetail, and northern bog goldenrod. Shrub cover is sparse to moderate with bog birch, alder, white meadowsweet, and slender
willow. The sandy upland ridges support patches of large-diameter red oak and white pine up to 34 inches in diameter, though many trees blew down in a 2017 storm. Red pine, northern pin oak, paper birch, red maple, and balsam fir are also present. Understory plants include pipsissewa, huckleberry, trailing arbutus, twinflower, partridgeberry, round-leaved shinleaf, American starflower, rosy twisted stalk, and sessile-leaved bellwort.

Objectives

- Manage the area as a Northern Sedge Meadow, Oak Barrens, Northern Dry-mesic Forest reserve, as a wetland protection area, and as an ecological reference area.

- Provide opportunities for research and education on the highest quality sedge meadows.

Prescriptions

- Use tree harvest, brushing, and occasional fire to control woody encroachment in the sedge meadow and adjoining barrens and forest communities.

- Manage the oak barrens primarily with fire and brushing. Any augmentation of the barrens ground layer will add only species that would historically have occurred on the site, using seeds or plugs from local genetic material.

- Continue managing pockets of oak wilt according to DNR Forest Health containment recommendations.

- Restrict other active management across the entire site to control of invasive animals and plants and access to suppress fires.

- Provide opportunities for research via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).

**Peshtigo Brook Habitat Management Area**

This 1,760-acre area encompasses the remainder of the property outside of the SNA. It consists of stands of aspen, oak, pine, shrub wetlands, and swamp hardwoods. This area includes the Peshtigo Brook Floodplain and Shrub-carr Primary Site, located in the eastern portion of the property. The Primary Site features a narrow swath of floodplain forest surrounded by extensive shrub-carr (shrub wetland), which grades into hardwood swamp. Silver maple and black ash dominate the floodplain forest, while the shrub-carr contains a high diversity of native wetland shrubs including pussy willow, speckled alder, and bog birch. Stands of hardwood swamp are scattered throughout the shrub-carr and become more extensive toward the southeastern edge of the property. These stands are dominated by red maple and black ash with occasional white cedar and paper birch. The shrub-carr is one of the more diverse and high-integrity examples in the state. The adjacent hardwood swamp supports a state-threatened wetland plant, while the floodplain forest has notably few invasive species on a free-flowing stream. Reed canary grass and glossy buckthorn are present within the site, though not extensively.

Objectives

- Maintain and enhance existing habitats for the benefit of resident and migratory wildlife and to sustain hunting and other wildlife/nature-based recreational activities.
• Protect the structure and diversity of the high-quality shrub wetlands.

Prescriptions


• Monitor infestations of invasive species, especially reed canary grass and glossy buckthorn, and implement control activities as appropriate and feasible.

Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

• Maintain the one existing parking area adjacent to the property.

• Work with the county and town to improve the first section of the primary access road from where it enters the property to where it first branches. Improvements may include culvert replacement and possible resurfacing.

• Update the signage on this property.
SHAWANO LAKE FISHERY AREA

Property Overview

Shawano Lake Fishery Area is located just northeast of the City of Shawano in Shawano County. The property consists of several small, non-contiguous parcels located around the perimeter of Shawano Lake. Two of these parcels are islands or portions of islands in the Shawano Lake Outlet adjacent to the lake. The first parcel within the Shawano Lake Fishery Area was acquired in 1969, with multiple additional parcels acquired subsequently. The property was established primarily to protect the natural shoreline around Shawano Lake. A variety of cover types are present, including oak, hemlock, and pine forests, deciduous and coniferous lowland forests, and shrub wetlands.

A small (~5-acre) Statewide Habitat Areas parcel located along the north shore of Shawano Lake south of Stark Road is proposed for redesignation and inclusion within the property project boundary of Shawano Lake Fishery Area as part of this master plan (see Real Estate Actions section, pp. 113-114).

Public Use and Recreation Facilities

Shawano Lake Fishery Area is open to a variety of recreational activities, including hunting, fishing, trapping, hiking, and wildlife watching. Hunting is the primary use of the property.

Roads and Parking Areas

There are no DNR roads on any Shawano Lake Fishery Area parcels. Access is via local and county roads, including CTH H, Cattau Beach Drive, and Cedar Court. Users seeking access to the large parcel in the northwest corner of Shawano Lake can park on Cattau Beach Drive and walk in from the road. Users seeking access to the parcel in the southwest corner of Shawano Lake near the airport can park on Cedar Court and walk in from the road.

The Statewide Habitat Areas parcel located on the north shore of Shawano Lake and proposed for redesignation as Shawano Lake Fishery Area and inclusion within this property’s project boundary can be accessed from Stark Road and has a parking area.

Water Access

There is one carry-in boat access site on the parcel located on the southwestern shore of Shawano Lake, at the end of Cedar Court. This site is owned and maintained by the Town of Wescott.

Current Natural Resources Management

The Shawano Lake Fishery Area is managed to protect the natural shoreline around Shawano Lake and to maintain the various habitats found on the different parcels. Passive management that allows natural
processes to determine the structure of the various communities is the primary management approach, as the large amounts of wetland make active management techniques such as timber harvest very difficult.

**Land Cover**

The cover types on the Shawano Lake Fishery Area are listed in Table 2.12 below. Cover types are not expected to change significantly.

**Table 2.12. Shawano Lake Fishery Area Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
</tr>
<tr>
<td>Oak</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
</tr>
<tr>
<td>Hemlock</td>
</tr>
<tr>
<td>White Pine</td>
</tr>
<tr>
<td>Forested Wetland</td>
</tr>
<tr>
<td>Bottomland Hardwood</td>
</tr>
<tr>
<td>Swamp Hardwoods</td>
</tr>
<tr>
<td>White Cedar</td>
</tr>
<tr>
<td>Shrub Wetland</td>
</tr>
<tr>
<td>Wetland Shrub – Alder</td>
</tr>
</tbody>
</table>

**Land Management Classification**

This entire property is classified as Habitat Management Area.

**Resource Management, Development, and Protection**

**Objectives**

- Maintain and enhance existing habitats for the benefit of resident and migratory wildlife and to sustain hunting and other wildlife/nature-based recreational activities.
- Maintain the natural shoreline conditions found around Shawano Lake.

**Prescriptions**

- Follow the [General Fisheries Management](#), [General Forest Management](#), [General Wildlife Habitat Management](#) Common Elements and the cover type-specific Common Elements for the cover types listed in Table 2.12, above, for management of cover types on the Shawano Lake Fishery Area. Apply passive management to forested and shrub wetland cover types where access for timber harvesting and other active management is not possible.
Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

- Maintain the existing parking area on the Statewide Habitat Areas parcel proposed for re-designation/inclusion within the Shawano Lake Fishery Area parcel as part of this master plan.

Shawano Lake Fishery Area; photo by Jason Breegemann
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: South Branch Oconto River Fishery Area

SOUTH BRANCH OCONTO RIVER FISHERY AREA

Property Overview

The South Branch Oconto River Fishery Area is located in west-central Oconto County, northwest of Suring. The property was established in 1961. It is on the southern edge of an extensive area of public lands, including the Chequamegon-Nicolet National Forest, Oconto County Forest, and other state-owned lands. The property extends from just east of the Oconto-Menominee county line along 11 miles of stream to where the north and south branches of the Oconto River merge just above Suring. It is a long, narrow property, mainly consisting of a streamside corridor that is 87% forested. Aspen and northern hardwoods are the primary forest types, with lesser amounts of balsam fir, swamp hardwoods, white pine, and hemlock. DNR owns and maintains a storage building on the property. The driveway to this storage facility is gated but walk-in public access to the surrounding DNR land is allowed.

Natural reproduction of both brook and brown trout occur. The lower segment of the South Branch Oconto River (below STH 32) is a Class II trout water.

Public Use and Recreation Facilities

The property is open to hunting, fishing, trapping, cross-country skiing, wildlife watching, and gathering of wild edibles. The South Branch of the Oconto River is very popular for trout fishing, and is also used by paddlers.

Roads and Parking Areas

There are five parking areas on the property. Approximately 1.11 miles of public, non-DNR roads and 0.74 miles of DNR roads provide access to the property. Existing road infrastructure is summarized in Table 2.13 below and shown on Map E-1. No changes to road access are being proposed.

Table 2.13. South Branch Oconto River Fishery Area Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Open DNR Roads</th>
<th>Seasonal DNR Roads</th>
<th>Closed DNR Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>0.3</td>
<td>-</td>
<td>0.13</td>
</tr>
<tr>
<td>Lightly Developed</td>
<td>0.29</td>
<td>-</td>
<td>0.02</td>
</tr>
</tbody>
</table>
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: South Branch Oconto River Fishery Area

Water Access

There are stone steps to facilitate walk-in access to the river from the parking area on the north side of the river west of STH 32.

Support Facilities

There is one equipment storage building on the property. An old outhouse associated with this building is slated for removal.

Current Natural Resources Management

The South Branch Oconto River Fishery Area began as a water demonstration area. The river flows through an area with mixed agricultural and forestry uses, and early management focused on reducing negative agricultural impacts to the river and improving access for anglers. The value of the property for wildlife habitat was also recognized. The property is currently managed to preserve, protect, and enhance the high-quality fishery, as well as the other habitats present, for recreation and wildlife. Fishery habitat work has included erosion control, cattle watering stations, and in-stream trout habitat installation.

In May 1992, two weirs were constructed in the South Branch of the Oconto River to study trout migration in the Oconto River system. One was constructed just upstream from where the South Branch and the North Branch converge to form the Oconto River proper. The other weir was installed downstream from CTH AA, six miles upstream from the lower weir. A single weir was also deployed in May, 2007. The weirs were designed to be portable and capture fish larger than ten inches. In the 1992, 1993, 2001, and 2007 weir studies, substantial natural recruitment of previously fin-clipped trout as well as trout movement were recorded at the weirs when water temperatures reached 60°F and above. Tagged trout were caught as far as 30 miles upstream from their tagging locations by anglers and fisheries survey crews.

The Class I portion of the South Branch Oconto River within the Fishery Area is managed for quality trout. Special fishing regulations exist, where two trout over 12 inches may be harvested daily and only artificial lures may be used. Within the Class II segment below STH 32, the standard county trout regulation of three trout over 8 inches is in effect.

Fisheries surveys utilizing a barge stream electroshocker are challenging in this large system due to poor stream shocking effectiveness and deep holes. The most recent survey was in 2015, when a 400-meter section downstream of Hill Road was surveyed using two barge electroshockers.

The forest types on the property are managed using sustainable forestry practices, maintaining a variety of successional stages and structural conditions to benefit wildlife and for forest production. Some stands of northern hardwoods as well as hemlock and white pine offer opportunity to manage for older condition and larger-diameter trees. Forest management on the property, as well as on neighboring Oconto County Forest lands, has generally left an uncut buffer of at least one rod (16.5 feet) along the stream bank, with the buffer on most timber sales being considerably greater than this. This riparian management zone is managed passively or with selective harvests that retain significant tree stocking to protect water quality.

A 10-acre field of warm-season grasses and forbs was planted in the late 1990s adjacent to agricultural fields west of STH 32 to help reduce nutrient flow into the river. This area is maintained with prescribed
fire and occasional mowing. Limited chemical treatments are also used occasionally to set back undesirable plants.

**Opportunities and Challenges**

A portion of the South Branch Oconto River Fishery Area is encompassed in the Northeast Wisconsin Forest Conservation Opportunity Area identified in the Wisconsin Wildlife Action Plan.

This segment of the South Branch Oconto River has been designated as an Outstanding Resource Water (ORW). These, along with Exceptional Resource Waters (ERW) are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities. ORWs receive the state’s highest protection standards.

Numerous willows and other trees that were planted along the river banks in the 1940s and 1950s are now leaning over or have fallen into the stream as they reach the end of their life spans. This has made navigation difficult for paddlers. In 2015, DNR Fisheries staff began a long-term project to cut, move, and anchor leaning and fallen trees along the banks and in the stream to provide fish habitat and improve navigation and fishability. As of 2017, approximately one mile of stream bank has been completed from the end of Spruce Road downstream to Hill Road. There are plans to continue this work on an annual basis.

Erosion is a problem, particularly downstream of STH 32. Oconto County Land Conservation Department is working with landowners to reduce soil runoff from agricultural fields.

DNR has collaborated on forest management with neighboring Oconto County Forest in the past, and there is opportunity to continue this partnership in the future to complete forest management practices on this property.

**Land Cover**

Current land cover on the South Branch Oconto River Fishery Area is listed in Table 2.14 below. Land cover is not expected to change significantly. A 12-acre field of upland grass on the east side of South Branch Road may be planted to red pine.

**Table 2.14. South Branch Oconto River Fishery Area Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>298</td>
<td>55</td>
</tr>
<tr>
<td>Aspen</td>
<td>178</td>
<td>33</td>
</tr>
<tr>
<td>Northern Hardwoods</td>
<td>99</td>
<td>18</td>
</tr>
<tr>
<td>Oak</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Red Maple</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>109</td>
<td>20</td>
</tr>
<tr>
<td>Balsam Fir</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>Hemlock</td>
<td>35</td>
<td>7</td>
</tr>
<tr>
<td>Red Pine</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>White Pine</td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>46</td>
<td>9</td>
</tr>
</tbody>
</table>
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: South Branch Oconto River Fishery Area

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swamp Hardwood</td>
<td>36</td>
<td>7</td>
</tr>
<tr>
<td>White Cedar</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Shrub Wetland</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Wetland Shrub – Alder</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Upland Grass</td>
<td>48</td>
<td>9</td>
</tr>
<tr>
<td>Cool-season Grass (Surrogate Grassland)</td>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td>Planted Prairie/Warm-season Grass</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Open Water</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Coldwater Stream</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Upland Shrub/Savanna</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Upland Shrub</td>
<td>17</td>
<td>3</td>
</tr>
</tbody>
</table>

Land Management Classification

This entire property is classified as Habitat Management Area.

Resource Management, Development, and Protection

Objectives

- Maintain and enhance existing habitats for the benefit of resident and migratory wildlife and to sustain hunting, fishing, and other wildlife/nature-based recreational activities.

Prescriptions

- Monitor streambank easements for compliance.
- Cut trees along easement areas that are leaning or have fallen into the river and are impeding navigation. Utilize those trees as in-stream fish habitat where possible.
- Continue leaving an uncut buffer of at least 1 rod along the stream bank during timber sales.
- Continue managing the Riparian Management Zone passively or with selective harvests that retain significant tree stocking to protect water quality.
- Manage some stands of northern hardwood, hemlock, and white pine for older structural condition and large-diameter trees.
- Thin the pines in the wildlife tree plantings to release oaks that are currently being shaded out.
- Use prescribed fire, mechanical, and chemical methods to control woody encroachment in the upland grassland area west of STH 32.
- Expand storage space at the existing storage building by adding a small lean-to, and maintain and utilize for equipment storage. Remove the old outhouse.
- Continue partnering with Oconto County on forest management.
Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

**Prescriptions**

- Maintain the five existing parking areas on the property.
- Improve fishability and navigability by moving or cutting trees that have fallen across the stream. Where practical, utilize the wood in-stream to enhance fish habitat.
- Look for suitable locations to provide carry-in boat access in the upper reaches of the property. One potential site is at the CTH AA crossing. Develop carry-in boat access at suitable sites.
THUNDER RIVER REARING STATION

Property Overview

The Thunder River Rearing Station is located on the South Branch of the Thunder River in west-central Marinette County, south and west of Governor Thompson State Park and the Peshtigo River State Forest. Also known as the “Little Falls Hatchery”, this facility was in operation as a fish rearing station for more than 75 years. The hatchery began as a tourist destination in the early 1900s, drawing adventurers with its waterfall and scenic beauty. Then, as part of President Roosevelt’s New Deal in 1936, it became a showcase fish hatchery and still has buildings and facilities constructed by Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) workers. Over the years the hatchery produced various species for both inland and Great Lakes stocking, including brown trout, rainbow trout, brook trout, steelhead, coho salmon, and walleye.

Thunder River Rearing Station was decommissioned in 2016. With the changing dynamic in producing and stocking fish into Lake Michigan, it was decided that the Wild Rose strain of brown trout did not meet the goals of providing a diverse fishery for Lake Michigan. Additionally, Thunder River Rearing Station utilized a surface water resource for fish production, which sometimes brought water quality and quantity challenges resulting in inconsistent production, and also presented biosecurity risks. The aging infrastructure and a building collapse in 2014 raised further concerns with operating this facility. Considering that the Wild Rose strain of brown trout was the only fish produced at Thunder River in recent years, the department decided to decommission the station and is currently exploring various options for the property.

The hatchery buildings and facilities comprise about 8 acres of the property. The remainder is forested with a mix of upland and lowland forest types. There are also some rock outcrops on the property.

Public Use and Recreation Facilities

The hatchery is currently closed, and the remainder of the property is currently not open to public access.

Roads and Parking Areas

Thunder River Rearing Station is accessed via Hatchery Road, a locally maintained town road, and a driveway that is approximately one mile west of the corner of Hatchery Road and Caldron Falls Road. There is a small parking area that was utilized by visitors to the facility and anglers accessing the fishable stretch of the river below the hatchery.

Other Facilities

The structures on the property include three fish rearing buildings, a visitor center, two vault toilets, a residence building, an office/workshop, and several storage buildings. There are a few ‘volunteer’ access
paths established by anglers but no designated trails on the property.

**Current Natural Resources Management**

The forest cover types on the property are managed sustainably with standard silvicultural practices.

**Land Cover**

The cover types on the Thunder River Rearing Station are listed in Table 2.15 below.

**Table 2.15. Thunder River Rearing Station Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
</tr>
<tr>
<td>Oak</td>
<td></td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td></td>
</tr>
<tr>
<td>Red Pine</td>
<td></td>
</tr>
<tr>
<td>Forested Wetland</td>
<td></td>
</tr>
<tr>
<td>Swamp Hardwoods</td>
<td></td>
</tr>
<tr>
<td>Open Water</td>
<td></td>
</tr>
<tr>
<td>Coldwater Streams</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Rock Outcrop</td>
<td></td>
</tr>
<tr>
<td>Developed</td>
<td></td>
</tr>
</tbody>
</table>

**Land Management Classification**

This entire property is classified as Special Management Area.

**Resource Management, Development, and Protection**

**Objectives**

- Maintain existing habitats for forest health and sustainable timber production.
- Maintain a passively managed Riparian Management Zone around the stream.

**Prescriptions**

- Apply passive management to the stands of swamp hardwoods.

**Public Use Management and Development**

No public use or facility changes are proposed for this property.
TOWN CORNER WILDLIFE AREA

Property Overview

The Town Corner Wildlife Area is located in north-central Marinette County, northwest of the town of Amberg, in an area of extensive public lands, including other Wildlife Areas, the Pike Wild River, and Marinette County lands. This property has frontage on Town Corner Lake, aptly named because it is located partially within the towns of Athelstane, Dunbar, Amberg, and Beecher. The lake is a 175-acre, shallow, warmwater lake with a fishery composed of northern pike, largemouth bass, and panfish. There is another small (11-acre), unnamed lake on Town Corner Wildlife Area. The property was established in 1947 and was originally purchased and managed for deer yard habitat. Management eventually transitioned to an emphasis on forest wildlife.

An embedded State Natural Area (SNA), Town Corner Cedars, occupies the center and the northeastern portion of the property. This SNA features a good-quality white cedar swamp with some black spruce and tamarack, a small, undeveloped seepage lake, and a poor fen. Town Corner Cedars was designated as a SNA in 2007.

The remainder of the property is forested, mostly with aspen, oak, and pine with some grassy openings and scattered rock outcrops.

Public Use and Recreation Facilities

Town Corner Wildlife Area is open to hunting, fishing, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. Hunting is the primary public use.

Roads and Parking Areas

There are two parking areas on Town Corner Wildlife Area as well as two small, grassy spots that accommodate one or two vehicles and are used as parking areas by the public but are not designated or maintained. Approximately 2.34 miles of public, non-DNR roads and 1.3 miles of DNR roads provide access to the property. Existing road infrastructure is summarized in Table 2.16 below and shown on Map F-1. No changes to road access are being proposed.

Table 2.16. Town Corner Wildlife Area Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Open DNR Roads</th>
<th>Seasonal DNR Roads</th>
<th>Closed DNR Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>1.25</td>
<td>-</td>
<td>0.05</td>
</tr>
</tbody>
</table>
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: Town Corner Wildlife Area

Trails

There are 1.5 miles of ATV routes connecting to regional networks on town roads that traverse the property or pass along its perimeter.

Current Natural Resources Management

The SNA is managed to protect the white cedar swamp and associated wetlands, primarily through passive management. The forest types on the rest of the property are managed using sustainable forestry practices, maintaining a variety of successional stages and structural conditions to benefit wildlife and for forest production. Some healthy oak stands may be managed with extended rotation, and an area of planted red pine is being thinned to more closely resemble natural-origin stands.

Opportunities and Challenges

One “Primary Site” has been identified on Town Corner Wildlife Area by the department for special consideration in this planning process (WDNR 2018a). Primary Sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for forest certification.

The Primary Site on Town Corner Wildlife Area is:

- Town Corner Cedars SNA

Control of *Phragmites* along the interior seepage lake within the SNA is contentious, as the variety on the site may be native but has exhibited invasive tendencies and may be encroaching on rare plants. The *Phragmites* plants were cut and stem-treated several years ago but the species is still present and there is concern that vigorous spread could threaten the unique floating fen/bog plan community. The area is currently being monitored for both *Phragmites* and cattail encroachment. There is also European swamp thistle growing within the wooded portions of the wetland.

The informal access points on the property may need to be developed in the future if use by the public increases.

Land Cover

Current land cover on Town Corner Wildlife Area is shown in Table 2.17 below. Land cover is not expected to change significantly.

Table 2.17. Town Corner Wildlife Area Cover Types.

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>422</td>
<td>48</td>
</tr>
<tr>
<td>Aspen</td>
<td>258</td>
<td>29</td>
</tr>
<tr>
<td>Oak</td>
<td>122</td>
<td>14</td>
</tr>
<tr>
<td>Red Maple</td>
<td>42</td>
<td>5</td>
</tr>
</tbody>
</table>
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: Town Corner Wildlife Area

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Coniferous Forest</td>
<td>64</td>
<td>7</td>
</tr>
<tr>
<td>Jack Pine</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Red Pine</td>
<td>38</td>
<td>4</td>
</tr>
<tr>
<td>White Pine</td>
<td>6</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>330</td>
<td>37</td>
</tr>
<tr>
<td>Black Spruce</td>
<td>18</td>
<td>2</td>
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<tr>
<td>White Cedar</td>
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<tr>
<td>Shrub Wetland</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Wetland Shrub - Alder</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Open Wetland/ Marsh</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Fen</td>
<td>11</td>
<td>1</td>
</tr>
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<td>Open Water</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Lake</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Upland Shrub/Savanna</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Upland Shrub</td>
<td>25</td>
<td>3</td>
</tr>
</tbody>
</table>

**Land Management Classification**

Town Corner Wildlife Area is divided into two management areas (Table 2.18 and Map F-2). The embedded SNA is classified as Native Community Management Area. The remainder of the property is classified as Habitat Management Area.

**Table 2.18. Town Corner Wildlife Area Management Areas.**

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area:</td>
<td>594</td>
</tr>
<tr>
<td>• Town Corner</td>
<td>594</td>
</tr>
<tr>
<td>Native Community Management Area:</td>
<td>306</td>
</tr>
<tr>
<td>• Town Corner Cedars SNA</td>
<td>306</td>
</tr>
</tbody>
</table>

These areas are described below.

**Resource Management, Development, and Protection**

**Town Corner Cedars SNA Native Community Management Area**

This 306-acre area encompasses the Town Corner Cedars SNA. Situated just southwest of Town Corner Lake, the SNA supports a Northern Wet-mesic forest with high ecological integrity dominated by white cedar with tamarack, black spruce, balsam fir, and scattered white pine. The shrub cover ranges from very sparse to moderate. A carpet of mostly sphagnum with other mosses blankets the forest floor and supports a ground flora that includes three-leaved goldthread, naked miterwort, marsh fern, yellow bluebead lily, creeping snowberry, blunt-leaved orchid, American starflower, bunchberry, twin-flower, one-flowered wintergreen, liver-leaf wintergreen, and Canada mayflower. A wide variety of lichens can be found growing within the forest, enhancing the site's diversity. A small undeveloped seepage lake is situated in the center of the cedar swamp with good cedar reproduction occurring on the lake's north shore. Surrounding the small lake is a firm to floating poor fen that supports numerous rare plants.
CHAPTER 2: Management, Development, and Use
Fishery and Wildlife Areas: Town Corner Wildlife Area

Objectives

- Manage this area as a Northern Wet-mesic Forest and aquatic reserve, as a wetland protection site, and as an ecological reference area.
- Provide opportunities for research on the highest quality Northern Wet-mesic Forests.

Prescriptions

- Manage the native species passively, allowing natural processes to determine their ecological characteristics.
- Restrict active management to control of invasive plants and animals and access to suppress fires.
- Do not conduct salvage of trees after a major wind event.
- Control Phragmites and/or cattail on the small seepage lake if the size of the population expands to the point where it threatens the existence of other wetland/fen species or if considered necessary by resource managers to preserve ecological integrity.
- Support research activities via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).

Town Corner Habitat Management Area

This 594-acre area encompasses the remainder of the property that is outside of the SNA. It is largely forested with stands of aspen, oak, red maple, pines, and shrub swamp.

Objectives

- Maintain and enhance existing habitats for the benefit of resident and migratory wildlife and to sustain hunting and other wildlife/nature-based recreational activities.

Prescriptions

- Maintain the existing red pine plantation. Follow the Conifer Plantation Common Element.
- Evaluate oak stands in the northwest corner of the property for opportunity to apply extended rotation management.
- Leave a minimum residual basal area of 80 square feet/acre when conducting forest management in stands within a 100-foot buffer around the SNA.
Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

• Maintain the two existing parking areas on the property. Monitor use levels at the undesignated access/parking spots and evaluate the need for further development. Proceed with improvements if necessary.

• Explore opportunities to improve access to the east side of the property, and pursue as feasible.

Conifer swamp; photo by WDNR
STATE NATURAL AREAS

DUNBAR BARRENS STATE NATURAL AREA

Property Overview

Dunbar Barrens State Natural Area (SNA) is located in northwestern Marinette County, in an area of extensive public lands, especially Marinette County Forest but also other state-owned lands, Forest Legacy lands (privately owned but open for public recreation), and the Chequamegon-Nicolet National Forest.

Dunbar Barrens SNA contains a pine barrens community that is part of an extensive, open landscape located on a gently rolling pitted glacial outwash plain. Logging, grazing, periodic fires, and frost action in low pockets have maintained the open character of the barrens, and the site’s composition and broad, sweeping prairie vistas are similar to presettlement barrens. Forests of aspen, oak, and pine surround the open areas, and low granitic outcrops are scattered throughout. Grasses and sedges dominate the vegetation and there is a well-developed shrub layer of blueberry, bearberry, prairie willow, and sweet fern. Herbaceous plants include rice grass, poverty oat grass, wintergreen, barren strawberry, and hawkweeds. The property also harbors a diverse and unusual lichen flora. Many grassland and grass-shrub bird species breed on the property.

Dunbar Barrens was designated as a SNA in 1973.

Public Use and Recreation Facilities

Dunbar Barrens SNA is open to hunting, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. There are no recreation facilities. Facilities, including camping and ATV trails, are available on surrounding Marinette County lands.

Roads and Parking Areas

There are no parking areas on Dunbar Barren SNA. Approximately 1.7 miles of public, non-DNR roads and 11.63 miles of DNR roads provide access to the property. The DNR roads consist primarily of maintained firebreaks that are open to public motor vehicle use. Existing road infrastructure is summarized in Table 2.19 below and shown on Map G-1.

Table 2.19. Dunbar Barrens State Natural Area Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Open DNR Roads</th>
<th>Seasonal DNR Roads</th>
<th>Closed DNR Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>0.14</td>
<td>11.49</td>
<td>-</td>
</tr>
</tbody>
</table>
The department is proposing to change the public motorized access on the north and east breaks of Burn Units 2 and 4 (4.29 miles, Map G-2). These firebreaks are currently seasonally open to public motor vehicles. The intent is to close these breaks as they have sections of steep and rugged terrain that are unsafe to drive, frequently wash out, and are sensitive to overuse.

**Trails**

A 1.3-mile segment of snowmobile trail that is part of a regional trail network traverses the northwestern portion of the property. An ATV trail on neighboring Marinette County Forest lands runs adjacent to the property but does not provide direct access.

**Land Use Agreements**

The department maintains an agreement with a local snowmobile club for use and maintenance of the snowmobile trail.

**Current Natural Resources Management**

The property is managed as an ecological reference area by restoring, maintaining, and enhancing pine barrens through activities such as prescribed fire, brush mowing, and timber harvesting. It is also intended to provide opportunities for research and education. Pockets of aspen, northern pin oak, and jack pine are established throughout existing prescribed burn units and are managed as barrens. Northern pin oak and red oak exist in stands surrounding the open barrens land and are managed with standard silvicultural methods to act as a transition between barrens and closed-canopy forest, creating a buffer with savanna-like structure.

Invasive plant control, mostly for spotted knapweed but also leafy spurge and sweet clover, has occurred annually on the property for over 15 years. This management has proved very effective and needs to be continued annually to keep the barrens habitat in a high-quality state. Recently, property managers have determined that the planted lupine on the property is not native this far north, and chemical control efforts began in 2018 to reduce the population.

**Opportunities and Challenges**

Dunbar Barrens SNA is encompassed within the Dunbar Barrens Conservation Opportunity Area identified in the Wisconsin Wildlife Action Plan. The property has also been identified as a Wisconsin Important Bird Area, a site that provides critical habitat for birds, by the Wisconsin Bird Conservation Initiative.

The entire Dunbar Barrens SNA has been identified by the department as a “Primary Site” (WDNR 2018a). Primary sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for Forest Certification.

Much of the land adjacent to the property is owned by Marinette County and is actively managed for timber production. The county has recently harvested much of the surrounding timber, resulting in an expanded area with barrens-like structure that will eventually develop into a closed-canopy forest.
Marinette County has been a good partner on other barrens projects in the county and there may be an opportunity to expand barrens management onto their ownership in the future.

Occasional illegal off-road use by motorized vehicles occurs on Dunbar Barrens SNA. In addition, there has been some illegal firewood collection in recent years.

**Land Cover**

Current land cover on Dunbar Barrens SNA is shown in Table 2.20 below. Land cover is not expected to change significantly.

**Table 2.20. Dunbar Barrens State Natural Area Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>589</td>
<td>42</td>
</tr>
<tr>
<td>Aspen</td>
<td>440</td>
<td>31</td>
</tr>
<tr>
<td>Oak</td>
<td>149</td>
<td>11</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Red Pine</td>
<td>2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Upland Shrub/Savanna</td>
<td>818</td>
<td>58</td>
</tr>
<tr>
<td>Barrens</td>
<td>761</td>
<td>54</td>
</tr>
<tr>
<td>Upland Shrub</td>
<td>57</td>
<td>4</td>
</tr>
</tbody>
</table>

**Land Management Classification**

This entire property is classified as Native Community Management Area.

**Resource Management, Development, and Protection**

**Objectives**

- Manage the property as a Pine/Oak Barrens reserve and as an ecological reference area.
- Provide opportunities for research and education on the highest quality native pine barrens.

**Prescriptions**

- Develop an annual barrens management plan with the involvement of local Natural Heritage Conservation, Forestry, and Wildlife staff that incorporates fire, brushing, timber sales, and invasive species control.
- Manage barrens habitat following the Barrens Common Element as well as the applicable prescriptions below.
- Prescribed fire may be applied to burn units at different times of year (spring, summer, or fall). Experiment with burn seasonality and monitor effectiveness at meeting habitat management goals.
- Burn units every 1-5 years during the Restoration Phase (>50% shrub cover and/or >30% aspen over 7 feet tall) and every 5-10 years during the Maintenance Phase (<50% shrub cover and/or <30% aspen
Mechanically or chemically treat or harvest aspen clones as needed to control/reduce the amount of aspen present in burn units.

Use mechanical brush mowing as needed to reduce woody vegetation and manage fire intensity along fire breaks and in burn unit interiors.

Do not burn >50% of the property in any one year.

Continue to control invasive and non-native (e.g., wild lupine) species with herbicide, biocontrol, or other effective measures as needed.

Evaluate the feasibility of planting local-genotype dwarf bilberry, a state-endangered plant and the only known host species for the state endangered Northern blue butterfly. Pursue planting if feasible.

Provide opportunities for research via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).

Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

Maintain the land use agreement for operation and maintenance of the snowmobile trail.

Use signage as needed to discourage illegal motorized use on the property.

Change the public motorized access on the north and east breaks of Burn Units 2 and 4 from Open Seasonally to Closed. Add signage to clarify the closing of these firebreaks to public motor vehicles. These firebreaks have sections of steep and rugged terrain that frequently washes out and is sensitive to overuse.
HALEY CREEK SWAMP STATE NATURAL AREA

Property Overview

Haley Creek Swamp State Natural Area (SNA) is located in west-central Florence County southwest of the town of Florence, in an area of extensive public lands and private lands open to public recreation, including the Pine-Popple Wild Rivers, the Chequamegon-Nicolet National Forest, the Wild Rivers Legacy Forest, and Florence County Forest lands. The property consists of four discontinuous tracts. Three of the four are located just south of the northwesternmost portion of the Pine-Popple Wild Rivers (the Savage-Robago lakes area). The fourth tract is located within the Wild Rivers boundary, encompassing two small spring ponds known as Dorothy Lake and Mud Lake, just south of Savage Lake. This disjunct tract is proposed to become part of a proposed new SNA on the Pine-Popple Wild Rivers property (p. 77), and will no longer be part of the Haley Creek Swamp SNA.

Haley Creek Swamp SNA features an undisturbed wetland complex with the two undeveloped spring ponds, fen, old-growth conifer swamp, and a mile-long segment of Haley Creek, a high-quality coldwater stream. The conifer swamp is dominated by white cedar, black spruce, and tamarack, and is surrounded by old-growth hemlock-hardwoods in the uplands. The western edge of the site contains superior-quality white cedar stands that support numerous rare plants. The forest on this property is the only remnant of the former Goodman timber block that still retains old-growth characteristics with mature stand structure.

Haley Creek Swamp was designated as a SNA in 2007.

Public Use and Recreation Facilities

Haley Creek Swamp SNA is open to hunting, fishing, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. Hunting and hiking are the primary uses. There are no recreation facilities on the property. Recreation facilities are available on surrounding or nearby Wild Rivers, Forest Legacy, Florence County, and National Forest lands.

Roads and Parking Areas

There are no parking areas on Haley Creek Swamp SNA. A small segment of primitive road associated with the Pine-Popple Wild Rivers property passes through a portion of the northernmost tract near Dorothy Lake and Mud Lake (see Map J-1A). Access to the other tracts is restricted to foot travel.

Current Natural Resources Management

The SNA is managed as an old-growth forest and aquatic/wetland reserve. It is also intended to provide opportunities for research and education on the highest quality native forested wetland communities.
Natural processes determine the structure of the forest, and passive management is the primary approach.

**Opportunities and Challenges**

Haley Creek Swamp SNA is included within the Nicolet Hemlock-Hardwoods Conservation Opportunity Area identified in the Wisconsin Wildlife Action Plan. The property is also included in the Savage-Robago lakes area identified as a Wetland Gem by the Wisconsin Wetlands Association.

Haley Creek has been designated as an Outstanding Resource Water (ORW). These, along with Exceptional Resource Waters (ERW) are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities. ORWs receive the state’s highest protection standards.

The entire Haley Creek Swamp SNA is included within the boundaries of a “Primary Site” identified by the department for special consideration in this planning process (WDNR 2011). Primary sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests or Forest Certification.

The Primary Site that includes Haley Creek Swamp SNA is:
- Goodman Wild Lakes and Pine River

There are minimal challenges associated with the management of this property. It is managed passively and as a reference site for old-growth forest. Current management includes treatment and monitoring of invasive species such as European marsh thistle and reed canary grass.

**Land Cover**

Current land cover on Haley Creek Swamp SNA is shown in Table 2.21 below. Land cover is not expected to change significantly.

**Table 2.21. Haley Creek Swamp State Natural Area Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>5</td>
<td>1.4</td>
</tr>
<tr>
<td>Northern Hardwoods</td>
<td>5</td>
<td>1.4</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>55</td>
<td>15</td>
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<tr>
<td>Hemlock</td>
<td>55</td>
<td>15</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>286</td>
<td>78</td>
</tr>
<tr>
<td>Black Spruce</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>White Cedar</td>
<td>283</td>
<td>77</td>
</tr>
<tr>
<td>Open Wetland/Marsh</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Emergent Wetland</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Open Water</td>
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<td>&lt;1</td>
</tr>
<tr>
<td>Warmwater Rivers &amp; Streams</td>
<td>2</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
**Land Management Classification**

This entire property is classified as Native Community Management Area.

**Resource Management, Development, and Protection**

**Objectives**

- Manage the property as an old-growth forest and aquatic/wetland reserve and as an ecological reference area.
- Provide opportunities for research and education on the highest quality native forested wetland communities.

**Prescriptions**

- Apply primarily passive management, allowing natural processes to determine the ecological characteristics of the site.
- Restrict active management to control of invasive plants and animals and access to suppress fires.
- Do not salvage trees after a major wind event.
- Provide opportunities for research via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).

**Public Use Management and Development**

No public use or facility changes are proposed for this property.

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Haley Creek Swamp State Natural Area; photo by WDNR
SPREAD EAGLE BARRENS STATE NATURAL AREA

Property Overview

Spread Eagle Barrens State Natural Area (SNA) is located in northeastern Florence County near the Michigan border. A portion of the Pine-Popple Wild Rivers property abuts the western edge of the SNA and the lower reaches of the Pine River traverse the property. The Menominee River forms a segment of the property’s eastern boundary. We Energies owns lands along both the Pine and Menominee rivers in this area as part of its Kingsford hydroelectric project. Some of these lands are within the Spread Eagle Barrens SNA project boundary and some are within the Pine-Popple Wild Rivers project boundary, but they are all part of the SNA and are managed under a DNR easement. Spread Eagle Barrens was designated as a SNA in 1995. Portions of the property were acquired from Florence County. A 1995 management plan agreement developed between the DNR and Florence County described how the property would be managed and developed; the property has been managed according to this plan up to the present time. One purpose of the 1995 management plan was to serve as an outline for a future master plan to be developed for the property. The proposed management for Spread Eagle Barrens in the Northeast Sands plan is entirely compatible with, and largely similar to, the management described in the 1995 plan.

The 1995 management plan agreement also called for the development of a property advisory committee to meet annually to discuss property management work plans. The advisory committee was designed to include representation from Florence County Forestry Committee, We Energies, Wisconsin DNR, the Sand County Foundation, and Town Chairpersons representing each of the three towns within the project area. The committee did meet initially but has not formally met in the last 15 years or so. Integrated property discussions for Spread Eagle Barrens currently occur annually during the property’s Annual Property Implementation Planning (DNR sponsored) and the We Energies annual property partnership meetings. These meetings provide an opportunity for all advisory committee members to discuss property management work plans for Spread Eagle Barrens, and will continue to be held annually. The advisory committee can be formally redeveloped, if requested, by any of the committee membership throughout the duration of this master plan.

The property protects an extensive landscape of bracken grasslands, pine barrens, dry forests, two creeks, and some kettle lakes and wetlands. Barrens are dominated by scattered jack pine, red pine, northern pin oak, and aspen. The bracken grasslands contain sedges, bracken and sweet fern, a mix of native and non-native grasses, and shrubs such as serviceberry, blueberry, and willows. Frost pockets – treeless depressions where frost may occur at any time of year – are found throughout. Also scattered through the property are depressions that have developed into wetlands, including black spruce-tamarack swamp and shallow seepage lakes with small acid peatlands. The SNA was established to protect the pine barrens and other natural communities and associated flora and fauna that require expansive open landscapes. Many rare or declining open-country species are found here, including many breeding grassland and grass/shrub birds as well as mammals such as black bear, fisher, and badger.
Portions of LePage Creek and Pine Creek, both of which are designated as Class I trout waters, flow across the property.

**Public Use and Recreation Facilities**

The property is open to hunting, fishing, trapping, wildlife viewing, hiking, cross-country skiing, and gathering of wild edibles. The Pine River and Sand Lake offers paddling and fishing opportunities. As with most SNAs, recreational facilities are few. Additional recreational facilities, including campgrounds, improved boat access sites, and hiking trails are available on adjacent or nearby Florence County lands or on We Energies land as part of their **Wilderness Shores Recreation Area**.

**Roads and Parking Areas**

There are six parking areas on the property. Approximately 4.52 miles of public, non-DNR roads and 11.11 miles of DNR roads provide access to the property. Existing road infrastructure is summarized in Table 2.22 below and shown on Map H-1.

The department is proposing to change the public motorized access on the ‘Eagles Nest’ road (1.3 miles) linking Roach Fire Lane Road and the Eagles Nest burn units in the southern portion of the property from Open to Open Seasonally. The intent is to close this road in the spring and during wet weather if needed as poor soils make this road very susceptible to damage in wet conditions, and repair and maintenance are costly. The department is also proposing to change the public motorized access on Overlook Road (1.1 miles), which links Lake Anna Road to the LePage Overlook, from Open to Open Seasonally. This road is used as a snowmobile trail in the winter. The intent is to restrict this road to snowmobile-only access during the winter when conditions are not suitable for street-licensed vehicles. Proposed road access changes are shown on Map H-2.

**Table 2.22. Spread Eagle Barrens State Natural Area Road Infrastructure.**

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Miles of Roads</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open DNR Roads</td>
<td>Seasonal DNR Roads</td>
<td>Closed DNR Roads</td>
<td></td>
</tr>
<tr>
<td>Primitive</td>
<td>8.44</td>
<td>-</td>
<td>2.09</td>
<td></td>
</tr>
<tr>
<td>Lightly Developed</td>
<td>0.35</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Moderately Developed</td>
<td>0.23</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Campsites**

There is one rustic campsite on Barrens Lake Road in the northeastern portion of the property (Map H-1).

**Trails**

There are 11.2 miles of snowmobile trails and 2.5 miles of ATV routes (on designated town roads) on the property that connect to regional trail networks. Over 30 miles of firebreaks on the property that are maintained on a semi-regular basis are available for foot travel (Map H-1).


**CHAPTER 2: Management, Development, and Use**

State Natural Areas: Spread Eagle Barrens State Natural Area

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**Water Access**

DNR maintains one carry-in boat access site on Sand Lake in the northwestern portion of the property and an unimproved carry-in boat access site at Barrens Lake in the northeastern portion of the property. We Energies maintains a boat ramp on the Pine River.

**Other Recreational Facilities**

There is a viewing platform at a scenic overlook, known as the LePage Overlook, in the north-central portion of the property south of Lake Anna (Map H-1).

**Land Use Agreements**

The We Energies Kingsford project lands are formally dedicated as State Natural Area and managed under the terms of a permanent easement agreement.

The department maintains agreements with Florence County for operation and maintenance of the snowmobile and ATV trails/routes on Spread Eagle Barrens.

**Current Natural Resources Management**

The property is managed as an ecological reference area to restore, maintain, and enhance bracken grasslands and pine barrens through activities such as prescribed fire and timber harvesting. It is also intended to provide opportunities for research and education on the highest quality bracken grasslands. The overall goal for the property is to maintain a significant component of open barrens, bracken grassland, and grass/shrub habitats, some stands with variable savanna-like structure to be transitional between open and forested habitats, and selected forest stands maintained with standard silvicultural methods, including extended rotations in some situations. A number of existing forested stands are slated for conversion to a more open, barrens-like condition. Conversion methods include commercial timber harvest, prescribed fire, selective herbicide application, and other mechanical treatments. Where the Pine River traverses the property, no vegetation management occurs within 150 feet from the bank on either side of the river in accordance with management of Wild Rivers as specified in NR 302.02(4), Wisconsin Administrative Code.

**Opportunities and Challenges**

Spread Eagle Barrens has been identified as a Wisconsin Important Bird Area, a site that provides critical habitat for birds, by the Wisconsin Bird Conservation Initiative, and as a Conservation Opportunity Area in the Wisconsin Wildlife Action Plan.

The entire Spread Eagle Barrens SNA has been identified by the department as a “Primary Site” (WDNR 2011). Primary sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for Forest Certification.
There are various resource and public use management challenges on this property, including illegal use of firebreaks by motorized vehicles, off-road use of motorized vehicles, and invasive species monitoring and control. Invasive species include spotted knapweed, white sweet clover, leafy spurge, butter-and-eggs, European marsh thistle, bull thistle, plumeless thistle, buckthorn, and honeysuckle. Maintaining areas of barrens that have already been restored requires regular effort, and property management staff are unable to convert additional acreage with the current level of resources and prescribed burn program. Maintaining the level of staffing necessary for habitat and property management of this large property is a major challenge.

Land Cover

Current land cover on Spread Eagle Barrens SNA is shown in Table 2.23 below. Overall, land cover is not expected to change significantly, although a ‘shifting mosaic’ of timber types and structural conditions is a natural dynamic for barrens. Approximately 2,400 acres of this property are currently within established burn units, with the majority on DNR property (a small acreage is on We Energies Kingsford project lands). Although managed as barrens, burn units are still “typed” according to the dominant tree species present. Of the DNR burn unit acreage, approximately 20% is typed as aspen, 3% as oak, 3% as white pine, 2% as red pine, and 1% as jack pine. The remaining acreage is non-forested (muskeg, open bog, grassland, etc.). Although the proportions of these cover types may shift slightly over the life of this master plan, the total acreage of each on the property is not expected to change significantly.

The department plans to expand one burn unit and add up to two additional units in the foreseeable future. The total of these additions to the existing burn program is approximately 400 acres, all on DNR lands. Of these, approximately 130 acres are currently typed as aspen and approximately 140 are currently typed as oak. Although these acres may become burn units, the cover type would not necessarily change during the life of this master plan, as it takes many years and multiple burn cycles to convert forested aspen and oak into bracken grassland and barrens.

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upland Deciduous Forest</strong></td>
<td>3,984</td>
<td>52</td>
</tr>
<tr>
<td>Aspen</td>
<td>3,414</td>
<td>44</td>
</tr>
<tr>
<td>Northern Hardwoods</td>
<td>95</td>
<td>1</td>
</tr>
<tr>
<td>Oak</td>
<td>441</td>
<td>6</td>
</tr>
<tr>
<td>White Birch</td>
<td>34</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>Upland Coniferous Forest</strong></td>
<td>549</td>
<td>7</td>
</tr>
<tr>
<td>Balsam Fir/White Spruce</td>
<td>48</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Jack Pine</td>
<td>190</td>
<td>2</td>
</tr>
<tr>
<td>Red Pine</td>
<td>230</td>
<td>3</td>
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<tr>
<td>White Pine</td>
<td>81</td>
<td>1</td>
</tr>
<tr>
<td><strong>Forested Wetland</strong></td>
<td>270</td>
<td>4</td>
</tr>
<tr>
<td>Black Spruce</td>
<td>233</td>
<td>3</td>
</tr>
<tr>
<td>White Cedar</td>
<td>37</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>Shrub Wetland</strong></td>
<td>173</td>
<td>2</td>
</tr>
<tr>
<td>Wetland Shrub – Alder</td>
<td>173</td>
<td>2</td>
</tr>
<tr>
<td><strong>Open Wetland/Marsh</strong></td>
<td>42</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Muskeg/Open Bog</td>
<td>42</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
Land Management Classification

Spread Eagle Barrens SNA is divided into three management areas (Table 2.24 and Map H-3). The area along the Pine River from the water to 150 feet on either side of the river is classified as Wild Resources Management with Type 2 Recreational Use Setting. The rest of the property is classified as Native Community Management Area (NCMA) and is divided into two management areas: The remainder of the We Energies Kingsford project lands along the Pine River and the entirety of the Kingsford project lands along the Menominee River comprise The Pine and Menominee Rivers NCMA and the remainder of the property, encompassing department-owned lands, comprises the Spread Eagle Barrens NCMA. These areas are described below.

Table 2.24. Spread Eagle Barrens State Natural Area Management Areas.

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Community Management Area:</td>
<td>9,278</td>
</tr>
<tr>
<td>• Pine &amp; Menominee Rivers</td>
<td>1,186</td>
</tr>
<tr>
<td>• Spread Eagle Barrens</td>
<td>8,092</td>
</tr>
<tr>
<td>Wild Resources Management Area, Type 2:</td>
<td>&lt;1</td>
</tr>
<tr>
<td>• Pine River Edge Protection Zone</td>
<td>232</td>
</tr>
</tbody>
</table>

Resource Management, Development, and Protection

Pine River Edge Protection Zone Wild Resources Management Area, Type 2 Setting

This 232-acre area is part of We Energies’ Kingsford project and comprises that portion of the wild river “protection zone”, as defined in NR 302.02(4), extending from the water to 150 feet on either side of the Pine River. This area is mostly forested with a mix of hardwoods and conifers. These lands are managed collaboratively by the department and We Energies according to the terms of the permanent easement agreement (Articles of Dedication).

Objectives

- Collaborate with We Energies to manage this area to protect and maintain a wild, undeveloped condition where natural ecological processes predominate, and evidence of human cultural impact is low.
- Restore and maintain the native pine barrens habitat.
Prescriptions

- Apply primarily passive management to the habitat types in this area, except as noted below to maintain or restore native vegetation and control invasive species.

- Restore any previously human-disturbed or eroded areas to a natural appearance. Limited vegetation may be removed if necessary when conducting restoration activities. Use only natural materials common to the local environment and native species in restorations.

- Prescribed fire may be used to restore and maintain native barrens vegetation.

- Control invasive species to protect ecological values and aesthetic quality. Hand cutting, herbicides, and biological controls may be used. Minimize the visual appearance of control activities.

- Do not salvage timber after natural disturbances, except within barrens restoration areas (burn units) if deemed necessary for habitat management purposes.

*Pine and Menominee Rivers Native Community Management Area*

This 1,186-acre area comprises the remainder of the We Energies Kingsford project lands along the Pine River and the entirety of the Kingsford project lands along the Menominee River. This is a remote and rugged area, forested mostly with aspen and pines (mainly red pine), with smaller amounts of oak, northern hardwoods, and balsam fir/white spruce. There are pockets of lowland conifers (white cedar and black spruce) and alder shrub wetland, and some areas of bracken grassland along the Pine River. These lands are managed collaboratively by the department and We Energies according to the terms of the permanent easement agreement (Articles of Dedication).

Objectives

- Collaborate with We Energies to manage the vegetative communities present, with a focus on restoration, protection, and maintenance of barrens and associated native communities.

- Manage the 150-to-400-foot zone along the Pine River to protect and enhance aesthetic values of the wild river corridor, with a focus on maintaining an undeveloped, natural-appearing condition with little evidence of resource management in most areas.

- Manage Pine Creek and LePage Creek for coldwater fisheries.

Prescriptions

- Maintain and restore barrens according to the prescriptions described in the Spread Eagle Barrens Native Community Management Area (below), in collaboration with We Energies.

- In the 150-to-400-foot zone along the Pine River, manage to protect ecological values and visual quality. Plan and implement management activities so as to minimize visual and auditory impacts to river users, prevent erosion, and soften sharp transitions between habitat types. Control of invasive species may occur and use of motorized equipment is allowed when conducting authorized restoration and management activities.
• Collaborate with We Energies to plan timber management. We Energies conducts all timber harvesting.

• Follow the Aspen, Balsam Fir and White Spruce, Jack Pine, Northern Hardwood, Oak and Oak-dominated Mixed Forest, Red Pine, White Birch, and White Pine Common Elements.

• Establish timber sale boundaries that are irregular and harmonize with local topography. Generally limit harvest activity to the period between September 15 and April 1, when river use is typically lower and negative environmental impacts can be minimized.

• Locate logging roads and decking sites outside the river protection zone. Close all skid trails and logging roads following completion of timber sales. Restore the first 50 feet of closed roads and trails to a natural-appearing condition (including planting native trees and shrubs) where they are not needed for future management activities.

• Limited salvage of timber after natural disturbances may occur if necessary to maintain aesthetic values and visual quality. Any salvage will be conducted following consultation with appropriate DNR representatives and We Energies. Disturbed areas may be planted with appropriate species if natural regeneration proceeds too slowly.

• Control invasive species to protect ecological values and visual quality using appropriate mechanical, chemical, or biological methods. Minimize the visual appearance of control activities.

• Follow the Coldwater Streams Common Element for management of Pine Creek and LePage Creek in this management area.

Spread Eagle Barrens Native Community Management Area

This 8,092-acre management area includes all lands not encompassed in other management areas and comprises the majority of the property. It consists of bracken grasslands, pine barrens, stands of dry pine-oak forest, and scattered lakes and wetlands. Bracken grasslands occur on gently rolling terrain that once supported pine barrens, and are composed of a mix of native and non-native species. More open areas of bracken fern, Pennsylvania sedge, Kalm’s brome, sweet-fern, poverty grass, northern heart-leaved aster, gray goldenrod, blueberries, wild strawberry, and the non-native Canada bluegrass and Kentucky bluegrass are interspersed with thickets of beaked hazelnut, prairie willow, juneberry, and cherry. There are pockets of aspen, jack pine, and northern pin oak, and occasional large snags. Frost pockets, scattered throughout the landscape, contain sedges, lichens, and other plant species adapted to the harsh microclimate.

Pine barrens have scattered jack pine, red pine, black cherry, sand cherry, northern pin oak, juneberry, and beaked hazelnut. A low shrub layer consists of sweet-fern, early low blueberry, juneberry, and common blackberry, with a groundlayer of Pennsylvania sedge, false melic grass, poverty grass, Canada bluegrass, harebell, bracken fern, and the non-native orange hawkweed, tall hawkweed, and butter-and-eggs. Large patches of pine barrens are currently rare.

The dry pine-oak forests can contain red oak, red pine, white pine, red maple, aspen, and white birch, with a sparse shrub layer of beaked hazelnut, maple-leaved viburnum, witch hazel, and blueberry. The groundlayer may include bracken fern, large-leaved aster, wood anemone, wild sarsaparilla, barren-strawberry, Pennsylvania sedge, and rough-leaved rice grass. Most stands of this forest type have an extensive logging history, but some stands are of good quality, with large, old trees and denser canopy and sub-canopy layers.
Kettle lakes and wetlands are scattered throughout the property. Wetlands may consist of black spruce and white cedar swamp, small acid peatlands with leatherleaf and Sphagnum moss, or floating sedge mats that grade into tamarack- or black spruce-dominated forest. Wetlands, some of significant size, are also found along small tributary streams, sometimes in conjunction with springs.

This site presents opportunity to manage for pine barrens at a landscape scale and including the full range of successional stages. This is the best site in the state to manage for bracken grassland, a regionally unique type of pine barrens. While bracken grassland has limited value for promoting native botanical diversity, it does support many open-country species that favor large expanses of grassland or grass-shrub habitats.

**Objectives**

- Manage the site to protect, maintain, and enhance the unique natural communities present, with a focus on pine barrens and bracken grassland.
- Provide opportunities for research and education on the highest quality bracken grasslands.
- Manage Sand Lake and the streams in this management area to enhance coldwater fisheries.

**Prescriptions**

- Develop an annual barrens management plan with the involvement of local Natural Heritage Conservation, Forestry, and Wildlife staff. The plan should be based on monitoring and include habitat management goals that integrate prescribed fire, herbicide use, brushing, timber sales, and invasive species control.
- Manage pine barrens and bracken grassland habitats following the Barrens Common Element and the relevant prescriptions below. Existing burn units will be managed according to Restoration and Maintenance Phase criteria, with a goal of moving all into Maintenance Phase. Restoration Phase refers to barrens burn units with >50% shrub cover and/or >30% aspen cover over 7 feet tall. Maintenance Phase refers to barrens burn units with <50% shrub cover and/or <30% aspen cover over 7 feet tall.
- Units may be burned at different times of the year (spring, summer or fall). Experiment with burn seasonality and monitor effectiveness at meeting habitat management goals.
- Burn units every 1-5 years during the Restoration Phase (>50% shrub cover and/or >30% aspen over 7 feet tall) and every 5-10 years during the Maintenance Phase (<50% shrub cover and/or <30% aspen over 7 feet tall).
- A shifting mosaic may be used where some burn units may be abandoned to succession and others converted from forest cover to barrens management. Some ‘savanna’ units may require rest periods to re-establish some tree growth. This will lead to multi-age and -stage management.
- Mechanically treat, chemically treat, or harvest aspen clones as needed to control/reduce the amount of aspen present in burn units.
- Use mechanical brush mowing as needed to reduce woody vegetation and manage fire intensity along fire breaks and in burn unit interiors.
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State Natural Areas: Spread Eagle Barrens State Natural Area

- Conduct manual brush control annually as time and resources allow. Focus on cherry and woody invasives, using small-scale herbicide application (cut and stump-treat, basal bark, etc.).
- Do not burn >50% of the bracken grassland/pine barrens habitat on the property in any one year.
- As time and resources allow, strategically add more burn units to the property or expand existing burn units in locations suitable for and conducive to barrens management, based on logistics and ecology. Bracken grassland and pine barrens communities may compose up to, but not exceed, 80% of the property.
- Within burn units: protect legacy white pine, red pine, and red oak; retain snags where feasible; recruit future super canopy or legacy trees by protecting seedling or sapling red and white pines.
- High quality northern dry-mesic pine and red oak stands will be managed for old-growth characteristics. All other stands will be managed with standard silvicultural practices and some will be considered for conversion to bracken grassland and pine barrens management.
- Apply primarily passive management to open and forested wetland habitats.
- Provide opportunities for research via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).
- Conduct annual invasive species inventory, monitoring, and control on the property as time and resources allow.
- If planting or seeding is considered for pine barrens or forest stands, use seeds or plugs from local genotypes where possible. Any augmentation of the bracken grassland or pine barrens ground layer will add only species that would historically have occurred on the site.
- Continue stocking trout in Sand Lake.
- Follow the Coldwater Streams Common Element.

Public Use Management and Development

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

- Maintain the existing six parking areas, two boat access sites, and LePage Overlook viewing platform.
- Maintain land use agreements for the operation and maintenance of the snowmobile and ATV trails/routes on the property.
- Explore the feasibility of moving the Barrens Lake campsite from its current location closer to Barrens Lake; relocate if feasible.
- Place a link on the Spread Eagle Barrens SNA webpage that takes users to the DNR's Public Access Lands interactive web map for this property. This web map clearly displays the property’s recreational facilities.
- Continue attempts to restrict illegal motorized vehicle use on trails and access roads that are closed to public motorized vehicle use. Pursue law enforcement where feasible.
• Seek opportunities to partner with external groups to develop interpretive information for this property.

• Change the public motorized access on the ‘Eagles Nest’ road linking Roach Fire Lane Road and the Eagles Nest burn units in the southern portion of the property from Open to Open Seasonally. This road will be closed if needed in the spring and during wet weather due to poor soils that make it very susceptible to damage in wet conditions.

• Change the motorized access on Overlook Road, which links Lake Anna Road to the LePage Overlook, from Open to Open Seasonally. This road is used as a snowmobile trail in the winter. This road will be restricted to snowmobile-only access during the winter when conditions are not suitable for street-licensed vehicles. Provide a small area to be used for winter parking during seasonal closure. Add a gate if needed to enforce seasonal closure.

• Mow the Anna Lake East and West firebreaks each summer after July 15 for foot travel, and again after the growing season if needed.

Prescribed burn on Spread Eagle Barrens; photo by Carly Lapin


CHAPTER 2: Management, Development, and Use

Wild Rivers: Pike Wild River

WILD RIVERS

PIKE WILD RIVER

Property Overview

The Pike Wild River, located in northern Marinette County, is one of only five state Wild Rivers in Wisconsin, designated by the State Legislature in 1965 to be protected from development and kept in a natural, free-flowing condition. The project boundary includes 61.3 miles of river corridor along the North, South, and Main branches of the Pike River. The river flows through an area of extensive public lands, especially Marinette County Forest but also other state-owned lands and the Chequamegon-Nicolet National Forest.

The Pike Wild River is characterized by extensive forests and bedrock outcrops. A diversity of forest types occurs, including lowland forests of black ash and white cedar, northern hardwoods, and dry forests of aspen, oak, and pine. There are also scattered peatlands, sedge meadows, and ephemeral ponds. Bedrock glades occur in various locations along the river, and rock bluffs provide scenic views in many places. The river features numerous rapids and waterfalls.

The Pike River is a designated trout water. Its lower reaches are also known to be seasonally inhabited by lake sturgeon, as the Pike is a tributary of the Menominee River.

Public Use and Recreational Facilities

The Pike Wild River offers a variety of recreational activities. Canoeing and kayaking are very popular, particularly during the spring, and the property also receives a fair amount of use for hunting, hiking, wildlife watching, and berry-picking. The upper reaches of the river are difficult to paddle but provide excellent trout fishing opportunities. Each spring, adult lake sturgeon, which migrate into the lower reaches of the Pike from the Menominee River, may be viewed downstream from STH 141. The Pike River is not a designated sturgeon fishery, however, so angling for that species is not allowed.

The Pike Wild River presents a scenic and natural recreational experience, though one that is remote and with few developed facilities. Access to the river is typically carry-in only, with roadside parking and a short hike to the water. Several minimally maintained, signed pull-offs and small parking areas are also available at various points along the river. Three developed parking lots, at the STH 141 bridge, CTH K bridge, and Pike River Road/Barker Road bridge, serve the most popular run of the river. Additional access to the river and recreational facilities are available on Marinette County land.

Roads and Parking Areas

There are 34 parking areas on the property. Approximately 19.13 miles of public, non-DNR roads and 7.14 miles of DNR roads provide access to the property. Existing road infrastructure is summarized in Table...
2.25 below and shown on Maps I-1A to C.

Table 2.25. Pike Wild River Road Infrastructure.

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Miles of Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open DNR Roads</td>
</tr>
<tr>
<td>Primitive</td>
<td>2.55</td>
</tr>
<tr>
<td>Lightly Developed</td>
<td>0.88</td>
</tr>
</tbody>
</table>

The department is proposing to change the public access on 0.94 miles of roads from Open to Closed. Roads proposed to be closed to public motor vehicle use are shown on Maps I-2A and B. Most of these roads provide access to privately owned parcels, and do not have utility for resource management or for access to the wild river. The intent is to sign (and possibly gate) these roads as closed to public motor vehicles and provide access for private parcel owners via land use agreements. The one road proposed to be closed that does not provide private parcel access will be abandoned. In all cases, roads will continue to serve as foot access ways for public access to Pike Wild River property.

Water Access

The department maintains 5 carry-in sites providing access to the Pike River.

Support Facilities

There is one storage building located along the North Branch of the Pike River, off Jossart Road south of Beecher.

Current Natural Resources Management

Section 30.26, Wisconsin Statutes, states that designated Wild Rivers “shall receive special management to assure their preservation, protection and enhancement of their natural beauty, and their unique recreational and other inherent values”. NR 302.02(4), Wisconsin Administrative Code, states that Wild Rivers have an established protection zone comprising “the area of land within 400 feet of the waters or to the visual horizon from the water whichever is greater on either side of the wild river”. No development, including campgrounds, is allowed on DNR-managed lands adjacent to shorelines in the protection zone, nor beyond the protection zone up to at least a ¼-mile from either side of the wild river other than that which is necessary to accommodate the users of the wild river areas. Additionally, no vegetation control (save for erosion control or restoration activities) is allowed within 150 feet from the bank on either side of the wild river.

Accordingly, management on the state-owned land along the river is designed to show as few traces of human intervention as possible, and developments are kept back from the river’s edge except for limited carry-in boat launches. In some sections of the riverway, parking areas serving users of the wild river have been located within the protection zone due to lack of any feasible alternative. Future acquisition may provide flexibility to relocate these parking areas outside the protection zone. Except for designated road crossings, motorized vehicle access is limited to designated areas outside the protection zone. Lands more than 150 feet from the rivers are managed for sustainable forest production, wildlife habitat, and public
recreation. Timber harvests are completed with minimal visual impact, and selective cutting encourages long-term maintenance of or conversion to longer-lived species.

DNR stocks brown trout annually in the Pike River and its tributaries.

**Opportunities and Challenges**

A portion of the Pike Wild River, along the South Branch, is included in the Amberg Conservation Opportunity Area identified in the Wisconsin Wildlife Action Plan.

The Pike River has been designated as an Outstanding Resource Water (ORW). These, along with Exceptional Resource Waters (ERW) are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities. ORWs receive the state’s highest protection standards.

Three “Primary Sites” have been identified by the department on the Pike Wild River for special consideration in this planning process (WDNR 2012a). Primary sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for Forest Certification.

**The Primary Sites on the Pike Wild River are:**
- Pike Wild River Corridor
- Little South Branch Pike River
- Pike Wild River Conifer Hardwoods

The Pike River supports a number of rare and common turtle species. The Rapid Ecological Assessment for the Pike Wild River (WDNR 2012a) identified a shortage of suitable turtle nesting habitat on this property. This results in turtles nesting on road shoulders and bridges where they are susceptible to mortality from vehicle strikes. A partner group, Turtles for Tomorrow, has installed a protected turtle nesting area on Pike Wild River lands, and a second site is currently being planned. These sites provide suitable nesting habitat that is optimally located for turtle use, and nests are protected from predation by solar-powered electrified fencing.

There are various long-standing encroachment issues on this property that need to be addressed, including a building constructed over the property line, mowing over the property line, and gravel added to state land by private citizens.

Invasive species are present in low numbers on portions of this property. Japanese barberry, common buckthorn, autumn olive, leafy spurge, spotted knapweed, and black locust have all been treated.

**Land Cover**

Current land cover on the Pike Wild River property is shown in Table 2.26 below. The most significant change to cover types on this property over the life of this plan is anticipated to be for the swamp hardwood cover type, where over half the current acreage, consisting of stands of pure or nearly pure
ash, is projected to be lost over the next 7-10 years due to emerald ash borer. The likeliest scenario for these stands at this time is that they will convert to a non-forested cover type (emergent wetland or shrub swamp), due to “swamping” or raising of the water table that occurs once all the ash trees die and which makes re-forestation of those stands challenging. The department is currently investigating management techniques (and associated costs) needed to establish new tree species in stands that experience complete ash mortality (D’Amato et al. 2018). Management of these stands will incorporate the best available science and techniques, focusing on maintaining potential to reforest the site and preventing infestation by exotic invasive plants such as reed canary grass.

Table 2.26. Pike Wild River Cover Types.

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>2,252</td>
<td>49</td>
</tr>
<tr>
<td>Aspen</td>
<td>1,520</td>
<td>33</td>
</tr>
<tr>
<td>Northern Hardwoods</td>
<td>225</td>
<td>5</td>
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<tr>
<td>Oak</td>
<td>282</td>
<td>6</td>
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<tr>
<td>Red Maple</td>
<td>225</td>
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<tr>
<td>Upland Coniferous Forest</td>
<td>1,123</td>
<td>25</td>
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<tr>
<td>Balsam Fir/White Spruce</td>
<td>107</td>
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<tr>
<td>Hemlock</td>
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<td>Jack Pine</td>
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<td>Red Pine</td>
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<tr>
<td>White Pine</td>
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<td>Swamp Hardwood</td>
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<td>Wetland Shrub – Alder</td>
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</tr>
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</tr>
<tr>
<td>Emergent Wetland</td>
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<td>Upland Grass</td>
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<tr>
<td>Cool-season Grass (Surrogate Grasslands)</td>
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<td>&lt;1</td>
</tr>
<tr>
<td>Right-of-way</td>
<td>22</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

Land Management Classification

The Pike Wild River is divided into six management areas (Table 2.27 and Maps I-3A to D). The area from
the water to 150 feet on either side of the river is classified as Wild Resources Management Area with Type 2 Recreational Use Setting. The area from 150 feet to 400 feet on either side of the river is classified as Scenic Resources Management Area with Type 2 Recreational Use Setting. Two small areas, one along the South Branch of the Pike River and one along the main stem of the Pike River shortly before its confluence with the Menominee River, are classified as Native Community Management Area. A parcel located just outside the property project boundary, north of the North Branch of the Pike River, that is used as a Forestry fire equipment training course, is classified as Special Management Area. The remainder of the property is classified as Habitat Management Area. These areas are described below.

Table 2.27. Pike Wild River Management Areas.

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area:</td>
<td>8,426</td>
</tr>
<tr>
<td>• Pike River</td>
<td>8,426</td>
</tr>
<tr>
<td>Native Community Management Area:</td>
<td>234</td>
</tr>
<tr>
<td>• Little South Branch Pike River Forest &amp; Meadow</td>
<td>112</td>
</tr>
<tr>
<td>• Pike River Conifer Hardwoods</td>
<td>122</td>
</tr>
<tr>
<td>Scenic Resources Management Area, Type 2:</td>
<td>3,903</td>
</tr>
<tr>
<td>• Backland Protection Zone</td>
<td>3,903</td>
</tr>
<tr>
<td>Special Management Area:</td>
<td>79</td>
</tr>
<tr>
<td>• Forestry Fire Equipment Training Area</td>
<td>79</td>
</tr>
<tr>
<td>Wild Resources Management Area, Type 2:</td>
<td>3,069</td>
</tr>
<tr>
<td>• River’s Edge Protection Zone</td>
<td>3,069</td>
</tr>
</tbody>
</table>

Property-specific Goal

As one of only five state-designated Wild Rivers in Wisconsin, the Pike Wild River is distinctive among department-owned and managed lands. The property’s primary purpose, as defined in state statute and administrative code, and its unique resources warrant a property-specific goal statement. This goal is in addition to the goals for all the NES EL properties as stated at the beginning of this chapter, and applies to both resource and public use management.

Goal

- Provide opportunities for river users to enjoy the wild, remote, and scenic qualities of a wild river by protecting and maintaining the Pike Wild River in an undeveloped, natural, free-flowing condition.

Resource Management, Development, and Protection

River’s Edge Protection Zone Wild Resources Management Area, Type 2 Setting

This 3,069-acre area comprises that portion of the wild river “protection zone”, as defined in NR 302.02(4), extending from the water to 150 feet on either side of the river. It is a scenically beautiful area, characterized by forests, bedrock outcrops, and waterfalls. Forest cover types include swamp and bottomland hardwoods, hemlock-hardwoods, and white cedar. Swamp hardwoods composed of black ash with red maple, green ash, silver maple, American elm, basswood, and bur oak dominate the river corridor. Ephemeral ponds, wet swales, and backwater sloughs are common. Relict stands of white cedar,
tamarack, hemlock, and occasionally yellow birch can also be found here. Hemlock-hardwoods and white cedar forests also occur along the river corridor, often associated with rock outcrops and with north-facing slopes in areas where the river runs west to east. The forest canopy in these areas is dominated by hemlock, white cedar, white pine, and red pine, with small stands of cedar swamp containing white cedar, tamarack, white spruce, and balsam fir interspersed throughout. Areas of seepage slopes occur, draining down to the Pike River. These different habitats support many uncommon species of plants and animals. Mature conifer and conifer-hardwood forests have old-growth potential. They provide interior forest habitat and a travel corridor for many species, including bats and diverse breeding birds, and protect water quality. The Pike River and associated aquatic habitats support numerous species of rare fish and aquatic invertebrates.

Emerald ash borer (EAB) is a non-native wood-boring beetle that attacks ash trees. It was first detected in Wisconsin in 2008 and has been found in 51 counties around the state as of 2018, including Marinette County. EAB is a threat to the lowland forests along the Pike River corridor as black ash and, to a lesser extent, green ash and white ash are important tree species here. Large-scale loss of ash in this area could cause a cascade of negative ecological impacts, particularly hydrologic changes due to elevated water tables and infestation by reed canary grass, resulting in a highly unnatural ecological condition. Management to mitigate and/or restore the effects of EAB will be pursued in this management area where feasible, focusing on areas where the risk of forest cover loss and conversion to reed canary grass is greatest. Every attempt will be made to avoid or minimize disturbance and visual impact of management activities.

Objectives

- Manage this area to protect and maintain a wild, undeveloped, condition where natural ecological processes predominate and evidence of human cultural impact is low.

Prescriptions

- Apply primarily passive management to the habitat types in this area, except as noted below to maintain or restore native vegetation and control invasive species.
- Monitor the impact of emerald ash borer on ash trees in this management area, focusing on areas where risk of hydrologic impacts and conversion to non-forested habitat dominated by non-native species is greatest. Respond if appropriate and feasible using the most current version of DNR’s Emerald Ash Borer Silviculture Guidelines and the best available science and techniques. Maintain the potential to reforest the site if possible and prevent conversion to reed canary grass or other non-native species.
- Control other invasive species to protect ecological values and visual quality. Hand cutting, herbicides, or biological controls may be used. Minimize the visual appearance of control activities.
- Restore any previously human-disturbed or eroded areas to a natural appearance. Limited vegetation may be removed if necessary when conducting restoration activities. Use only natural materials common to the local environment and native species in restorations.
- Do not salvage timber after natural disturbances.
**Backland Protection Zone Scenic Resources Management Area, Type 2 Setting**

This 3,903-acre area comprises that portion of the wild river “protection zone”, as defined in NR 302.02(4), from 150 feet to 400 feet on either side of the river. It is forested with similar cover types as the River’s Edge Protection Zone. These forests provide complementary ecological values, including interior habitat, riparian corridor connectivity, and older age-classes, and contribute to the high-quality scenic value of the river corridor.

**Objectives**

- Manage this area to protect, maintain, and enhance the unique and high-quality aesthetic values of the river corridor, with a focus on an undeveloped, natural-appearing condition with little evidence of resource management.
- Manage forested habitats to maintain or increase the conifer component and to favor species that can attain large diameters and old-growth status. Provide ‘soft’ transitions between this management area and adjacent areas.

**Prescriptions**

- Apply primarily passive management to open and forested wetlands.
- Work on converting most aspen stands in this zone to long-lived species capable of attaining large size, including conifers. Retain some aspen for wildlife habitat and diversity.
- Apply extended rotation or old-growth management, especially to white pine, red pine, hemlock, and oak, to promote growth and retention of large trees and structural characteristics of old forests. Retain and promote snags and coarse woody debris. Favor partial harvest or selective cutting methods and natural regeneration techniques wherever possible.
- Hand planting of species like white spruce, balsam fir, and white pine may be considered to maintain or increase their abundance.
- Encourage regeneration or reestablishment of eastern hemlock, Canada yew, northern white-cedar, and other conifers when appropriate through adaptive management techniques.
- Periodically thin existing pine plantations to promote diameter growth, reduce uniform appearance, and encourage understory development. Consider variable density thinning with gap creation and extended rotation or old-growth management for some stands or portions of stands.
- Plan and implement management activities to minimize visual and auditory impacts to river users, prevent erosion, and soften sharp transitions between habitat types. Establish timber sale boundaries that are irregular and harmonize with local topography. Generally limit harvest activity to the period between September 15 and April 1, when river use typically is lower and negative environmental impacts can be minimized.
- Locate logging roads and decking sites outside of the river protection zone. Minimal temporary decking areas and skid trails are allowed. Close all skid trails and logging roads following completion of timber sales. Restore the first 50 feet of closed roads and trails to a natural-appearing condition (including planting native trees and shrubs) where they are not needed for future management activities.
• Within 100 feet of a designated trail or public road, remove or chip/lop and scatter slash to within 30 inches of the ground. Where effective visibility from the trail or road exceeds 100 feet, treat slash within that zone up to 200 feet from the trail or road.

• Restore any previously human-disturbed or eroded areas to a natural appearance. Use only natural materials common to the local environment and native species in restorations.

• Limited salvage of timber after natural disturbances may occur if necessary to maintain aesthetic values and visual quality. Disturbed areas may be planted with appropriate native species if natural regeneration proceeds too slowly.

• Control invasive species to protect ecological values and visual quality using appropriate mechanical, chemical, or biological methods. Minimize the visual appearance of control activities.

• Use of motorized equipment is allowed when conducting restoration and authorized management activities.

• Follow the Turtle Nesting Sites Common Element.

Little South Branch Pike River Forest and Meadow Native Community Management Area

This 112-acre area is located along the South Branch of the Pike River, south of the river channel. It consists of a good-quality hemlock-hardwood forest on slopes and terraces of the Pike River, grading into a drier mixed coniferous-deciduous forest, a narrow area of sedge meadow along a small, unnamed tributary of the South Branch, and a bedrock glade on a large, sloped outcrop between the river and the sedge meadow. The hemlock-hardwood forest is dominated by hemlock (including some hemlock regeneration), with white cedar, balsam fir, white birch, yellow birch, and beech. Some seepage slopes drain down into the riparian zone. This forest grades into a drier forest of red pine, white pine, oaks, red maple, and aspen. The sedge meadow is relatively small and linear, characterized by species such as woolgrass, Canada goldenrod, spotted Joe-Pye-weed, and lake sedge, with scattered shrubby thickets of alder, willow, white meadow-sweet, and red-osier dogwood. The bedrock glade contains characteristic lichen species and drought-tolerant plants such as northern pin oak, jack pine, white pine, juneberry, blueberry, northern bush honeysuckle, sweet-fern, polypody fern, and rusty cliff fern.

The forest presents opportunity to develop old-forest characteristics, and connects to adjacent forested stands closer to the river to provide a fairly large block of habitat valuable to rare breeding birds. The presence of hemlock regeneration provides opportunity to manage for this now uncommon species. The sedge meadow is fairly pristine and contains a high diversity of forbs, while the globally imperiled bedrock glade community supports an assemblage of rare plants and provides important habitat for herptiles, including the Eastern hog-nosed snake.

Objectives

• Protect, maintain, and enhance the unique, high-quality natural communities present at this site.

Prescriptions

• Where access is available and feasible, manage forested stands with extended rotation to maintain and increase the conifer component and to promote compositional and structural characteristics
associated with older forest, including uneven-aged structure with diverse age-classes, large-diameter trees, old trees, snags, and coarse woody debris.

- Encourage regeneration or reestablishment of hemlock using guidelines for managed old-growth/old forests or extended rotation in the Hemlock chapter of the *Old-growth and Old Forests Handbook*. Employ an adaptive approach.

- Maintain and enhance connectivity with adjacent forested areas, including lowland forests along the river.

- Protect the bedrock glade from anthropogenic disturbance and from excessive woody encroachment through thinning or prescribed fire.

- Apply passive management to the sedge meadow.

- Follow the [Forested Seeps Common Element](#).

- Control invasive species using appropriate mechanical, chemical, or biological methods.

- To the degree practicable, provide the appearance of a low level of management and attempt to minimize visual and auditory impacts of management on river users.

**Pike River Conifer-Hardwoods Native Community Management Area**

This 122-acre area is located north and east of the Pike River just upstream from its confluence with the Menominee River. It is a very diverse site, characterized by varying topography and geological formations, several different upland and lowland forest types, and an ephemeral pond. The site’s main feature is a large stand of upland conifer forest on elevated glacial formations (eskers) containing large-diameter red pine and super-canopy white pine, with large-diameter oaks also present within the stand and adjacent to it. This area grades into moister slopes and lowlands forested with lowland hardwoods of red maple, white birch, and black ash, and contains a good-quality ephemeral pond. The pond’s tannin-stained edges are fringed with winterberry and alder and contain herbaceous plant species such as wild iris, stinging nettle, lake sedge, and mint. Also present on the site is a good-quality lowland conifer forest of white spruce and white cedar.

The large tract of upland pine forest has old-growth characteristics. Breeding bird surveys in this tract indicated high diversity and abundance of breeding birds compared to similar habitats in the region. This upland forest is connected to lowland forests associated with Pike River terraces, forming a sizeable block of intact forest habitat. The ephemeral pond provides habitat for many invertebrates and amphibians, including salamanders.

**Objectives**

- Protect, maintain, and enhance the unique, high-quality natural communities present at this site.

**Prescriptions**

- Manage forested stands with extended rotation to maintain and increase the conifer component and to promote compositional and structural characteristics associated with older forest, including uneven-aged structure with diverse age-classes, large-diameter trees, old trees, snags, and coarse woody debris.
• Maintain and enhance connectivity with adjacent forested areas, including lowland forests along the river and on county-owned lands through continuing management collaboration with Marinette County Forest.

• Follow the Ephemeral Pond Common Element.

• Control invasive species using appropriate mechanical, chemical, or biological methods.

• To the degree practicable, provide the appearance of a low level of management and attempt to minimize visual and auditory impacts of management on river users.

**Pike River Habitat Management Area**

This 8,426-acre area comprises the remainder of the Pike Wild River property not covered under other land management classifications. Upland habitat types are more prevalent in this area, including both deciduous and coniferous forests and scattered patches of upland grass. Most of the red pine plantations on the property are located in this zone.

**Objectives**

• Maintain and enhance the quality of existing habitats for the benefit of resident and migratory wildlife and to sustain hunting and other wildlife/nature-based recreational activities.

• Pursue opportunities for barrens or dry forest management on suitable parcels in the central portion of the property.

**Prescriptions**

• Follow the General Wildlife Habitat Management, General Forest Management, Aspen, Northern Hardwoods, Oak and Oak-dominated Mixed Forest, Red Maple, and White Pine Common Elements.

• Manage forested habitats to maintain the cover types and for compositional and structural diversity.

• Maintain connectivity with adjacent habitats and provide soft transitions between habitat types.

• Manage to restore or enhance barrens composition and structure on parcels along Beecher Lake, Pike River, and Lily Lake roads on the North Branch of the Pike River and parcels south and west of Smiley and Dow Dam roads on the South Branch of the Pike River. Follow the Barrens Common Element.

• Maintain red pine plantations and manage on an extended rotation (up to 200 years). Employ variable basal area thinning to encourage a more natural composition and stocking level, with the eventual goal of the appearance of natural-origin stands.

• Protect bedrock glades from disturbance and enhance their openess through thinning or prescribed fire.

• Apply passive management to upland grass patches. Where appropriate, utilize these openings as log landings.

• Within the visual horizon of the river, provide the appearance of a low level of management and attempt to minimize visual and auditory impacts of management on river users.
**Forestry Fire Equipment Training Course Special Management Area**

This 79-acre site is located just outside the Pike Wild River project boundary, on the North Branch of the Pike River between Love Lane and Sonnenberg Road. Smeesters Creek traverses the northeast corner of the parcel. Land cover is predominantly a mix of jack pine, Northern pin oak, and scattered legacy white pine. In addition, a small corridor of swamp hardwoods and white cedar can be found growing along the banks of Smeesters Creek.

This area is used by the Division of Forestry to train and test personnel on equipment used to respond to wildland forest fires. The site features several forest types that are particularly susceptible to catastrophic forest fires, and provides both upland and low-ground conditions similar to what may be encountered during an actual fire response situation. The site’s layout also allows for accurate duplication of the same measurable conditions for all personnel being trained. There are currently five maintained openings designed for training personnel on specific tasks related to operation of fire engines, tractor plows, and low-ground units. There is also a network of maintained roads and trails that links the open training areas and is also used to provide driving training. The maintained open areas double as wildlife openings, and the trails provide foot access to the site. This parcel receives regular use by hunters pursuing upland birds and white-tailed deer from September through January.

**Objectives**

- Provide a facility for Forestry fire equipment training while providing compatible wildlife habitat management and public recreation.

**Prescriptions**

- Maintain the openings and trail network on this site to meet the evolving demands required to adequately train fire control personnel. This management will also provide wildlife habitat and foot access for public recreation as secondary benefits.
- Maintain the current mix of upland forest species in order to provide training conditions similar to what personnel are likely to encounter in an actual wildland forest fire situation. Follow the Jack Pine, Oak and Oak-dominated Mixed Forest, and White Pine Common Elements for management of these cover types.
- Continue to apply passive management to the swamp hardwoods along Smeesters Creek to maintain shaded conditions along the stream corridor and to serve as a filter strip for potential run-off.
- Maintain year-round public access by foot travel only for hunting, trapping, and hiking.

**Public Use Management and Development**

**Objectives**

- Maintain the Pike Wild River in a natural, free-flowing, unaltered state for the enjoyment of river users.
- Provide conditions where river users may feel they are in a secluded, wild area remote from human activity, with opportunities for solitude and primitive, non-motorized recreation and little or no visible
Prescriptions

- Limit facility development within the river protection zone to primitive carry-in watercraft launching sites and primitive access trails.
- Maintain existing parking areas and boat access sites. Monitor river access paths for erosion and implement erosion control measures as appropriate.
- Change the public access from Open to Closed on 0.94 miles of department managed roads as shown on Maps 1-2A and B. Roads used primarily to provide access to privately owned parcels will be signed as closed to public motorized access, and may be gated. Access will be provided to owners via land use agreements. Passively abandon the one road that does not provide private parcel access.
- Evaluate access roads to the property and determine if additional signage is necessary. Provide additional signage as appropriate.
- In accordance with NR 302.04(7), DNR staff will only remove downed trees within the river that pose an immediate safety threat to river users. Trees that fall naturally into the water and pose no immediate safety concern will not be removed by DNR staff.
- Work with regional or statewide real estate staff to address trespass issues.
- Seek opportunities to partner with local stakeholder groups on maintaining access paths to the river.
PINE-POPPLE WILD RIVERS

Property Overview

The Pine-Popple Wild Rivers, located in southern Florence County, comprise two of only five state-designated Wild Rivers in Wisconsin. The entire 89-mile length of the Pine River and 62 miles of its major tributary, the Popple, were designated as Wild Rivers by the State Legislature in 1965, to be protected from development “so as to afford the people of this state an opportunity to enjoy these rivers in their natural and free-flowing condition and to assure the well-being of Wisconsin’s tourist industry by attracting out-of-state visitors” (NR 302.01, Wis. Admin. Code). The DNR’s Pine-Popple Wild Rivers project area encompasses the lower 12 miles of the Popple River and the lower 33 miles of the Pine River, ending at the confluence of the Pine with the Menominee River. Approximately 80% of the project area is publicly owned, either by the state or by Florence County, with the remainder made up of small, privately-owned parcels or owned by We Energies. We Energies, whose predecessor companies first began acquiring land along the Pine River in 1916 for development of power generating plants, owns and operates two hydroelectric facilities at the Pine River and Kingsford dams, which predate the wild river designation. We Energies-owned lands associated with both the Pine and Kingsford projects are located within the Pine-Popple Wild Rivers project boundary. The Kingsford project lands have been dedicated as State Natural Area (SNA) and are part of the Spread Eagle Barrens SNA. Management of these lands is discussed in the Spread Eagle Barrens property section (p. 55).

The two rivers originate in the vast forests and swamps of the Chequamegon-Nicolet National Forest, in the North Central Forest Ecological Landscape, which borders the northern half of the Northeast Sands to the west. They flow through a remote, rugged, and undeveloped area. The river corridors are heavily forested with hemlock-hardwoods and lowland conifer and swamp hardwoods in the upper reaches and aspen-maple-pine forests in the lower reaches. Rock outcrops, spring ponds, lakes, and intact, forested stream corridors add to the diversity. The river waters range from quiet sections that meander slowly through lowland forest to swift, rocky riffles, low rapids, and waterfalls. Some whitewater sections of both the Pine and Popple rivers require expert-level skills to paddle.

One tract that is part of the Haley Creek Swamp State Natural Area is located within the boundary of the Pine-Popple Wild Rivers property. This tract is located in the northwesternmost portion of the property south of the Pine River, and encompasses two small spring ponds known as Dorothy Lake and Mud Lake, just south of Savage Lake.

Public Use and Recreation Facilities

The Pine-Popple are among Wisconsin’s most remote river systems, and offer a truly wild experience in a secluded, natural setting. The rivers, lakes, and streams offer high-quality paddling and fishing. Canoeing, kayaking, tubing, fishing, hunting, hiking, camping, and scenic enjoyment are popular activities. The property’s remoteness means that access is limited and can be challenging. The DNR maintains a series of carry-in boat access sites and parking areas throughout the property, as well as a small number of

| Current State Ownership (deed acres): | 11,495 |
| Fee Title: | 11,335 |
| Easement: | 160 |
primitive campsites, but many access sites are unimproved and do not provide off-road parking. Many gravel roads are only marginally improved or unimproved and poorly marked, and require high-clearance/four-wheel-drive vehicles. Additional recreational facilities, including campgrounds, improved boat access sites, and hiking trails are available on adjacent Florence County lands or on We Energies land as part of their Wilderness Shores Recreation Area. Also adjacent to portions of the Pine-Popple Wild Rivers is the Wild Rivers Legacy Forest, privately owned land under a conservation easement that provides public access for certain recreational activities, including hunting, fishing, and hiking. Certain trails and roads across both public and private land are open to vehicle access, snowmobiles, and ATVs as posted.

**Roads and Parking Areas**

There are 12 parking areas on the Pine-Popple Wild Rivers. The property has many forest management roads, some of which also traverse private lands. The department holds an easement for public motor vehicle use on some of these roads. However, others have no public access easement and access is at the discretion of the landowner, even though the road may ultimately lead to the Pine-Popple Wild Rivers property. There are approximately 9.63 miles of public use, non-DNR roads (e.g., town roads, county roads, etc.) and 92 miles of easement roads that provide access to the property, as well as 25.04 miles of DNR roads on the property. Existing road infrastructure is summarized in Table 2.28 below and shown on Maps J-1A to C.

**Table 2.28. Pine-Popple Wild Rivers Road Infrastructure.**

<table>
<thead>
<tr>
<th>NR 44 Classification</th>
<th>Open DNR Roads</th>
<th>Seasonal DNR Roads</th>
<th>Closed DNR Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>4.59</td>
<td>1.60</td>
<td>11.04</td>
</tr>
<tr>
<td>Lightly Developed</td>
<td>0.04</td>
<td>0.72</td>
<td>-</td>
</tr>
<tr>
<td>Moderately Developed</td>
<td>3.48</td>
<td>2.93</td>
<td>0.24</td>
</tr>
<tr>
<td>Fully Developed</td>
<td>0.40</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

A portion of the open roads on the Pine-Popple property are within relatively close proximity to the riverway. Some of these roads are not currently being maintained but have remained open in a limited capacity, either for public motor vehicle use or resource management. Others are important access ways leading to significant public use areas or are used for timber management on department lands and adjacent properties. Following careful analysis, the department is proposing to close to public motor vehicle use 2.6 miles of roads in close proximity to the riverways that have limited public motor vehicle use or utility for resource management. Roads that are proposed to be closed to public motor vehicle use are shown on Map J-2.

The department is committed to maintaining and enhancing public access to this property for recreation. Closed roads would continue to provide foot access for hunters and other property users. Roads that are used for timber management of adjacent Forest Legacy Easement land or provide public access to the Pine-Popple property will remain open. This proposal allows the department to balance access with maintaining the unique scenic qualities and character of the wild river.

**Campsites**

Rules governing camping on the wild rivers differ depending on land ownership. The department
maintains three primitive campsites on the Pine-Popple property to serve users of the wild rivers (Maps J-1A to C). These sites are non-reservable and are available to river users for one night. Florence County and the Nicolet National Forest allow dispersed camping, where users may set up on any suitable site along the rivers. There also are several small campgrounds located in the general vicinity on county and federal lands, as well as two small campgrounds on the We Energies Pine River Flowage property along the Pine River.

**Trails**

There are several primitive trails that provide access to the Pine and Popple rivers near most of the major waterfalls. There are also portage trails around waterfalls and significant rapids areas along the rivers. Additionally, many forest management roads that are closed to public motor vehicle use may provide foot access to the property.

In the area near the Oxbow of the Pine River there is an ATV trail that parallels CTH N, in accordance with s. 30.26(4), Wis. Stats, as well as a connector trail (2.16 miles, total). These trails are open to snowmobiles in winter and are managed by Florence County through a land use agreement with DNR. Many town roads are also open to ATV use as road routes. There are 5.38 miles of snowmobile trail segments on the property that connect to regional networks. The trails on the property are listed in Table 2.29 below.

### Table 2.29. Current Pine-Popple Wild Rivers Trails.

<table>
<thead>
<tr>
<th>Trail Name</th>
<th>NR 44 Class</th>
<th>Use/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Bull Falls Portage Trail</td>
<td>Primitive</td>
<td>Foot travel only; east of the river</td>
</tr>
<tr>
<td>Big Bull Falls Trail</td>
<td>Primitive</td>
<td>Foot travel only; for viewing falls west of river</td>
</tr>
<tr>
<td>Bull Falls North Trail</td>
<td>Primitive</td>
<td>Foot travel only; for viewing falls north of river</td>
</tr>
<tr>
<td>Bull Falls Portage Trail</td>
<td>Primitive</td>
<td>Foot travel only; south of the river</td>
</tr>
<tr>
<td>Camp 1 Rapids Portage Trail</td>
<td>Primitive</td>
<td>Foot travel only; south of the river</td>
</tr>
<tr>
<td>CTH N ATV and Snowmobile Trail</td>
<td>N/A</td>
<td>ATV (summer) and snowmobile (winter); foot travel available on extra width between Oxbow put-in and take-out sites</td>
</tr>
<tr>
<td>Jennings Falls Trail</td>
<td>Primitive</td>
<td>Foot travel only; for viewing falls north of river</td>
</tr>
<tr>
<td>LaSalle Falls Trail and Portage</td>
<td>Primitive</td>
<td>Foot travel only; south of the river</td>
</tr>
<tr>
<td>Meyers Falls North Trail</td>
<td>Primitive</td>
<td>Foot travel only; for viewing falls north of river</td>
</tr>
<tr>
<td>Meyers Falls Portage Trail</td>
<td>Primitive</td>
<td>Foot travel only; south of the river</td>
</tr>
<tr>
<td>North Oxbow ATV/Snowmobile Connector</td>
<td>N/A</td>
<td>ATV (summer) and snowmobile (winter); connects CTH N trail to regional network</td>
</tr>
<tr>
<td>Oxbow Take-out Trail</td>
<td>Primitive</td>
<td>Foot travel only; north Oxbow, west of river</td>
</tr>
<tr>
<td>South Oxbow Snowmobile Connector</td>
<td>N/A</td>
<td>Snowmobile; connects CTH N trail to regional network</td>
</tr>
<tr>
<td>Upper Pine Snowmobile Trail</td>
<td>N/A</td>
<td>Snowmobile; passes on/off property in several segments and utilizes a forest road open to public motor vehicles for a portion</td>
</tr>
</tbody>
</table>

**Water Access**

There are 11 carry-in boat access sites on the Pine and Popple rivers within the wild rivers property project boundary, although some are located on county land or We Energies property. There are additional access points on both rivers farther upstream on National Forest land, allowing for trips of varying lengths. River
features such as rapids and falls offer an array of challenges ranging from relaxing, quiet water floats on the lower Pine River to expert-level whitewater runs on the both the Pine and the Popple.

Water levels are critical for an enjoyable trip on either river. When water levels are moderate to high, canoeing can be very pleasant. At other times, it is more of a walking experience. The best season for river running, particularly on the whitewater sections, is typically April through May when spring snowmelt and rain swell the river flows, though water levels vary and may remain suitable for paddling through June and in parts of October, depending on the year. Water levels generally remain suitable for paddling longer on the Pine than on the Popple.

The area of the Pine River known as the Oxbow, in the far downstream portion of the property (east of the Pine Dam) is extremely popular for tubing in the summer.

Other Recreational Facilities

There is a wayside (locally known as the Massey wayside) off CTH N to the west, just south of the Oxbow, that features parking for several cars, picnic tables, a small, open shelter building, and a scenic overlook of the Pine River. Another scenic overlook is located a few miles to the east at the intersection of Johnson Creek Road and Sand Lake Road, offering a scenic view of the lower Pine River corridor (Map J-1B).

Land Use Agreements

The department has an agreement with Florence County for operation and maintenance of their snowmobile and ATV trails across the Pine-Popple Wild Rivers property.

The department has a Memorandum of Understanding (MOU) with the U.S. Forest Service to manage timber along the wild rivers to protect their scenic beauty where they traverse National Forest lands. The department also has a MOU with We Energies to allow for collaboration on recreation management within We Energies FERC lands along the Pine River.

As is typical for any DNR property, the department works with adjacent landowners to allow for access to private property across state-owned lands through the use of access permits.

Current Natural Resources Management

Section 30.26, Wisconsin Statutes, states that designated Wild Rivers “shall receive special management to assure their preservation, protection and enhancement of their natural beauty, and their unique recreational and other inherent values”. NR 302.02(4), Wisconsin Administrative Code, states that Wild Rivers have an established protection zone comprising “the area of land within 400 feet of the waters or to the visual horizon from the water whichever is greater on either side of the wild river”. No development, including campgrounds, is allowed on DNR-managed lands adjacent to shorelines in the protection zone, nor beyond the protection zone up to at least a ¼-mile from either side of the wild river other than that which is necessary to accommodate the users of the wild river areas. Additionally, no vegetation control (save for erosion control or restoration activities) is allowed within 150 feet from the bank on either side of the wild river.

Accordingly, management on the state-owned land along the rivers is designed to show as few traces of human intervention as possible, and developments are kept back from the river’s edge except for limited
carry-in boat launches. Except for designated road crossings, motorized vehicle access should be limited to designated areas outside the protection zone. However, this area of the state has a long history of forest management, with a well-established network of roads supporting that industry. Many of these roads were established well prior to state ownership and have been used by the public for decades. Following acquisition by the state, the department has allowed key roadways to remain open to motorized use for the purposes of property management, despite some of them being in relatively close proximity to the riverway. Most of these roads support continued forest management activities by adjacent landowners and provide public access to the property for enjoyment of the wild rivers such as the viewing of waterfalls or carry-in boat access.

Lands more than 150 feet from the rivers are managed for sustainable forest production, wildlife habitat, and public recreation. Timber harvests are completed with minimal visual impact, and selective cutting encourages long-term maintenance of or conversion to longer-lived species. The lands owned by Florence County and We Energies are managed under a similar philosophy through local zoning regulations and agreements, respectively.

**Opportunities and Challenges**

The western portion of the Pine Wild River is included in the Lauterman Lake Important Bird Area, a site identified by the Wisconsin Bird Conservation Initiative as containing critical habitat for birds. The Pine and Popple rivers have been identified as an aquatic Conservation Opportunity Area (COA) in the Wisconsin Wildlife Action Plan. Portions of the Wild Rivers property are also encompassed in the Nicolet Hemlock-Hardwoods COA and the Spread Eagle Barrens COA. The Savage-Robago lakes area within the Pine-Popple Wild Rivers has been identified as a Wetland Gem by the Wisconsin Wetlands Association.

The Pine and Popple rivers have been designated as Outstanding Resource Waters (ORW). These, along with Exceptional Resource Waters (ERW) are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities. ORWs receive the state’s highest protection standards.

One “Primary Site” has been identified by the department for special consideration in this planning process (WDNR 2011). Primary sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Such sites warrant high protection and/or restoration consideration during the development of a property master plan. Primary Sites can be considered High Conservation Value Forests for Forest Certification.

**The Primary Site on the Pine-Popple Wild Rivers is:**

- Goodman Wild Lakes and Pine River

The long, narrow nature of much of the Pine-Popple property, as it follows the wild rivers for many miles, creates access challenges for both resource management and public use. Access to over half the property is by easement roads over private property. These roads require maintenance (gravel and grading) to continue to allow for access. With few road crossings over the rivers, there may be significant travel times to reach sites on the opposite side, whether for property management work or for public use. Additionally, the overall property boundary is irregular as it follows the river corridors, with a significant amount of boundary to monitor relative to ownership, creating opportunity for encroachment.
Since the designation of the Pine and Popple as wild rivers by the Wisconsin Legislature in 1965, management has been a balance of providing public access while protecting the unique scenic qualities of the rivers as specified by statute and code. Over time, this property has grown in popularity, particularly in recent years due to efforts by external partners like Florence County, who has utilized Department of Tourism funds to create a road tour and other public promotions. The department will continue to work with partners to promote tourism while balancing resource protection, use, and providing a quality experience, particularly in the stretch of the lower Pine River known as the Oxbow.

**Land Cover**

Current land cover on the Pine-Popple Wild Rivers is shown in Table 2.30 below. Land cover is not expected to change significantly.

**Table 2.30. Pine-Popple Wild River Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
<th>GIS Acres</th>
<th>% cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
<td>8,615</td>
<td>73</td>
</tr>
<tr>
<td>Aspen</td>
<td>3,652</td>
<td>31</td>
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<tr>
<td>Northern Hardwoods</td>
<td>4,875</td>
<td>41</td>
</tr>
<tr>
<td>Red Maple</td>
<td>41</td>
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</tr>
<tr>
<td>White Birch</td>
<td>47</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
<td>593</td>
<td>5</td>
</tr>
<tr>
<td>Balsam Fir/White Spruce</td>
<td>392</td>
<td>3</td>
</tr>
<tr>
<td>Hemlock</td>
<td>178</td>
<td>2</td>
</tr>
<tr>
<td>Jack Pine</td>
<td>13</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Red Pine</td>
<td>10</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Forested Wetland</td>
<td>1,437</td>
<td>12</td>
</tr>
<tr>
<td>Balsam Fir</td>
<td>393</td>
<td>3</td>
</tr>
<tr>
<td>Black Spruce</td>
<td>13</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Swamp Hardwoods</td>
<td>413</td>
<td>4</td>
</tr>
<tr>
<td>Tamarack</td>
<td>81</td>
<td>&lt;1</td>
</tr>
<tr>
<td>White Cedar</td>
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<td>5</td>
</tr>
<tr>
<td>Shrub Wetland</td>
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<td>2</td>
</tr>
<tr>
<td>Wetland Shrub – Alder</td>
<td>222</td>
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<tr>
<td>Open Wetland/Marsh</td>
<td>87</td>
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<tr>
<td>Emergent Wetland</td>
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<tr>
<td>Muskeg/Open Bog</td>
<td>16</td>
<td>&lt;1</td>
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<tr>
<td>Open Water</td>
<td>666</td>
<td>6</td>
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<tr>
<td>Lake</td>
<td>270</td>
<td>2</td>
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<tr>
<td>Coldwater Stream</td>
<td>340</td>
<td>3</td>
</tr>
<tr>
<td>Warmwater Rivers and Streams</td>
<td>56</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Upland Grass</td>
<td>31</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Cool-season Grass (Surrogate Grasslands)</td>
<td>31</td>
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<tr>
<td>Upland Shrub/Savanna</td>
<td>45</td>
<td>&lt;1</td>
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<tr>
<td>Upland Shrub</td>
<td>45</td>
<td>&lt;1</td>
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<tr>
<td>Developed</td>
<td>78</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Parking Area</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Right-of-way</td>
<td>77</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
Land Management Classification

The Pine-Popple Wild Rivers property is divided into eight management areas (Table 2.31 and Maps J-3A to C). An overview of land management classifications, including descriptions of the different classifications and recreational use settings, is provided beginning on p. 8. Land management classifications are mapped to project boundaries and therefore may include lands that are not DNR-managed.

The area from the water to 150 feet on either side of the rivers is classified as Wild Resources Management Area with Type 2 Recreational Use Setting. The area from 150 to 400 feet on either side of the rivers and is classified as Scenic Resources Management Area with Type 2 Recreational Use Setting. A proposed new State Natural Area around Savage Lake is classified as Native Community Management Area. Robago Lake is designated as a Wild Resources Management Area, Wild Lake. Forested land to the east, north, and northwest of Robago Lake is classified as a second Native Community Management Area. The area around the Pine River Flowage from the water’s edge out to 400 feet is classified as a second Scenic Resources Management Area with Type 2 and Type 3 Recreational Use Settings. The CTH N ATV trail and connector are classified as Recreation Management Area with Type 3 Recreational Use Setting. The remainder of the property is classified as Habitat Management Area. These areas are described below.

Table 2.31. Pine-Popple Wild Rivers Management Areas.

<table>
<thead>
<tr>
<th>Management Area</th>
<th>GIS Acres*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area:</td>
<td></td>
</tr>
<tr>
<td>• Pine-Popple Rivers Habitat Management Area</td>
<td>7,626</td>
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<tr>
<td>Native Community Management Area:</td>
<td></td>
</tr>
<tr>
<td>• Robago Lake</td>
<td>479</td>
</tr>
<tr>
<td>• Savage Lake Proposed State Natural Area</td>
<td>1,650</td>
</tr>
<tr>
<td>Recreation Management Area, Type 3:</td>
<td></td>
</tr>
<tr>
<td>• CTH N ATV Trail &amp; Connector</td>
<td>6</td>
</tr>
<tr>
<td>Scenic Resources Management Area:</td>
<td></td>
</tr>
<tr>
<td>• Type 2: Pine &amp; Popple Backland Protection Zone</td>
<td>2,589</td>
</tr>
<tr>
<td>• Types 2 &amp; 3: Pine River Flowage</td>
<td>354</td>
</tr>
<tr>
<td>Wild Resources Management Area:</td>
<td></td>
</tr>
<tr>
<td>• Type 1: Robago Wild Lake</td>
<td>125</td>
</tr>
<tr>
<td>• Type 2: Pine &amp; Popple River’s Edge Protection Zone</td>
<td>2,186</td>
</tr>
</tbody>
</table>

*Not all acres are DNR-managed.

Property-Specific Goal

As two of only five state-designated Wild Rivers in Wisconsin, the Pine-Popple Wild Rivers are distinctive among department-owned and managed lands. This property’s primary purpose as defined in state statute and administrative code, to be protected from development “so as to afford the people of this state an opportunity to enjoy these rivers in their natural and free-flowing condition and to assure the well-being of Wisconsin’s tourist industry by attracting out-of-state visitors” (NR 302.01, Wis. Admin. Code), and its unique resources warrant a property-specific goal statement. This goal is in addition to the goals for all the NES EL properties as stated at the beginning of this chapter, and applies to both resource and public use management.
CHAPTER 2: Management, Development, and Use
Wild Rivers: Pine-Popple Wild Rivers

Goal

- Provide opportunities for river users to enjoy the wild, remote, and scenic qualities of a wild river by protecting and maintaining the Pine-Popple Wild Rivers in an undeveloped, natural, free-flowing condition.

Resource Management, Development, and Protection

Pine and Popple River’s Edge Protection Zone Wild Resources Management Area, Type 2 Setting

This 2,186-acre area comprises that portion of the wild river “protection zone”, as defined in NR 302.02(4), extending from the water to 150 feet on either side of the Pine and Popple rivers. This area is scenically beautiful, presenting river corridors of mixed coniferous-deciduous forests, rock outcrops, and waterfalls. Hemlock-hardwoods and conifer swamps of balsam fir, white cedar, black spruce, and tamarack are more prevalent in the upper reaches. River-side terraces and feeder streams can host both upland and wetland species, including hemlock, white cedar, white spruce, black ash, yellow birch, and sugar maple. Swamp hardwoods occur scattered along the river corridors, often associated with shrub wetlands. There are scattered areas of upland brush. Aspen and northern hardwoods are abundant throughout. These different habitats support a diversity of plants and animals, including some that are uncommon or rare. Mature stands of conifer and conifer-hardwoods have old-growth potential. Diverse, intact forest communities along the rivers are part of an extensive forested landscape that supports an abundance of breeding birds, provides travel corridors for many species, and protects water quality. Aquatic habitats support rare fish and aquatic invertebrates.

Objectives

- Manage this area to protect and maintain a wild, undeveloped condition where natural ecological processes predominate and evidence of human cultural impact is low.
- Enhance the coldwater fisheries of the Pine and Popple rivers through stocking.

Prescriptions

- Apply primarily passive management to the habitat types in this area, except as noted below to maintain or restore native vegetation and control invasive species.
- Control invasive species to protect ecological values and aesthetic quality. Hand cutting, herbicides, or biological controls may be used. Minimize the visual appearance of control activities.
- Restore any previously human-disturbed or eroded areas to a natural appearance. Limited vegetation may be removed if necessary when conducting restoration activities. Use only natural materials common to the local environment and native species in restorations.
- Do not salvage timber after natural disturbances.
- Continue stocking brown and brook trout in the Pine and Popple rivers.
**Pine and Popple Backland Protection Zone Scenic Resources Management Area, Type 2 Setting**

This 2,630-acre area comprises that portion of the wild river “protection zone”, as defined in NR 302.02(4), from 150 feet to 400 feet on either side of the Pine and Popple rivers. It is forested with similar cover types as the River’s Edge Protection zone as well as the Habitat Management Area (see p. 93) and also includes spring ponds, shallow seepage lakes, forested seeps and springs, and scattered bogs and sedge wetlands. These habitats provide complementary ecological values, including interior habitat, riparian corridor connectivity, and older age-classes, as well as contributing to the high-quality scenic value of the river corridors.

**Objectives**

- Manage this area to protect, maintain, and enhance the unique and high-quality aesthetic values of the river corridors, with a focus on an undeveloped, natural-appearing condition with little visual evidence of resource management.
- Where soils and cover type allow (primarily upstream of where the North Central Forest Ecological Landscape transitions into the Northeast Sands) manage forested habitats to maintain or increase the conifer component, favor longer-lived species that can attain large diameters, and encourage structural complexity characteristic of old or old-growth forests (e.g., large trees, old trees, coarse woody debris, uneven-aged structure, vertical complexity, etc.). Provide ‘soft’ transitions between this management area and adjacent areas.
- Manage the tributary streams in this management area for coldwater fisheries.

**Prescriptions**

- Apply primarily passive management to open wetlands and stands of lowland white cedar.
- Apply active management to stands of lowland spruce/tamarack only if deemed necessary to respond to pest or disease outbreaks, and only after consultation between staff from Forestry, Parks, Natural Heritage Conservation, and Wildlife Management.
- Monitor the impact of emerald ash borer on ash trees in this management area and respond if appropriate using the most current version of the DNR’s Emerald Ash Borer Silviculture Guidelines and the best available science and techniques. Maintain the potential to reforest the site if possible and prevent conversion to reed canary grass. Salvage of ash should involve consultation between Parks, Forestry, Natural Heritage Conservation, and Wildlife Management.
- Where soils and cover type allow, work towards converting most aspen stands in this zone to longer-lived species capable of attaining large size, including conifers. Retain some aspen for wildlife habitat and diversity.
- Apply extended rotation or old-growth management, especially to natural white pine, red pine, hemlock, and some northern hardwood stands (i.e., those with advanced regeneration of conifers, existing large trees, etc.), to promote growth and retention of large trees and structural characteristics of old forests. Retain and promote snags and abundant coarse woody debris.
- Hand planting of species like hemlock, oak, red pine, and white pine may be considered to maintain or increase their abundance.
• Encourage regeneration or reestablishment of hemlock, Canada yew, white cedar, and other conifers when appropriate through adaptive management techniques.

• Plan and implement management activities to minimize visual and auditory impacts to river users, prevent erosion, and soften sharp transitions between habitat types. Establish timber sale boundaries that are irregular and harmonize with local topography. Generally limit harvest activity to the period between September 15 and April 1 when river use is typically lower and negative environmental impacts can be minimized.

• Locate logging roads and decking sites outside of the river protection zone. Minimal temporary skid trails and decking areas are allowed. Close all skid trails and logging roads following completion of timber sales. Restore the first 50 feet of closed roads and trails to a natural-appearing condition (including planting native trees and shrubs) where they are not needed for future management activities.

• Within 100 feet of a designated trail or public road, remove or chip/lop and scatter slash to within 30 inches of the ground. Where effective visibility from the trail or road exceeds 100 feet, treat slash within that zone up to 200 feet from the trail or road.

• Restore any previously human-disturbed or eroded areas to a natural appearance. Use only natural materials common to the local environment and native species in restorations.

• Salvage of timber after natural disturbances may occur if necessary to maintain aesthetic values and visual quality. Any salvage should proceed only after consultation between staff from Parks, Forestry, and Wildlife Management. Disturbed areas may be planted with appropriate native species if natural regeneration proceeds too slowly.

• Control invasive species to protect ecological values and visual quality using appropriate mechanical, chemical, or biological methods. Minimize the visual appearance of control activities.

• Use of motorized equipment is allowed when conducting restoration and authorized management activities.

• Follow the Forested Seeps and Ephemeral Pond Common Elements.

• Follow the Coldwater Streams Common Element. Consult with Natural Heritage Conservation and the property manager before applying any active management techniques.

Savage Lake Proposed State Natural Area – Native Community Management Area

This 1,650-acre area is located in the far northwestern portion of the Pine-Popple Wild Rivers property, encompassing a portion of the area identified in the Goodman Wild Lakes and Pine River Primary Site (WDNR 2011). The proposed SNA extends from the western property boundary to just east of Savage Lake and from the southern property boundary north across the Pine River to the northern property boundary, abutting the Kieper Creek SNA on the Chequamegon-Nicolet National Forest (CNNF). The proposed SNA encompasses portions of the River’s Edge Protection Zone Wild Resources Management Area and the Backland Protection Zone Scenic Resources Management Area (see descriptions of these areas, above); these river protection zones retain their respective land management classifications and management objectives and prescriptions. The proposed SNA also encompasses the disjunct tract of Haley Creek Swamp SNA that is located just south of Savage Lake; this tract, which includes two small spring ponds known as Dorothy Lake and Mud Lake, will become part of the new SNA. The full acreage of the proposed SNA is 1,881 acres.
The Savage Lake Proposed SNA contains high-quality upland and lowland forest communities, including Northern Mesic Forest and Northern Wet-mesic Forest, as well as the undeveloped Savage Lake, two small spring ponds, and some forested bedrock outcrops. The Northern Mesic Forest is dominated by sugar maple, with hemlock, yellow birch, basswood, and white cedar as associates. A sparse shrub layer contains red elderberry, red raspberry, American fly honeysuckle, and mountain maple. The herbaceous layer ranges from relatively depauperate, with Pennsylvania sedge, wild sarsaparilla, and large-leaved aster dominating, to more diverse with numerous spring ephemerals such as spring beauty, Dutchman’s breeches, squirrel-corn, yellow trout lily, broad-leaved toothwort, cut-leaved toothwort, wild leek, bloodroot, and large-flowered trillium. Also present are bishop’s-cap, tall white violet, downy yellow violet, blue cohosh, lady fern, hairy sweet cicely, maidenhair fern, long-stalk sedge, Wood’s stiff sedge, plantain-leaved sedge, northern beech fern, rough-leaved rice grass, horse-gentian, mountain woodsorrel, blue-bead lily, shining club-moss, Jack-in-the-pulpit, large-flowered bellwort, Canadian wood-nettle, and white chervil.

A significant proportion (approximately 20%) of the proposed SNA is composed of forested wetlands of tamarack, white cedar, black ash, and balsam fir. Shrubs include Labrador-tea, velvet-leaf blueberry, speckled alder, mountain maple, and American fly honeysuckle. Herbs include three-seeded sedge, three-leaved gold-thread, swamp false Solomon’s-seal, blue-bead lily, bishop’s-cap, bunchberry, fowl manna grass, slender sedge, small enchanter’s nightshade, crested wood fern, spinulose wood fern, and nodding trillium.

The proposed SNA represents a landscape-scale old-growth forest management opportunity. The area was cited in DNR’s Old-growth and Old Forests Handbook as a representative site for Old Forest in the Reserved management class. Adjacent SNAs identified on the CNNF across the Pine River to the north also contain old forest, and the entire site is embedded in a large tract of private Forest Legacy land that has been selectively managed for large saw-logs. The combination of state, federal, and easement lands and existing SNAs makes this site one of the most significant opportunities in the state to manage for old and old-growth forest within a contiguous forested landscape. While many upland stands have been actively managed for over a century, the integrity of the ground layer, including the presence of rare plants, remains, and the forested wetlands have seen very little disturbance. The site hosts an exceptional diversity of breeding birds, including forest interior species, conifer-dependent species, and forest raptors. There are significant opportunities to restore under-represented successional stages that would naturally have occurred here and to promote habitat for rare species using a combination of active and passive management techniques.

The land that includes the proposed SNA is part of a 5,600-acre area purchased by The Nature Conservancy from International Paper in 2006 as part of a larger transaction that secured a working forest conservation easement on an additional 59,000 acres of land in the surrounding landscape. The fee title land and the easement were later transferred to the state. Several decades prior to state acquisition of this area, the lands were managed with long-term sustained yield harvesting practices by the Goodman Lumber Company going back to before 1900. The land changed hands many times since Goodman began divesting its ownership several decades ago, but has remained intact and not subdivided. These factors – long-term single ownership, management emphasizing selective harvest for large saw-logs, and no parcelization or fragmentation – kept the forests in this area from being clear-cut and burned, as happened throughout much of northern Wisconsin, and maintained ecological integrity (e.g., intact ground layer, rare plants, high breeding bird diversity) in some areas. It is this combination of restoration potential within the site and its location within a larger, intact forested landscape that will remain forested
(as well as open to public recreation and managed for production forestry), that creates a unique opportunity to restore, develop, and maintain structural and composition characteristics of old forests, which are now very rare in the state.

The Savage Lake Proposed SNA is open to hunting, fishing, trapping, hiking, snowshoeing and cross-country skiing, nature observation, research activities (with an approved permit), and collection of wild edibles. There are two DNR roads open to public highway-licensed motor vehicles that cross through the proposed SNA. These roads connect from Savage Lake Road and the Goodman Grade. One road borders the eastern boundary of the site and then enters north of Savage Lake and continues westward, terminating at the state ownership boundary. The second road traverses the site south of Savage, Dorothy, and Mud Lakes and continues west onto industrial forest property. There is also a small parking area east of Savage Lake, with a short (0.07 mile) road leading from the parking area to the lake. This road is in poor condition, with soft soils that are prone to rutting. Some modest improvements are proposed for this road to enhance access while preventing ground disturbance and erosion. There are also a number of primitive access ways, stemming from the two main gravel roads, that are currently closed to motor vehicles but open to foot travel. No change is proposed to these access ways; they will remain closed to public motor vehicles and open to foot travel.

Objectives

• Maintain the forested and non-forested wetlands in a natural, undisturbed condition.

• Manage the northern hardwood and hemlock-hardwood stands on the site to develop or maintain old forest ecological attributes, including large trees, old trees, abundant coarse woody debris, numerous standing dead snags, a diversity of age classes, multi-storied canopies, canopy gaps in a range of sizes, and increased recruitment of trees species other than sugar maple. Use the guidelines for the ‘Old Forest’ ecological class and ‘Managed’ management class in the Old-growth and Old Forests Handbook.

• Provide opportunities for research and encourage visitor enjoyment and appreciation of the unique aesthetic characteristics of old-growth forest.

• Protect the scenic and undeveloped characteristics of Savage, Dorothy, and Mud lakes.

Prescriptions

• Apply passive management to the forested and non-forested wetlands except for invasive species control.

• Apply passive management to a 200-foot buffer around Savage, Dorothy, and Mud lakes except for invasive species control.

• In hemlock and northern hardwood stands, use timber management to enhance the development, composition, and structure of managed old forest. Following stand assessment, apply techniques that mimic natural processes (e.g., large and small patch clear-cuts, group selection, ground disturbance, limited planting) to move these communities into late-successional stages.

  o Apply uneven-aged management with a ≥30-inch maximum tree size class and longer (20-25-year) cutting cycles.
Timber harvest may be used to maintain the vigor of selected trees; enhance composition, structure, or function; manipulate reproduction; simulate natural processes; or accomplish other management objectives. Leave 5-10 pulpwood trees/acre as coarse woody debris.

Encourage the development and maintain the representation of large-diameter trees. Allow trees to reach biological rotation age (generally 320+ years for hemlock and yellow birch, 250+ years for sugar maple and white pine, and 200+ years for basswood).

Maintain and encourage the development of large-diameter (>18” DBH) live cavity trees, snags, and downed woody debris. The creation of snags and downed woody debris with the use of girdling, cutting, and other techniques may be considered. If available, retain at least:

- 4 snags/acre >12” DBH
- 2 snags/acre >18” DBH
- 1 snag/acre >24” DBH
- 3 cavity trees/acre >18” DBH
- ≥5 sound trees/acre >18” DBH to develop into large, old trees and to complete their natural lifespan.

Attempt to approximate gap sizes and distributions characteristic of old, unmanaged forests. Most canopy gaps are <0.1 acre in size, and gaps of 0.01-0.03 acre tend to be common. Use larger gaps, up to 0.5 acre in size, to promote mid-tolerant species. Average annual gap formation rates are commonly 0.5-0.9% of a stand or group of stands, with a highly variable size range and distribution.

Encourage regeneration or reestablishment of hemlock, Canada yew, white cedar, yellow birch, and other conifers where appropriate through adaptive management techniques. Retain most individuals of these species and create appropriate seedbed and shade conditions to favor and gradually increase their numbers in the forest.

Encourage horizontal and vertical structural diversity using both active management focusing on uneven-aged techniques and passive management following natural disturbance.

Underplanting with native, local genotype tree seeds and seedlings may be considered. To enhance seedling establishment, small areas may be scarified or cleared of advanced sugar maple regeneration if needed to encourage species diversity.

Convert stands of aspen, white birch, and other early-successional species to northern hardwoods.

Use monitoring information on changes in composition and structure from old-growth reference sites/stands to aid in future management decisions.

Follow the Ephemeral Pond Common Element.

Do not harvest fine woody material, as defined in Wisconsin’s Forestland Woody Biomass Harvesting Guidelines (Herrick et al. 2009).

Do not salvage in forested wetlands or in the 200-foot passive management zone around Savage, Dorothy, and Mud lakes. In uplands, partial salvage may be permitted after evaluation and consultation with staff from affected programs, including Parks, Forestry, Wildlife, and Natural Heritage Conservation. At maximum, 50% of salvageable materials, by species and size class, may be salvaged. In special cases where significant negative impacts to forest health, forest fire protection, or forest aesthetics can be demonstrated, additional salvage may be approved.
• Inventory, monitor, and control invasive species as time and resources allow.
• Attempt to limit the negative ecological and silvicultural impacts of excessive herbivory by maintaining access to the area for deer hunters. The use of fencing to limit excessive herbivory on regeneration and sensitive areas of the proposed SNA may be employed where feasible.
• Provide opportunities for research via NHC’s State Natural Areas Research or Collection Application and Permit (Form 9400-280).

Robago Wild Lake Wild Resources Management Area, Type 1 Setting

This 125-acre area in the far northwestern portion of the property includes the undeveloped Robago Lake and a 400-foot zone around the lake. Robago Lake and the surrounding lands are within the area identified as the Goodman Wild Lakes and Pine River Primary Site (WDNR 2011). Cover types around the lake consist of both open and forested wetlands and some stands of northern hardwoods. An existing primitive road branching off Savage Lake Road provides access to Robago Lake from the south, although this road is in poor condition due to soft, wet soils and may need to be relocated.

Wild Lakes are defined as Wild Resources Management Areas in NR 44.06(10). On Wild Lakes, human influence on the lake or its surroundings is not conspicuous. The lakes and their shorelines, within 400 feet or to the visual horizon from the lake, whichever is farther, are natural-appearing without signs of management. Public motor vehicle access is restricted to the designated access road. All other public motorized vehicle use, including motor boat use, within the 400-foot Wild Lake zone is prohibited. Motor vehicles may be used for restoration activities as specified below or in response to significant health and safety emergencies.

Objectives

• Manage Robago Lake to maintain an undeveloped condition without conspicuous signs of human influence for scenic, ecological, and habitat values, while continuing to provide public access.
• Improve wild rice habitat in Robago Lake as feasible.

Prescriptions

• Apply passive management to the 400-foot zone around the lakeshore except for invasive species control.
• Do not salvage following a natural disturbance.
• Actively suppress forest fires that threaten areas outside the management area using the minimum actions required. Restore any disturbed soil to a natural-appearing condition.
• Monitor insect and disease outbreaks when they occur and take action only when there is a significant threat to forests outside the management area, in consultation with staff from Forestry, Parks, Natural Heritage Conservation, and Wildlife Management.
• As feasible, seed Robago Lake with wild rice to improve conditions for wildlife and enhance ecological values.
Robago Lake Native Community Management Area

This 479-acre area in the far northwestern portion of the Pine-Popple property encompasses lowland and upland forested areas to the east, north, and northwest of Robago Lake, and includes lands identified in the Goodman Wild Lakes and Pine River Primary Site (WDNR 2011). The forest types include white cedar, northern hardwoods, and hemlock.

This site includes high-quality Northern Mesic Forest and Northern Wet-mesic Forest communities and some forested bedrock outcrops. The Northern Mesic Forest is similar in composition to that described in the proposed Savage Lake State Natural Area and has been managed with selective harvest. The Northern Wet-mesic Forest has not been managed. This site presents opportunity to maintain and enhance ecological attributes of old forest.

Objectives

• Maintain the forested and open wetlands in a natural, undisturbed condition.

• Manage the northern hardwood and hemlock-hardwood stands on the site to develop or maintain old forest ecological attributes, including large trees, old trees, abundant coarse woody debris, numerous standing dead snags, a diversity of age classes, multi-storied canopies, abundant canopy gaps in a range of sizes, and increased recruitment of tree species other than sugar maple. Use the guidelines for ‘Old Forest’ ecological class and ‘Extended Rotation’ management class in the Old-growth and Old Forests Handbook.

Prescriptions

• Apply passive management to the open and forested wetlands except for invasive species control.

• In hemlock and northern hardwood stands, use timber management to enhance the development, composition, and structure of extended rotation old forest. Apply techniques that mimic natural processes (e.g., large and small patch clear-cuts, group selection, ground disturbance, limited planting) to move these communities into late-successional stages.

  o Apply adaptive, single-tree selection stocking guide based on 30-inch DBH maximum size class and longer cutting cycles. Retain the four largest trees per acre as reserve trees, which will supply the recommended stocking in the largest size class. Spatial distribution of reserve trees can be variable. Allow designated reserve trees to live out their natural life-spans. As they develop, they can provide large trees, cavity trees, snags, and downed woody debris.

  o Maintain and encourage the development of large-diameter (≥18” DBH) live cavity trees, snags, and coarse woody debris. The creation of snags and downed woody debris through the use of girdling, cutting, and other techniques may be considered. If available, retain at least:
    ▪ 3 snags/acre >12” DBH
    ▪ 3 snags/acre >18” DBH
    ▪ 1-3 cavity trees/acre >18” DBH

  o Attempt to create gaps of variable size and distribution to simulate low-intensity natural disturbance.
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- Encourage regeneration or reestablishment of yellow birch as well as hemlock, white cedar, and other conifers where appropriate through adaptive management techniques. Retain most individuals of these species and create appropriate seedbed and shade conditions to favor and gradually increase their numbers in the forest.

- Encourage horizontal and vertical structural diversity using both active management focusing on uneven-aged techniques and passive management following natural disturbance.

- Underplanting with native, local-genotype tree seeds and seedlings may be considered. To enhance seedling establishment, small areas may be scarified or cleared of advanced sugar maple regeneration if needed to encourage species diversity.

- Do not salvage in forested wetlands. In uplands, partial salvage may be permitted after evaluation and consultation with staff from Parks, Forestry, Natural Heritage Conservation, and Wildlife Management. At maximum, 75% of salvageable materials, by species and size class, may be salvaged. In special cases, where significant negative impacts to forest health, forest fire protection, or forest aesthetics can be demonstrated, additional salvage may be approved.

- Attempt to limit the negative ecological and silvicultural impacts of excessive herbivory by maintaining access to the area for deer hunters. The use of fencing or cribbing to limit excessive herbivory on regeneration and sensitive areas may be employed where feasible.

**Pine River Flowage Scenic Resources Management Area, Type 2 Setting**

This 354-acre area comprises the Pine River Flowage and land from the water’s edge extending out 400 feet around the entire Pine River Flowage, created by the Pine Dam which is owned and operated by We Energies. This is a remote and scenic area, forested primarily with northern hardwoods and aspen-birch with smaller amounts of pine and spruce. This management area is assigned a Type 2 Recreational Use Setting.

The department owns approximately 40 acres within the Pine River Flowage Scenic Resources Management Area. The remainder is owned by We Energies as part of their Pine Hydro project. The Recreational Use Setting, objectives, and prescriptions described for this management area apply only to department-managed lands within the management area.

**Objectives**

- Manage this area to protect, maintain, and enhance the unique aesthetic values of the Pine River Flowage, with a focus on an undeveloped, natural-appearing condition with little evidence of resource management.

**Prescriptions**

- Apply passive management to the habitats in that portion of shoreline extending from the water’s edge to 150 feet around the Pine River Flowage, except as noted below to maintain or restore native vegetation and control invasive species.

- Manage forested habitats to promote longer-lived species that can attain large diameters, including conifers.
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- Apply extended rotation to some stands of both hardwoods and conifers to promote growth and retention of large trees and structural characteristics of old forests.

- Plan and implement management activities to minimize visual and auditory impacts to flowage users, prevent erosion, and soften sharp transitions between habitat types. Establish timber sale boundaries that are irregular and harmonize with local topography. Generally limit harvest activity to the period between September 15 and April 1 when recreational activity is typically lower and negative environmental impacts can be minimized.

- Within 100 feet of a designated trail or public road, remove or chip/lop and scatter slash to within 30 inches of the ground. Where effective visibility from the trail or road exceeds 100 feet, treat slash within that zone up to 200 feet from the trail or road.

- Restore any previously human-disturbed or eroded areas to a natural appearance. Use only natural materials common to the local environment and native species in restorations.

- Control invasive species to protect ecological values and visual quality using appropriate mechanical, chemical, or biological methods. Minimize the visual appearance of control activities.

- Use of motorized equipment is allowed when conducting restoration and authorized management activities.

*Pine-Popple Rivers Habitat Management Area*

This 7,626-acre area comprises the remainder of the Pine-Popple Wild Rivers property not covered under other land management classifications. Upland forest habitats are more prevalent in this area, especially aspen and northern hardwoods, with scattered conifers, upland brush, and grassy openings.

**Objectives**

- Maintain and enhance the quality of existing habitats for the benefit of resident and migratory wildlife and to sustain hunting, fishing, and other wildlife/nature-based recreational activities.

- On highly suitable sites (where soils and the aspen component allow, and where management on surrounding lands permits management at a larger scale), manage early-successional forest types, primarily aspen, to enhance young-forest habitat for the benefit of property users and associated game and non-game wildlife species. These sites are primarily in the southern portion of the property, primarily downstream of where the North Central Forest Ecological Landscape transitions into the Northeast Sands.

- Manage the tributary streams in this management area for coldwater fisheries.

**Prescriptions**

- Follow the General Wildlife Habitat Management, General Forest Management, Aspen, Coldwater Streams, Northern Hardwoods, Red Maple, Swamp Hardwoods, and Wetlands Shrub – Alder Common Elements.

- Manage forested habitats to maintain the cover types and to increase structural and compositional (including conifers) diversity.
• Improve age-class diversity in aspen blocks by managing for smaller (≤20 acres) stands of varying ages rather than larger, single-age blocks, where feasible.

• When harvesting aspen stands, attempt to retain 10-15 live trees per acre, with some conifers, aggregates, and residual trees scattered throughout the stand. Focus should be placed on trees ≥9” DBH. If the stand has few large-diameter trees, foster smaller trees for future retention.

• Maintain connectivity with adjacent habitats and provide soft transitions between habitat types.

• Within the visual horizon of the rivers, provide the appearance of a low level of management. Attempt to minimize visual and auditory impacts of management on river users.

• Allow grassy openings to succeed to forest where they are not needed to serve as log landings.

Public Use Management and Development

Objectives

• Maintain the Pine-Popple Wild Rivers in a natural, free-flowing, unaltered state for the enjoyment of river users.

• Provide conditions where river users may feel they are in a secluded, wild area remote from human activity, with opportunities for solitude and primitive, non-motorized recreation to enjoy the scenic beauty of the rivers, and with little or no visible management.

• Continue positive relationships with external partners and the public.

Prescriptions

• Maintain existing hiking and portage trails, as listed in Table 2.29 above. Evaluate the LaSalle Falls and Big Bull Falls trails for potential enhancements, and implement.

• Maintain existing parking areas and boat access sites. Evaluate overall use of the existing sites to determine if expansion or additional amenities to support wild river users, such as kiosks or portable toilets, are needed. Any further developments will be well-screened from the river by vegetation or topography. Any new parking areas will be located outside the 400-foot protection zone and well-screened from the river by vegetation or topography.

• Work with partners to facilitate parking improvements at the Oxbow as needed to accommodate public use and as compatible with land management classifications.

• Construct a small parking area (approximately 3-car pull-off) at the Jennings Falls trailhead, off Mulberry Lane.

• Construct a small parking area (approximately 3-car pull-off) at the end of the easement road off Morgan Lake Road on land along the Popple River.

• Evaluate access roads to the property and determine if additional signage is necessary. Provide additional signage as appropriate.

• Close and passively abandon (i.e., close and do not maintain) 2.6 miles of department managed roads, as indicated on Map J-2, that provide limited connectivity or utility for resource management, including forest management on adjacent private lands. As these abandoned roads will continue to provide foot
access-ways for hunters and other property users, provide and maintain small off-highway parking for 1-2 vehicles as appropriate.

- Evaluate use of existing campsites and determine whether they should be moved to a location that would better serve river users and whether any additional sites should be developed. Any new sites will be located outside the 150-foot protection zone and be well-screened from the river by vegetation or topography.

- Improve the road access leading to Savage Lake, provide a turnaround for carry-in boat access, and control erosion around the lakeshore as needed to maintain ecological integrity.

- Provide interpretive signage at the Savage Lake parking area for the proposed new SNA that educates visitors about the unique features of the site.

- Explore the feasibility of closing the existing access road to Robago Lake, which is in poor condition due to soft, wet soils, and developing a new access road on drier soils to the north in order to maintain access to the lakeshore for authorized management and low-impact recreational activities. A possible location is off Savage Lake Road north of the existing parking area, where the road begins curving to the northwest. Develop a new primitive access road if feasible; this will become the authorized access road to the Wild Lake.

- Install boat slides at Savage and Robago lakes if needed to control erosion.

- Coordinate with We Energies to develop a primitive trail from Pine River Road (north of the Pine River) to provide views of Breakwater Falls and access to the Pine River. This would include a small parking area (approximately 4-car pull-off) separate from We Energies campground #34.

- Update the property brochure and other maps to include new facility developments.

- Maintain agreements with Florence County for operation and maintenance of existing snowmobile and ATV trails on the property.

- Maintain existing ATV/snowmobile trail crossings as allowed by s.30.26(4), Wis. Stats.

- DNR staff will only remove downed trees within the rivers that pose an immediate safety threat to river users. Those trees that fall naturally into the rivers and pose no immediate safety concern will not be removed by DNR staff.

- Perform selective thinning of trees along the slope at the Massey Wayside off CTH N to allow for scenic views of the Pine River.

- Continue meetings of the Pine-Popple Wild Rivers Advisory Committee. Meetings should be held at least once per year and be open to the public. The continued purpose of this committee is to provide public input, discussion, and recommendations regarding management of DNR lands and recreation activities associated with the Pine-Popple Wild Rivers property.

- Continue partnerships with the U.S. Forest Service and We Energies. Review existing MOUs and update these agreements as needed.

- Work with the utility company to limit unauthorized motor vehicle use of the pipeline corridor that crosses the Pine River.
WAUSAUKEE STEWARDSHIP DEMONSTRATION FOREST

PROPERTY OVERVIEW

The Wausaukee Stewardship Demonstration Forest is located in east-central Marinette County northeast of Wausaukee, just north of the intersection of Pike River Road and Beach Road. It is a small parcel with flat to gently rolling topography. The land cover is conifer forest, predominantly white pine with a small amount of red pine, consisting of large, old trees with an understory of white pine saplings and seedlings. Aspen is a secondary timber type on a small portion of the property. There are no water resources on the property. The State of Wisconsin acquired the property from the federal government in 1908. Starting in 1945, through agreements between the Wisconsin Conservation Department (the precursor to DNR), the University of Wisconsin Extension Service, and (in 1946) the U.S. Forest Service, the property became a Timber Harvest Forest, used to demonstrate timber production and harvesting practices to private landowners through a series of field days that were held periodically until the 1960s. Harvests occurred in conjunction with these field days. The property was also used for research.

Due to various factors, no field days were held through the 1970s and by 1980 it was decided that the pine sawtimber growing on the property was not typical of the type of timber most landowners had growing on their properties. This limited the value of further demonstration harvests, and harvests after 1980 were for the purposes of sustainably managing the forest resource on the property and did not have an active educational component. In 1990, the property was re-designated as a Stewardship Demonstration Forest, and new signage was installed to promote this concept. The property was open to the public to tour the forest on their own and observe sustainable forestry taking place, but no formal field days were offered. This has continued into the present.

A Tier 3 Management Plan was developed for the Wausaukee Stewardship Demonstration Forest and approved by the Natural Resources Board in 2014. That plan is being incorporated into the NES plan. The resource and public use management described below is consistent with the Tier 3 plan.

PUBLIC USE AND RECREATION FACILITIES

The Wausaukee Stewardship Demonstration Forest is open to a variety of recreational activities including hunting, hiking, and nature enjoyment.

There is a primitive horseshoe-shaped road, approximately a half-mile in length, that traverses the property (Map K). This road is gated at the two places where it meets Pike River Road and is open to foot travel. There is one small parking area.
CURRENT NATURAL RESOURCES MANAGEMENT

The forest on the property is managed with sustainable forestry practices to produce quality white pine sawtimber.

LAND MANAGEMENT CLASSIFICATION

This entire property is classified as Forest Production Area.

RESOURCE MANAGEMENT, DEVELOPMENT, AND PROTECTION

Objectives

- Manage the forest on the property to demonstrate sustainable forest management and responsible stewardship.
- Maintain the white pine cover type and manage to produce high-quality sawtimber.

Prescriptions

- Accommodate educational visits by students, professional foresters, and non-industrial private forest owners.
- Manage the white pine with shelterwood harvests on a 110-180-year rotation.
- Apply periodic thinnings to immature white pine stands.
- Use aesthetic management techniques along Pike River Road to reduce the visual impact of harvesting and to maintain some white pine legacy trees.
- Periodically thin red pine stands, slowly allowing them to naturally convert to white pine. Retain scattered red pine legacy trees.
- Maintain aspen for diversity and wildlife habitat by applying coppice harvests every 40-50 years.
- Monitor the presence of invasive species and apply control measures as appropriate.

PUBLIC USE MANAGEMENT AND DEVELOPMENT

The following prescriptions support the general recreation and public use objectives and prescriptions presented at the beginning of this chapter.

Prescriptions

- Maintain current recreational activities on the property.
- Maintain the existing road, parking area, and gates.
PROPERTIES WITH NR 44-COMPLIANT PLANS

GOVERNOR EARL PESHTIGO RIVER STATE FOREST

Property Overview

The Governor Earl Peshtigo River State Forest (GEPRSF) is a 13,192-acre property located in west-central Marinette County and northeastern Oconto County. It was established in 2001. The property contains mature forests and wetlands and provides access to two large flowages as well as a high-quality stretch of the Peshtigo River. It is managed for sustainable forestry and wildlife habitat and to provide abundant recreational opportunities for property users. Existing road infrastructure is shown on Maps L-1 A to C.

The Natural Resources Board approved a name change for this property from Peshtigo River State Forest to Governor Earl Peshtigo River State Forest at their September 25, 2019 meeting.

Updates to the Existing Master Plan

The GEPRSF has a NR 44-compliant master plan, approved in 2007 with several subsequent variances, that is incorporated into the NES plan by reference. The Peshtigo River State Forest (PRSF) master plan will now be on the same update schedule as this regional plan. The following updates to the PRSF master plan are being made as part of the NES plan.

All-Terrain Vehicles (ATVs)

As stated in the PRSF master plan, the department supports the development and maintenance of ATV riding opportunities on appropriate trails, particularly trails that connect to regional trail networks.

In cooperation with representatives of a local ATV club, department staff have identified three potential corridors on the property to investigate for possible future trail development. These potential corridors will be evaluated for suitability to support trail segments that re-route ATV traffic off existing town road routes for safety. The evaluation will consider various factors, including physical suitability (soils, slope, existing land cover, etc.), existing recreational uses, and compatibility of land uses on adjacent private lands.

Recreational Trails on the Potato Rapids Flowage Unit

The GEPRSF has many miles of open access ways throughout the property. The Potato Rapids Flowage, a 771-acre parcel located outside of the main state forest boundary near the cities of Peshtigo and Marinette, has a unique network of trails that currently allow recreational uses including hiking, bicycling, hunting, horseback riding, and snowshoeing, unless otherwise posted. The trails are located north of STH 64 along Potato Rapids Road and Bagley Road, and are compacted sand or gravel or sometimes less stable material such as a mixture of sand and muck. These trails have been utilized by the public for years.
primarily for horseback riding, hiking, and biking. In the recent past, these trails have increased in popularity with horseback riders and mountain bikers from southeastern Marinette County. These existing trails are considered to be designated trails by the department and will be maintained by the local user groups through an agreement with the department. The allowed trail uses will remain the same.

A portion of this trail system has been discovered to impact both a prehistoric archaeological site and an early European settlement. This area (14.7 acres) is proposed to be closed to trail use (Map L-2).

The department will work with trail users to expand the trail system into the former archery range west of the Peshtigo River and also to develop trail head facilities (small covered shelter and portable toilets) at the southern end of the property near STH 64.

**Land Management Classifications for Parcels Acquired Since Master Plan Approval**

Four small parcels, totaling 16.22 acres, have been acquired within the GEPRSF project boundary since the approval of the PRSF Master Plan in 2007 (Map L-3). These parcels do not have a land management classification, and are being assigned one as part of the NES plan.

**Addition to Peshtigo River Flowages Forest Production Area**

The two parcels outlined in the inset labeled “Peshtigo River Flowages” on Map L-3 (totaling 3.1 acres) are being added to the existing adjacent Peshtigo River Flowages Forest Production Area.

**Addition to Fly Fishing Area Forest Production Area**

The 0.47-acre parcel outlined in the inset labeled “Fly Fishing Area” on Map L-3 is being added to the existing adjacent Fly Fishing Area Forest Production Area.

**CTH C Habitat Management Area**

The 12.65-acre parcel outlined in the inset labeled “CTH C” on Map L-3 is located along CTH C northwest of the main body of the GEPRSF property. It consists of a roadless, forested area that slopes steeply down to the Peshtigo River. The poor access, steep topography, and proximity of the Peshtigo River make this parcel poorly suited for active forest management. This parcel is classified as Habitat Management Area. The objective is to maintain existing cover types using primarily passive management. Staff will evaluate the feasibility of locating a primitive campsite on this parcel; a primitive campsite may be developed in the future if feasible.

**Big Eagle Creek Public Access**

This 40-acre parcel is located just outside the GEPRSF property project boundary at the corner of Tower Road and Eagle River Road. The parcel is proposed for re-designation as GEPRSF and inclusion within the state forest boundary as part of this master plan (see Real Estate Actions section, p. 117).

The property was purchased to protect and provide public access to Eagle Creek, which traverses the parcel from north to south. Eagle Creek is an Outstanding Resource Water (ORW). These, along with Exceptional Resource Waters (ERW) are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not
significantly impacted by human activities. ORWs receive the state’s highest protection standards. Eagle Creek is also a Class I trout water, with natural reproduction of brook trout. Extensive trout habitat rehabilitation work was conducted along a 1,320-foot segment of Eagle Creek downstream from the Eagle River Road crossing in the late 1980s and early 1990s, including construction of a sand trap and installation of bank covers, boulder retards, and rip-rap.

The parcel is forested and has no developed facilities. Access is via Tower Road, which runs across the property near its eastern border, and a primitive DNR road coming off Eagle River Road which provides access to the interior of the parcel. A grassy opening near the end of the DNR road serves as a parking area.

Land Cover

Land cover on this parcel consists of forest and stream. Specific cover types are listed in Table 2.32, below.

**Table 2.32. Big Eagle Creek Public Access Cover Types.**

<table>
<thead>
<tr>
<th>Cover Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
</tr>
<tr>
<td>Aspen</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
</tr>
<tr>
<td>White Pine</td>
</tr>
<tr>
<td>Forested Wetland</td>
</tr>
<tr>
<td>Swamp Hardwood</td>
</tr>
<tr>
<td>Upland Grass</td>
</tr>
<tr>
<td>Cool-season Grass (Surrogate Grassland)</td>
</tr>
<tr>
<td>Open Water</td>
</tr>
<tr>
<td>Coldwater Streams</td>
</tr>
<tr>
<td>Developed</td>
</tr>
<tr>
<td>Right-of-way</td>
</tr>
</tbody>
</table>

Land Management Classification

This parcel is classified as Habitat Management Area (see inset labeled “Big Eagle Creek” on Map L-3).

Resource and Public Use Management

Objectives

- Maintain and enhance existing cover types for the benefit of resident and migratory wildlife and to sustain hunting, fishing, and other wildlife/nature-based recreational activities.
- Follow the general recreation and public use objectives and prescriptions presented at the beginning of this chapter, as well as specific public use prescriptions below.
Prescriptions

- Follow the General Fisheries Management, General Forest Management, and General Wildlife Habitat Management Common Elements and the cover type-specific Common Elements for the cover types listed in Table 2.32, above, for management of the vegetative cover types on this parcel, unless otherwise indicated below.
- Apply passive management to the swamp hardwoods stands on this parcel.
- Follow the Coldwater Streams Common Element.
- Maintain the existing road and parking area.

Governor Earl Peshtigo River State Forest; photo by Jonathan Kult
CHAPTER 2: Management, Development, and Use
Properties with NR 44-compliant Plans: Governor Thompson State Park

GOVERNOR THOMPSON STATE PARK

Property Overview

**Governor Thompson State Park** (GTSP) is a 2,967-acre property located west of Crivitz in west-central Marinette County, directly adjacent to the Governor Earl Peshtigo River State Forest. It was established in 2000. The property presents a mix of forested uplands and wetlands, and has about 6 miles of shoreline on the Caldron Falls Reservoir along the northwestern property boundary. GTSP is managed to provide a variety of public recreational and educational opportunities in a rustic forested setting. The park’s resources are managed to provide a range of ecological, social, cultural, and economic benefits within its capabilities. Existing road infrastructure is shown on Map M-1.

**Updates to the GTSP Master Plan**

GTSP has a NR 44-compliant master plan, approved in 2004 with a subsequent variance, that is incorporated into the NES plan by reference. The GTSP master plan will now be on the same update schedule as this regional plan. The following updates to the GTSP master plan are being made as part of the NES plan.

**FERC Project Boundary**

The following language regarding an existing Federal Energy Regulatory Commission (FERC) project boundary on the property is being added at the request of Wisconsin Public Service Corporation (WPS) for consistency with similar language in the Peshtigo River State Forest Master Plan.

A portion of land within the Governor Thompson State Park adjacent to the Caldron Falls reservoir is within the FERC project boundary of WPS’s Caldron Falls Hydroelectric Project (Project No. 2525). This land consists of a 200-foot-wide strip of land upland of the reservoir constituting a shoreline buffer, some submerged lands, and recreational properties. Beginning in 2001, WPS transferred 9,738 acres of land that help form the core of the Governor Earl Peshtigo River State Forest and Governor Thompson State Park. WPS transferred 174 acres of land to the WDNR for the creation of Governor Thompson State Park. The transfer of land included documents that require the WDNR to manage the conveyed property in accordance with the terms of WPS’s FERC license for the Caldron Falls Project (Project No. 2525), High Falls (Project No. 2595), Johnson Falls (Project No. 2522), Sandstone Rapids (Project No. 2546), and Potato Rapids (Project No. 2560) Hydroelectric Projects; collectively known as Peshtigo River Hydroelectric Project, and all approved exhibits including but not limited to the Recreation Plan, Comprehensive Land and Wildlife Management Plan, and the Historic Resource Management Plan.

**Public Use Management**

**Caldron Falls Reservoir Swimming Area**

The GTSP master plan includes establishment of a small swimming area on Caldron Falls Reservoir (p. 15).
This swimming area and associated facilities (access road, parking area) were approved by the State Building Commission, but will not be developed at this time.

**Golf Cart Use**

Section 27.01(17), Wisconsin Statutes, arising out of 2009 Wisconsin Act 54, directs the department to allow golf cart use on GTSP and to specify where and when this use may take place. Golf carts must be allowed in at least the same areas of the property and for at least the same hours as golf carts were used prior to state acquisition of the property.

A golf cart trail is currently being developed between Fabian Lane and the South Bay boat landing (#13) to provide golf carts with access to a parking area at the boat landing.

**Otter Hiking/Cross-country Ski Trail**

The department will provide up to 2 additional miles of trail to the existing Otter hiking/ski trail.

**Canoe/Kayak Launch**

The department will provide a canoe/kayak launch at South Bay Landing.

**Resource Management**

**Barrens Management Areas**

Two small pine barrens management areas, one of 20 acres and one of 16 acres, are identified in the GTSP master plan (p. 25). Both of these are classified as Native Community Management Area with the objective of restoring and maintaining pine barrens habitat, primarily through prescribed fire. Selective cutting, herbicide application, and planting are also authorized management activities.

In 2017, the department initiated a new prescribed burn policy that established a minimum burn unit size (currently 25 acres) and directs staff to assign a priority ranking to burn units. As a result of this policy, fire may no longer be available as a management tool for the barrens areas on GTSP, as the parcels are small and isolated and unlikely to rank as high priorities for prescribed burns. Accordingly, prescribed fire will not be the primary management tool for these parcels, and the barrens habitat will be maintained mainly through use of the other management activities authorized in the master plan.

**Aspen Management**

Aspen represents a significant proportion (~40%) of the forested acreage on GTSP. The GTSP master plan authorizes active aspen management in a small (~50-acre) Aspen Maintenance Area (p. 24); a 2016 variance that modified the boundaries of some management units included only a small expansion of this area. Forest management in most of the property emphasizes succession to longer-lived species rather than aspen regeneration.

Currently, much of the aspen on GTSP is aging. Oak is not replacing aspen in many places, as was originally intended, due to the serious oak wilt infestation on the property. Some dead/dying aspen trees are becoming recreation hazard trees. Additionally, state parks were not open to hunting when the GTSP
master plan was approved. In 2012, most state park lands were opened to hunting. This has generated interest in conducting additional aspen regeneration for game species habitat. There has also been additional land acquisition within the park since the approval of the master plan, and most of this acreage is in the Active Recreation Zone (Recreation Management Area) which does not emphasize aspen management.

Aspen in the Active Recreation Zone will be managed to maintain the type in a range of age classes, providing habitat diversity. The exact acreages and locations of management areas will be determined in the field. This management goal is the same as that for the Aspen Maintenance Area described in the 2004 master plan and the 2016 variance.

Land Management Classifications for Proposed Boundary Expansion/Re-designation Areas

The NES plan is proposing a boundary expansion of approximately 97 acres for GTSP (see Real Estate section, pp. 117-118). Most of this acreage is in the Caldron Falls Reservoir area along the property’s northwestern border and includes a proposed re-designation of approximately 48 acres from the Governor Earl Peshtigo River State Forest. Another expansion/re-designation area is along the property’s southern border, where a 0.92-acre parcel containing a small residence used for seasonal staff housing is being also being re-designated from the state forest to the state park. The expansion/re-designation acres in the Caldron Falls area are classified as Scenic Resources Management Area with Type 3 Recreational Use Setting and the expansion/re-designation acres for the staff housing parcel are classified as Special Management Area (Map M-2). A very small (<1 acre) expansion, also along the property’s southern border, is being added to the Active Recreation Zone Recreation Management Area.
CHAPTER 2: Management, Development, and Use

Administrative Properties

ADMINISTRATIVE PROPERTIES

OVERVIEW

There are two small properties included in the NES plan that serve internal DNR administrative needs only. The specific operation and development of these facilities are outside the scope of this master plan.

The two administrative properties included in the NES plan are listed in Table 2.33, below.

Table 2.33. Administrative Properties of the Northeast Sands EL Plan.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>County</th>
<th>Deed Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pembine Station</td>
<td>Marinette</td>
<td>3</td>
</tr>
<tr>
<td>Wausaukee Station</td>
<td>Marinette</td>
<td>3</td>
</tr>
</tbody>
</table>

Both of these properties are managed by the Division of Forestry and consist of office buildings for department staff, garage/shop buildings for vehicle storage and equipment maintenance, and other storage buildings.

LAND MANAGEMENT CLASSIFICATION

Both of these properties are designated as Special Management Area.

PROPERTY MANAGEMENT

The management objective is to provide and maintain areas and facilities that serve internal administrative needs. These facilities are developed, managed, and maintained for their intended purpose through regular operations/upkeep, ongoing maintenance, and capital development as needed. Operation and development of these facilities complies with all applicable safety regulations and building codes.
CHAPTER 2: Management, Development, and Use
State Habitat Areas

STATE HABITAT AREAS

OVERVIEW

The NES plan includes six proposed State Habitat Areas, small-acreage sites purchased under a scattered statewide acquisition authority primarily to protect wildlife and fish habitat and provide public access. Four of these parcels are currently designated as Statewide Habitat Areas and two are currently designated as Scattered Forest Lands. All six parcels are proposed to be re-designated as State Habitat Areas and have official names being proposed as part of this master plan (see Real Estate Actions section, pp. 119-120). The six sites are listed in Table 2.34, below.

Table 2.34. State Habitat Areas of the Northeast Sands EL Plan.

<table>
<thead>
<tr>
<th>Proposed Name</th>
<th>County</th>
<th>Deed Acres Fee</th>
<th>Easement</th>
<th>Access/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Bottom Lake State Habitat Area</td>
<td>Florence</td>
<td>40</td>
<td>0</td>
<td>No public access; proposed re-designation from Scattered Forest Lands</td>
</tr>
<tr>
<td>Woods Creek State Habitat Area</td>
<td>Florence</td>
<td>80</td>
<td>0</td>
<td>Access from STH 101/Town Hall Road; water access via Woods Creek</td>
</tr>
<tr>
<td>Long Lake Road State Habitat Area</td>
<td>Marinette</td>
<td>5</td>
<td>&lt;1</td>
<td>Public access from surrounding Marinette Co. lands; proposed re-designation from Scattered Forest Lands</td>
</tr>
<tr>
<td>Upper Middle Inlet State Habitat Area</td>
<td>Marinette</td>
<td>53</td>
<td>&lt;1</td>
<td>Access from STH 141 and McMahon Road; water access via Upper Middle Inlet Creek</td>
</tr>
<tr>
<td>Wausaukee River State Habitat Area</td>
<td>Marinette</td>
<td>23</td>
<td>0</td>
<td>Access from Davis Road; water access via Wausaukee River</td>
</tr>
<tr>
<td>Shawano Lake State Habitat Area</td>
<td>Shawano</td>
<td>20</td>
<td>0</td>
<td>Access from STH 22/Bergs Road</td>
</tr>
</tbody>
</table>

State Habitat Areas are open to hunting, fishing, and other outdoor recreation activities (e.g., hiking, wildlife viewing, etc.). Most of these parcels do not have developed facilities. The proposed Woods Creek State Habitat Area has a primitive access road traversing the northern portion of the property. The proposed Wausaukee River State Habitat Area has a small, grassy parking area off Davis Road. The proposed Shawano Lake State Habitat Area has a parking lot near the intersection of Bergs Road and Woodland Road. Forest management activities may create access ways (e.g., logging roads, skid trails) that can be used for foot access on some of these parcels.

The proposed Long Lake Road State Habitat Area is surrounded by Marinette County land on three sides. The department would be open to a land exchange with the county for this parcel.

LAND COVER

Land cover on these parcels is primarily forest, particularly lowland types, with small areas of open wetlands and uplands. The cover types occurring on the properties are listed in Table 2.35 below.
### Table 2.35. Land Cover Types of State Habitat Areas in the Northeast Sands EL Plan.

<table>
<thead>
<tr>
<th>Cover Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upland Deciduous Forest</td>
</tr>
<tr>
<td>Aspen</td>
</tr>
<tr>
<td>Northern Hardwoods</td>
</tr>
<tr>
<td>Oak</td>
</tr>
<tr>
<td>Upland Coniferous Forest</td>
</tr>
<tr>
<td>Red Pine</td>
</tr>
<tr>
<td>Forested Wetland</td>
</tr>
<tr>
<td>Bottomland Hardwoods</td>
</tr>
<tr>
<td>Swamp Hardwoods</td>
</tr>
<tr>
<td>Tamarack</td>
</tr>
<tr>
<td>Shrub Wetland</td>
</tr>
<tr>
<td>Wetland Shrub – Alder</td>
</tr>
<tr>
<td>Open Wetland/Marsh</td>
</tr>
<tr>
<td>Emergent Wetland</td>
</tr>
<tr>
<td>Open Water</td>
</tr>
<tr>
<td>Coldwater Streams</td>
</tr>
<tr>
<td>Lake</td>
</tr>
<tr>
<td>Upland Grass</td>
</tr>
<tr>
<td>Surrogate Grasslands</td>
</tr>
</tbody>
</table>

### LAND MANAGEMENT CLASSIFICATION

All proposed State Habitat Areas are classified as Habitat Management Area.

### PROPERTY MANAGEMENT

#### Objectives

- Maintain existing habitats for resident and migratory wildlife and to sustain hunting, fishing, and other wildlife/nature-based recreational activities.
- Follow the general recreation and public use objectives and prescriptions presented at the beginning of this chapter, as well as specific public use prescriptions below.

#### Prescriptions

- Follow the [General Fisheries Management](#), [General Forest Management](#), and [General Wildlife Habitat Management](#) Common Elements and cover type-specific Common Elements for the cover types listed in Table 2.35, above, for management of cover types on State Habitat Areas, unless otherwise indicated below.
- Apply passive management to the swamp hardwood stands on the proposed Woods Creek State Habitat Area.
- Develop no structures on the proposed Long Lake Road State Habitat Area due to the presence of a former landfill.
- Maintain existing access roads and parking areas.
STATE-OWNED ISLANDS

OVERVIEW

The NES plan includes five State-owned Islands. This section outlines management for these parcels. State-owned Islands are unsurveyed and unattached islands in inland lakes north of townships 33 and 34, granted to the State of Wisconsin from the federal government through House Bill No. 13417, introduced in 1911 and passed in 1912. The number of state-owned islands changes as surveying methods improve, property disputes are resolved, and water levels vary. Islands not recognized when the initial grant from the federal government occurred in 1911 are still granted to the State of Wisconsin as they are recognized as meeting the criteria of the initial act.

The federal government granted these islands to the State of Wisconsin to be added to the state’s forest reserves. Accordingly, all State-owned Islands are under the administrative control of the Division of Forestry, and managed according to the State-Owned Island Handbook (department Handbook 2861) and the following statutes and administrative codes:

- Section 28.02(1), Wis. Stats. defines state-owned islands as state forest lands.
- Section 28.02(4), Wis. Stats. establishes that sale of state-owned islands is subject to the same restrictions as the sale of state forest lands.
- Section 28.02(6), Wis. Stats. prohibits leases on state-owned islands after June 25, 1925, except existing leases to charitable and nonprofit organizations and where improvements had been made.
- Section 29.27(3), Wis. Stats. governs the construction, identification and removal of waterfowl blinds on state lands.
- Chapter NR 45, Wis. Adm. Code pertains to the conduct of visitors to state parks, state forests, and all state-owned islands.
- Section NR 1.31, Wis. Adm. Code establishes that the department maintains state-owned islands in as natural and undisturbed condition as possible while permitting limited public use on islands suited for water route camping or day use.
- Section NR 1.48, Wis. Adm. Code further provides that no leases for private use shall be executed, extended, or renewed, except if the Secretary determines that the lease will serve a public benefit or provide for public use.

State-owned Islands are named according to the county and lake in which they are found. The islands for which the NES plan establishes management are listed below by the official names being proposed as part of this master plan (see Real Estate Actions section, pp. 120-121):

- State-owned Islands – Florence County – Bass Lake – Bass Island
- State-owned Islands – Florence County – East Lake – Paradise Island
- State-owned Islands – Florence County – Ellwood Lake – Island No. 2
- State-owned Islands – Florence County – Ellwood Lake – Norway Island
- State-owned Islands – Marinette County – Island Lake – Island No. 1
Other State-owned Islands not currently recognized as such that fall within the NES EL will be covered under this plan at the time of designation as a State-owned Island.

The five State-owned Islands listed above are all approximately 1 acre in size or smaller. They are managed primarily for aesthetics, wildlife habitat, and related recreational uses.

**LAND MANAGEMENT CLASSIFICATION**

All State-owned Islands in the NES plan are classified as Scenic Resources Management Area with Type 3 Recreational Use Setting.

**PROPERTY MANAGEMENT**

**Objective**

- Manage islands primarily for aesthetics, fish and wildlife habitat, and related recreational uses.

**Prescriptions**

- Follow the *State-Owned Island Handbook* guidelines for island classification and management. Island classification is determined by the property management team.
CHAPTER 2: Management, Development, and Use

State Public Access Sites

STATE PUBLIC ACCESS SITES

OVERVIEW

The NES plan includes six State Public Access sites that provide access to waterbodies. As required by NR 1.90, Wis. Adm. Code, it is the goal of the State of Wisconsin to provide, maintain, and improve access to Wisconsin’s navigable lakes, rivers, and streams for the public. The State Public Access sites included in the NES plan are listed in Table 2.36. All these sites have official names being proposed as part of this master plan (see Real Estate Actions section, pp. 121-122). Any property designated as a State Public Access site during the period this plan is in effect will also follow the management described in this section.

Table 2.36. State Public Access Sites of the Northeast Sands EL Plan.

<table>
<thead>
<tr>
<th>Proposed Name</th>
<th>County</th>
<th>Deed Acres</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery Lake State Public Access</td>
<td>Florence</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Gilas Lake State Public Access</td>
<td>Marinette</td>
<td>&lt;1</td>
<td>6</td>
</tr>
<tr>
<td>Lake Noquebay State Public Access</td>
<td>Marinette</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Oconto River-Patzer Park State Public Access</td>
<td>Oconto</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Shawano Lake-Stark Road State Public Access</td>
<td>Shawano</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shawano Lake-Swan Acres State Public Access</td>
<td>Shawano</td>
<td>&lt;1</td>
<td>0</td>
</tr>
</tbody>
</table>

These sites provide improved or unimproved boat access and may also have access roads and parking areas.

LAND MANAGEMENT CLASSIFICATION

All State Public Access sites are classified as Recreation Management Area with Type 4 Recreational Use Setting.

PROPERTY MANAGEMENT

Objectives

- Provide, maintain, and improve access for the public to the region’s waterways as appropriate to the suitability of the individual waterbody to support such access.
- Alone or in cooperation with local government, exercise DNR management and regulatory responsibilities to assure that levels and types of use of navigable waters are consistent with protection of public health, safety, and welfare, including protection of natural resources.

Prescriptions

- Maintain or improve current surfacing of boat launches as appropriate for use level and waterbody capacity.
- Renew the agreement with Oconto County for maintenance of the boat access and associated facilities at the proposed Oconto River – Patzer Park State Public Access.
CHAPTER 2: Management, Development, and Use

State Public Access Sites

- Continue the agreement with the town of Middle Inlet to operate and maintain a boat landing on the proposed Lake Noquebay State Public Access.

- Continue to allow the Lake Noquebay Rehabilitation District to use a portion of the shoreline at the proposed Lake Noquebay State Public Access to dock their weed harvesters.

- Continue the agreement with the Town of Washington to maintain the parking lot for the boat access at the proposed Shawano Lake – Swan Acres State Public Access on the south side of Shawano Lake.

- Work with the towns of Washington and Wescott to renew the lease for continued operation and maintenance of the proposed Shawano Lake – Stark Road State Public Access, located on the channel between Washington and Shawano lakes.
REAL ESTATE ACTIONS

INTRODUCTION

The department typically proposes a variety of real estate-related actions in master plans. An overview of the department’s real estate program and description of real estate management and master planning is provided in the Real Estate Management Common Element. That document includes information on land acquisition and sales; easements, access permits, and land use agreements; payment in lieu of taxes; project boundaries; acquisition authority and acquisition goal; property naming; and parcel re-designation.

REAL ESTATE ACTIONS

Clean-up of Project Boundaries

Project boundaries in the past may have been developed using parcel maps or aerial photographs rather than the Geographic Information Systems (GIS) tools that exist today. This GIS technology has improved in accuracy over time. In some cases, it is clear the original intent of the project was to follow the nearest river, road, or existing department ownership, but because of changing technology, a boundary line may be slightly ‘off’ from these features. With NRB approval of this plan, where applicable, some project boundaries included in this master plan will be ‘snapped’, or aligned, to better define these boundaries. These snapped areas are very small in size, usually less than 0.1 acre, or are snapped a few feet to the nearest feature.

Statewide Scattered Acquisition Property Naming

Included in the NES EL master plan are unnamed properties purchased under a variety of statewide scattered acquisition authorities (Extensive Wildlife, Scattered Wildlife, etc.). These parcels do not currently have a NRB-approved (official) local name identifying them. The master plan team used Manual Code 2281.1 as well as internal draft naming guidance to propose names for these properties. Those naming and property grouping recommendations are included as part of this plan and are described, as applicable, below and in Appendix B. Maps associated with these parcels and actions may be found in Table A1 in Appendix A and in map series AA-AP.

Property-specific Real Estate Actions (refer to real estate action tables in Appendix B)

Fishery and Wildlife Areas

Amberg Wildlife Area (Map B-3)

- Expand the project boundary around 38.73 acres to encompass lands already owned by the department.
  - Net expansion of 38.73 acres.
- Increase the acquisition goal by 58.57 acres.
The boundary expansion is considered a clean-up action in order to encompass land already owned by the department. The increase in acquisition goal is a clean-up action to make the acquisition authority equal to the existing project boundary.

**Miscauno Wildlife Area** (Map C-3)

- Expand the project boundary around 1.45 acres to encompass lands already owned by the department.
  - Net expansion of 1.45 acres.
- Reduce the acquisition goal by 1.71 acres.

The boundary expansion is considered a clean-up action in order to encompass the main property access strip within the project boundary. The reduction in acquisition goal is considered a clean-up action to make the acquisition authority equal to the existing project boundary.

**Bagley Tower Site and Peshtigo Brook Wildlife Area** (Map D-3)

- Re-designate these parcels totaling 40 acres from Bagley Tower Site to Peshtigo Brook Wildlife Area.
- Transfer 40 acres of acquisition goal from Bagley Tower Site to Peshtigo Brook Wildlife Area.

The re-designation and acreage goal transfer are considered clean-up actions. The Bagley Tower Site parcel is within the Peshtigo Brook Wildlife Area project boundary. The tower, located on the Bagley Tower Site parcel, is in the process of being decommissioned. Since the parcel is not going to be used as a tower site by Forestry, better management will be achieved with this re-designation.

**Shawano Lake Fishery Area and Statewide Habitat Areas** (Map N)

**Shawano Lake Fishery Area**

- Expand the project boundary by 29.26 acres to encompass lands already owned or held in easement by the department.
  - Some of the lands in this expansion area are being re-designated from Statewide Habitat Areas to Shawano Lake Fishery Area (see below).
  - Net expansion of 29.26 acres.
- Reduce the acquisition goal by 58.94 acres.

The boundary expansion is considered a clean-up action to encompass lands the department already owns on Shawano Lake. The reduction in acquisition goal is considered a clean-up action to make the acquisition authority equal to the existing project boundary.

**Statewide Habitat Areas**

- Re-designate this parcel from Statewide Habitat Areas to Shawano Lake Fishery Area.
- Transfer 5.10 acres of acquisition goal from Statewide Habitat Areas to Shawano Lake Fishery Area.
These are considered clean-up actions, as the parcel is located adjacent to Shawano Lake and other parcels within the Shawano Lake Fishery Area project boundary. The parcel is managed as a part of the larger Fishery Area project.

**South Branch Oconto River Fishery Area (Map E-2)**

- Expand the project boundary by 24.02 acres to encompass lands already owned by the department.
  - Net expansion of 24.02 acres.

The boundary expansion is considered a clean-up action to encompass lands the department already owns within the South Branch Oconto River Fishery Area project boundary.

**Town Corner Wildlife Area**

- Reduce the acquisition goal by 5.18 acres.

The reduction in acquisition goal is a clean-up action to make the acquisition authority equal to the existing project boundary.

**State Natural Areas**

**Dunbar Barrens State Natural Area (Map G-3)**

- Contract the project boundary by 11.38 acres along the 2-track lane dividing the 40-acre project boundary overlap area.
  - Net contraction of 11.38 acres.

The contraction is considered a clean-up action to address the overlapping project boundary authorities here, for Dunbar Barrens State Natural Area and the Pike Wild River.

**Haley Creek Swamp State Natural Area (Map O)**

- Expand the State Natural Area project boundary by 8.41 acres to encompass lands already owned by the department.
- Expand the State Natural Area project boundary by 90.53 acres to encompass lands not already owned by the department.
- Contract the project boundary by 90.94 acres.
  - Net expansion of 8 acres.

This SNA features an undisturbed wetland complex with several undeveloped spring ponds, fens, old-growth conifer swamps, and a coldwater stream segment. The area proposed for inclusion in the project boundary contributes significantly to these features, connecting an additional ¼-mile of coldwater stream on two parts of the property. It features additional old-growth conifer swamp that is connected to, and
of the same quality as, existing stands on the SNA. It would also consolidate two fragmented portions of the SNA, facilitating management and conservation. The non-department-owned parcels in question are embedded in a larger landscape of managed older forest containing additional SNAs. The inclusion of these parcels would enhance connectivity and native community management.

The project boundary contraction is a clean-up action to address the overlap with the Pine-Popple Wild Rivers project boundary. This contraction area has been included in the proposed new embedded SNA for the Pine-Popple Wild River.

**Spread Eagle Barrens Natural Area – Proposed Name: Spread Eagle Barrens State Natural Area** (Map H-4)

- Expand the project boundary around 40 acres currently designated as part of Spread Eagle Barrens Natural Area.
- Expand the project boundary by 1,047.12 acres to encompass lands owned or held by easement by the department.
  - The majority of this expansion is considered a project boundary swap between Spread Eagle Barrens Natural Area and the Pine-Popple Wild Rivers to clarify project boundaries and management responsibilities.
- Contract the project boundary by 4.84 acres to the south of Lake Anna.
  - Net expansion of 1,123.62 acres
- Establish an official local name of Spread Eagle Barrens State Natural Area for this property.
- Find that the small parcel located off West Ellwood Lake Road is no longer needed for the state’s use for conservation purposes. Offer the parcel for sale to the identified adjoining landowner first, then offer for sale to the general public.

The project boundary expansion is considered a clean-up action to encompass lands currently designated as part of Spread Eagle Barrens Natural Area. The project boundary expansion to encompass department-owned or easement lands is considered a clean-up action to bring these lands into the project. The addition of the word ‘State’ to the name is to provide consistency with State Natural Areas Program naming conventions. The proposed land sale is a parcel that the Bureau of Natural Heritage Conservation had specifically removed from the project boundary in order to offer it for sale. It is no longer needed by the state for conservation purposes and the department has been working with the adjoining landowner on a possible sale.

**Wild Rivers**

**Pike Wild River** (Maps I-4A to I-4E)

- Contract the project boundary by 26.81 acres along the 2-track lane dividing the 40-acre project boundary overlap area (Map I-4A).
- Expand the project boundary around 121.66 acres to encompass lands already owned or held by easement by the department (Maps I-4B, C, D, and E).
  - Net expansion of 94.86 acres.
• Retain the 20-acre parcel in T35N R20E Section 4, located outside the project boundary, for possible future exchange if a parcel of greater conservation value can be found or if an exchange would improve access along the river (Map I-4C).

The boundary contraction is to address overlapping project boundary authorities in this area for both the Pike Wild River and Dunbar Barrens State Natural Area. The project boundary expansion is considered a clean-up action to include lands the department already owns or manages through easements within the Pike Wild River project boundary.

Pine-Popple Wild Rivers and Statewide Natural Area

Pine-Popple Wild Rivers (Maps J-4A to J-4D)

• Expand the project boundary by 42.02 acres to encompass lands already owned by the department or managed through an easement (Maps J-4A, B).
• Contract the project boundary by 1,121.4 acres (Map J-4C).
  o The majority of this contraction is considered a project boundary swap between Spread Eagle Barrens Natural Area and the Pine-Popple Wild Rivers to clarify project boundaries and management responsibilities.
  o Net contraction of 1,079.38 acres.
• Retain the 26.81-acre parcel in T39N R17E Section 11, located outside the project boundary, for possible future exchange for a parcel of greater conservation value located within the project boundary (Map J-4D).

The boundary expansions are considered a clean-up action to encompass lands already owned by the department or managed through an easement. The boundary contractions are considered clean-up actions to remove lands dedicated as State Natural Area. This will improve clarity and secure better management coordination between the two adjacent projects. The acquisition goal increase is a clean-up action to make the acquisition authority equal to the project boundary.

Statewide Natural Area (Map J-4A)

• Re-designate this 14.30-acre parcel located within the Pine-Popple Wild Rivers from Statewide Natural Area to Pine-Popple Wild Rivers.

The re-designation is considered a clean-up action to achieve consistent parcel ownership within the Pine-Popple Wild Rivers. These parcels and surrounding acreage containing SNA-quality habitats are being proposed as a new embedded SNA as part of this master plan. Both Parks and Natural Heritage Conservation will continue coordinating management in this area of the Pine-Popple property.
CHAPTER 2: Management, Development, and Use
Real Estate Actions

Properties with NR 44-compliant Plans

Governor Earl Peshtigo River State Forest and Big Eagle Creek Public Access

Governor Earl Peshtigo River State Forest (Map L-4)

- Expand the project boundary by 40 acres to encompass lands already owned by the department.
  - The lands in this expansion area are being re-designated from Big Eagle Creek Public Access to Governor Earl Peshtigo River State Forest (see below).
- Contract the project boundary by 98.86 acres (some are submerged lands).
  - Net contraction of 58.86 acres
- Re-designate 31.33 acres of Governor Earl Peshtigo River State Forest to Governor Thompson State Park.
- Transfer 31.33 acres of acquisition goal from Governor Earl Peshtigo River State Forest to Governor Thompson State Park.
- Reduce the acquisition goal by 5,182.45.

The boundary contraction, re-designation, and acreage goal transfer are clean-up actions to have program parcel ownership match the proposed project boundary between the two projects. Historically, administrative ownership of these islands was split, with a portion of each island assigned to Parks and the other portion to Forestry, resulting in ambiguous management responsibility as well as confusion for the public. The proposed changes (in this and the Governor Thompson State Park section) will assign each entire island and surrounding submerged lands to a single program in accordance with the proposed project boundary for each property. This will secure better management for the islands as well as for surrounding submerged lands should they ever become unsubmerged. The reduction in acquisition goal is considered a clean-up action to make the acquisition authority equal to the proposed project boundary.

Big Eagle Creek Public Access (Map L-4)

- Re-designate this parcel totaling 40 acres from Big Eagle Creek Public Access to Governor Earl Peshtigo River State Forest.
- Transfer 40 acres of acquisition goal from Big Eagle Creek Public Access to Governor Earl Peshtigo River State Forest.

The re-designation and acreage goal transfer are considered clean up actions. The Big Eagle Creek Public Access parcel is adjacent to the State Forest project boundary. Improved management efficiency and coordination will be achieved with this re-designation. Management of the property will continue to be shared between the Fisheries and Forestry programs.

Governor Thompson State Park (Map M-3)

- Expand the project boundary by 31.33 acres to encompass lands already owned by the department (some are submerged lands).
Most of the lands in this expansion area are being re-designated from Governor Earl Peshtigo River State Forest (see below).

- Expand the project boundary by 67.54 acres to encompass lands not currently owned by the department (these are submerged lands).
  - Net expansion of 98.87 acres.

The boundary expansions are clean-up actions to have program parcel ownership match the proposed project boundary between the two projects. Historically, administrative ownership of these islands was split, with a portion of each island assigned to Parks and the other portion to Forestry, resulting in ambiguous management responsibility as well as confusion for the public. The proposed changes (in this and the Governor Earl Peshtigo River State Forest section) will assign each entire island and surrounding submerged lands to a single program in accordance with the proposed project boundary for each property. This will secure better management for the islands as well as for surrounding submerged lands should they ever become unsubmerged.

**Menominee River State Park and Recreation Area – Proposed Name: Menominee River State Recreation Area** (Map P)

- Change the administrative ownership of a portion of this property from Wild River to Parks.
- Reduce the acquisition goal by 10.89 acres.
- Establish an official local name of Menominee River State Recreation Area for this property.

The administrative owner change is to achieve better management and consistency over the entire property. The entirety of these parcels lies within the Menominee River State Park and Recreation Area project boundary and they are being managed as a recreation area. When this project was recently master planned, the name used for this property was Menominee River State Recreation Area rather than Menominee River State Park and Recreation Area, which was the original NRB-approved name for this project. The department wishes to adopt the name used in the property master plan and officially rename this property as a part of the NES plan. The reduction in acquisition goal is considered a clean-up action to make the acquisition authority equal to the existing project boundary.

**Administrative Properties**

**Pembine Station**

- Designate Forestry as the administrative owner of Pembine Station.

This is considered a clean-up action to assign an administrative owner for this property. Historically, Forestry has acted as the administrative owner for this property.

**Wausaukee Station**

- Designate Forestry as the administrative owner of Wausaukee Station.
This is considered a clean-up action to assign an administrative owner for this property. Historically, Forestry has acted as the administrative owner for this property.

**State Habitat Areas, Scattered Forest Lands, and Statewide Habitat Areas**

Scattered Forest Lands – Proposed Name: No Bottom Lake State Habitat Area (Map AA)

- Re-designate this parcel totaling 40 acres from Scattered Forest Lands to Habitat Area.
- Transfer 40 acres of acquisition goal from Scattered Forest Lands to Habitat Area.
- Establish the official local name of No Bottom Lake State Habitat Area.

The re-designation and acreage goal transfer are clean-up actions related to the naming of this property. The name of No Bottom Lake is a locally recognized name for this parcel.

Statewide Habitat Areas – Proposed Name: Woods Creek State Habitat Area (Map AB)

- Re-designate this parcel from Statewide Habitat Areas to Habitat Area.
- Transfer 80 acres of acquisition goal from Statewide Habitat Areas to Habitat Area.
- Establish the official local name of Woods Creek State Habitat Area.

The re-designation and acreage goal transfer are clean-up actions related to the naming of this property. The name of Woods Creek is a locally recognized name for this parcel.

Scattered Forest Lands – Proposed Name: Long Lake Road State Habitat Area (Map AC)

- Re-designate this parcel from Scattered Forest Lands to Habitat Area.
- Transfer 4.86 acres of acquisition goal from Scattered Forest Lands to Habitat Area.
- Establish the official local name of Long Lake Road State Habitat Area.

The re-designation and acreage goal transfer are clean-up actions related to the naming of this property. The name of Long Lake Road is a locally recognized name for this parcel.

Statewide Habitat Areas – Proposed Name: Upper Middle Inlet State Habitat Area (Map AD)

- Re-designate this parcel from Statewide Habitat Areas to Habitat Area.
- Transfer 52.82 acres of acquisition goal from Statewide Habitat Areas to Habitat Area.
- Establish the official local name of Upper Middle Inlet State Habitat Area.

The re-designation and acreage goal transfer are clean-up actions related to the naming of this property. The name of Upper Middle Inlet is a locally recognized name for this parcel.
CHAPTER 2: Management, Development, and Use
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Statewide Habitat Areas – Proposed Name: Wausaukee River State Habitat Area (Map AE)

- Re-designate this parcel from Statewide Habitat Areas to Habitat Area.
- Transfer 22.74 acres of acquisition goal from Statewide Habitat Areas to Habitat Area.
- Establish the official local name of Wausaukee River State Habitat Area.

The re-designation and acreage goal transfer are clean-up actions related to the naming of this property. The name of Wausaukee River is a locally recognized name for this parcel.

Statewide Habitat Areas – Proposed Name: Shawano Lake State Habitat Area (Map AF)

- Re-designate this parcel from Statewide Habitat Areas to Habitat Area.
- Transfer 20.4 acres of acquisition goal from Statewide Habitat Areas to Habitat Area.
- Establish the official local name of Shawano Lake State Habitat Area.

This parcel was identified for sale during the Act 20 land sales effort, and was approved for sale to the municipality. The department continues to market this property to the municipality. Although the parcel may eventually be sold, the establishment of a unique name will improve department records and management of the parcel. The re-designation and acreage goal transfer are clean-up actions related to the naming of this property. The name of Shawano Lake is a locally recognized name for this parcel.

State Owned Islands

State Owned Islands – Proposed Name: State Owned Islands – Florence County – Bass Lake – Bass Island (Map AG)

- Establish an official local name of State Owned Islands – Florence County – Bass Lake – Bass Island for this parcel.

The name of State Owned Islands – Florence County – Bass Lake – Bass Island follows the naming structure described in Forestry’s State-Owned Island Handbook. The county and lake names are locally recognized identifiers for this parcel.

State Owned Islands – Proposed Name: State Owned Islands – Florence County – East Lake – Paradise Island (Map AH)

- Establish an official local name of State Owned Islands – Florence County – East Lake – Paradise Island for this parcel.

The name of State Owned Islands – Florence County – East Lake – Paradise Island follows the naming structure described in Forestry’s State-Owned Island Handbook. The county and lake names are locally recognized identifiers for this parcel.
CHAPTER 2: Management, Development, and Use
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**State Owned Islands – Proposed Name: State Owned Islands – Florence County – Ellwood Lake – Island No. 2 (Map AI)**

- Establish an official local name of State Owned Islands – Florence County – Ellwood Lake – Island No. 2 for this parcel.

The name of State Owned Islands – Florence County – Ellwood Lake – Island No. 2 follows the naming structure described in Forestry’s *State-Owned Island Handbook*. The county and lake names are locally recognized identifiers for this parcel.

**State Owned Islands – Proposed Name: State Owned Islands – Florence County – Ellwood Lake – Norway Island (Map AI)**

- Establish an official local name of State Owned Islands – Florence County – Ellwood Lake – Norway Island for this parcel.

The name of State Owned Islands – Florence County – Ellwood Lake – Norway Island follows the naming structure described in Forestry’s *State-Owned Island Handbook*. The county and lake names are locally recognized identifiers for this parcel.

**State Owned Islands – Proposed Name: State Owned Islands – Marinette County – Island Lake – Island No. 1 (Map AJ)**

- Establish an official local name of State Owned Islands – Marinette County – Island Lake – Island No. 1 for this parcel.

The name of State Owned Islands – Marinette County – Island Lake – Island No. 1 follows the naming structure described in Forestry’s *State-Owned Island Handbook*. The county and lake names are locally recognized identifiers for this parcel.

**State Public Access Sites**

**Statewide Public Access – Proposed Name: Montgomery Lake State Public Access (Map AK)**

- Establish an official local name of Montgomery Lake State Public Access.

The name of Montgomery Lake is a locally recognized name for this parcel.

**Statewide Public Access – Proposed Name: Gilas Lake State Public Access (Map AL)**

- Establish an official local name of Gilas Lake State Public Access.

The name of Gilas Lake is a locally recognized name for this parcel.
Lake Noquebay Public Access – Proposed Name: Lake Noquebay State Public Access (Map AP)

- Establish an official local name of Lake Noquebay State Public Access.

The addition of the word “State” to the name is considered a clean-up action to provide consistency across the Public Access program.

Statewide Public Access – Proposed Name: Oconto River-Patzer Park State Public Access (Map AM)

- Establish an official local name of Oconto River-Patzer Park State Public Access.

The names of Oconto River and Patzer Park are locally recognized names for this parcel.

Statewide Public Access – Proposed Name: Shawano Lake-Stark Road State Public Access (Map AN)

- Establish an official local name of Shawano Lake-Stark Road State Public Access.

The names of Shawano Lake and Stark Road are locally recognized names for this parcel.

Statewide Public Access – Proposed Name: Shawano Lake-Swan Acres State Public Access (Map AO)

- Establish an official local name of Shawano Lake-Swan Acres State Public Access.

The names of Shawano Lake and Swan Acres are locally recognized names for this parcel.
CHAPTER 3: REGIONAL AND PROPERTY ANALYSIS

Information in the following sections is substantially taken from the Northeast Sands chapter of the *Ecological Landscapes of Wisconsin* book (WDNR 2015b). Consult this document for greater detail.

ECOLOGICAL CHARACTERISTICS AND MANAGEMENT OPPORTUNITIES

PHYSICAL CHARACTERISTICS

The Northeast Sands Ecological Landscape (NES EL), located in northeastern Wisconsin, includes portions of Florence, Marinette, Oconto, Menominee, and Shawano counties (Figure 3.1). It encompasses 1,542 square miles (987,176 acres), which represents 2.8% of Wisconsin’s total area, and is the fifth smallest EL in the state. The climate generally is similar to other northern ELs, with an annual average temperature of 41.6°F but with a January minimum temperature average higher than other northern ELs and an average August maximum temperature (78.8°F) that is the third coolest of any EL in the state. The growing season is short (122 days), limiting potential for row-crop agriculture.

Precambrian bedrock underlies almost the entire NES EL. Waterfalls, almost all of which are associated with this ancient bedrock, are prominent in the northern part of the NES. A small area of Cambrian sandstone occurs along the eastern edge of the Landscape. The EL was covered by the Green Bay lobe in the last part of the Wisconsin glaciation, and outwash was deposited over lower-lying surface features as the ice melted and retreated eastward. As a result, the topography now appears as nearly-level-to-rolling sandy outwash plain, pitted in places, and with sandy heads-of-outwash and loamy moraines protruding through the sediments. More than half the land surface consists of outwash sand and gravel, and the dominant soil is excessively drained and sandy with a loamy sand surface, rapid permeability, and very low available water capacity.

Rivers in the NES EL include the Menominee, Peshtigo, Pike, Pine, Oconto, South Branch of the Oconto, and Wolf. The Pine-Popple and Pike rivers are three of only five state-designated Wild Rivers and the Wolf River is a National Wild and Scenic River. Many high-quality coldwater streams exist in this EL, prized by trout anglers. There are scattered lakes, and several large impoundments have been constructed, such as those on the Peshtigo and Menominee rivers. The 30,000-acre Brazeau Swamp-Waupee Lake-Peshtigo Brook complex, consisting of white cedar swamp, swamp hardwoods, lowland shrub, and sedge meadow, is the largest wetland complex in the NES and one of the largest in the state. Water quality generally is good, with 221 rivers and streams and one impoundment designated as Exceptional or Outstanding Resource Waters. Some portions of the Brazeau Swamp have suffered hydrologic disruption from conversion to agriculture and from the construction of STH 64.
Historical vegetation in the NES was a mix of northern hardwood forests, jack pine-northern pin (scrub) oak forest and barrens, and coniferous forested wetlands. Approximately 30% of the Landscape contained extensive northern hardwood forests, of which two-thirds included hemlock and white pine and one-third included beech as dominant or co-dominant species. The jack pine-scrub oak forest and barrens covered another 30% of the area, largely in the northern half of the EL where sandy soils predominate. Conifer wetlands made up 20% of the area, scattered throughout the Landscape with the largest contiguous block occupying much of the current Brazeau Swamp complex. White pine-red pine forests made up 15% of the land area, with open water, aspen-birch forest, and brush comprising the remainder. Collectively, the pine species were the most dominant group in the NES historically, with white pine highest in importance followed by red pine and jack pine. Hemlock also was a species of high importance.

Current land cover is quite different from what it was historically. Forests predominate, more so than they did historically, covering almost 77% of the NES EL. Aspen is the most abundant cover type. Pine barrens is much reduced from its historical extent, having succeeded to dense forests of pine, oak, and aspen in the absence of fire or been replaced by red pine plantations. Pines have declined in importance, while oak and red maple have increased. Northern hardwood forests are still common but have changed in species composition, now often dominated by sugar maple with basswood and white ash among the associates. Lowland communities include conifer swamps of white cedar, black spruce, and tamarack, and shrub swamps dominated by alder. Agriculture comprises only 7% of the land area and is mostly concentrated in the southeastern and northernmost portions of the EL.

OUTSTANDING ECOLOGICAL OPPORTUNITIES

The NES EL offers the following outstanding ecological management opportunities:

- Extensive forests
- Forest communities with high biodiversity value
- Barrens and bracken grasslands
- River/stream corridors and other aquatic and wetland habitats
- Bedrock features

Extensive forests – Three-quarters of the NES EL is forested, the highest proportion of forested land of any EL. These extensive forests play a significant role in maintaining high water quality and viable populations of many native plants and animals, and present opportunities to manage at larger scales for connectivity and to restore habitat types, successional stages, and structural conditions that are currently uncommon or declining.

High-biodiversity-value forest communities – Forest types that are especially important and well represented in the NES compared to other parts of the state include: dry (jack pine and scrub oak) and dry-mesic forests (white pine-red pine); mesic forests of beech, sugar maple, and hemlock; and wet-mesic forests dominated by white cedar, which harbor high numbers of rare plants and animals and are vulnerable to hydrologic disruption and excessive white-tailed deer herbivory.

Barrens and bracken grasslands – These communities, once much more common in this Landscape, provide critical breeding habitat for many grassland birds as well as a number of herps, mammals, and
insects. The NES is one of only three ELs in the state where management for species associated with the globally imperiled pine barrens community can be accomplished effectively, and is the EL with the best opportunity to manage for bracken grasslands.

**River/stream corridors and other aquatic and wetland habitats** – Several river corridors, including those of the Peshtigo, Oconto, Pine, and Pike rivers, offer opportunity to protect high-biodiversity-value aquatic habitats. Some of these corridors are bordered by rock outcrops and stands of conifers and/or relatively old forest that may support species rare elsewhere in the EL. Twenty percent of the NES EL is wetlands, the sixth highest percentage of all ELs. Wetlands such as bogs, fens, marshes, sedge meadows, and shrub swamps provide high ecological value. Undeveloped ponds and lakes, including those with unusual properties such as marl lakes, also constitute important opportunities for aquatic species.

**Bedrock features** – Exposures of bedrock are locally common and prominent in the NES. These features, which include outcrops, cliffs, glades, and talus slopes, support rare plants and animals, including some bedrock specialists.

**NATURAL COMMUNITIES**

A natural community is an assemblage of interacting plants, animals, other organisms, and the physical environment in which they occur that is shaped primarily by natural processes, and may be repeated across a landscape where similar environmental conditions prevail. The Wisconsin Wildlife Action Plan (WDNR 2015c) identified management opportunities for natural communities by EL, as the different ELs present varying opportunities to sustain the state’s native natural communities.

Management potential for natural communities in a given EL is characterized by opportunity. A “**major**” opportunity indicates that a natural community can be sustained in the EL, either because many significant occurrences of the natural community have been recorded in that landscape or major restoration activities are likely to be successful in maintaining the community’s composition, structure, and ecological function over a long period of time. An “**important**” opportunity indicates that although the natural community does not occur extensively or commonly in the EL, one to several occurrences are present and are important in sustaining the community in the state. In some cases, important opportunities may exist because the natural community may be restricted to just one or a few ELs within the state and should be considered for management there because of limited geographical distribution and a lack of better opportunities elsewhere.

The NES EL presents “**major**” or “**important**” opportunities to manage for 33 natural community types. Of these, the properties to be planned in the NES regional plan offer opportunity to protect, restore, and manage 29 (WDNR 2018a). These are listed in Table 3.1. Natural community definitions can be found on the DNR’s **Natural Community webpages** or, in more detail, in Chapter 7 of the *Ecological Landscapes* book (WDNR 2015a).

**Table 3.1. Natural Community Management Opportunities of the Northeast Sands EL Properties.**

<table>
<thead>
<tr>
<th>Major</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspen-Birch</td>
<td>Alder Thicket</td>
</tr>
<tr>
<td>Bracken Grassland</td>
<td>Bedrock Glade</td>
</tr>
<tr>
<td>Coldwater Streams</td>
<td>Black Spruce Swamp</td>
</tr>
<tr>
<td>Conifer Plantation</td>
<td>Emergent Marsh</td>
</tr>
</tbody>
</table>
### SIGNIFICANT WILDLIFE RESOURCES

#### Rare Species

The Wisconsin Wildlife Action Plan (WDNR 2015c) identified Species of Greatest Conservation Need (SGCN), species in need of conservation action because they are:

- already listed as endangered or threatened;
- at risk because of threats to their life history needs or habitats;
- declining in adjacent states or nationally, though stable in Wisconsin;
- of unknown status in Wisconsin and suspected to be vulnerable.

There are 52 SGCN and 22 rare plants that are highly or moderately associated with the NES EL. This means that these species are (and/or historically were) significantly associated with this Landscape, and that restoration of those species’ natural habitats would significantly improve their condition. The Wildlife Action Plan also highlighted natural communities in each EL that are most important to SGCN. While there are many natural communities in the NES EL that have significant conservation opportunity, some of these communities support greater numbers of SGCN and rare plants than others.

For example, pine barrens support a considerable number of rare species in the NES EL. While not all of these species may necessarily occur on pine barrens on DNR properties, this community (and others with higher species counts) provide a disproportionate benefit to a larger number of SGCN and rare plants across the NES EL and may warrant special consideration in the master planning process.

The intersection of SGCN and rare plants with priority natural communities highlights the best opportunities for management on the NES EL from an ecological and biodiversity perspective. This intersection is shown in Figure 3.2 below (taken from WDNR 2018a).
Figure 3.2. Number of SGCN and Rare Plants Highly or Moderately Associated with Natural Communities having Major or Important Opportunity in the NES EL.
CHAPTER 3:
Regional and Property Analysis

The NES EL contains one of only four counties in the state where the federally endangered Kirtland’s warbler has been documented and one of only three counties where the bird has been confirmed as breeding (USFWS 2017). The NES is one of only three ELs that could potentially support a breeding population of this species. The state endangered Northern blue butterfly is found only in northeastern Wisconsin in association with its larval host plant, dwarf bilberry, a rare barrens species occurring in small patches beneath scattered pines on sandy soils in association with bracken fern, sweet-fern, and barren-strawberry.

The NES is one of only three ELs in the state where management for species dependent on pine barrens and bracken grassland can be effectively accomplished. Conifer swamps dominated by white cedar, which support high numbers of rare plants and animals, are relatively common in this landscape, with some of Wisconsin’s largest examples found here. A large portion of this EL contains significant blocks of working forests that support extensive forest wildlife species such as breeding neotropical migrant birds and forest raptors. Calcareous habitats such as alkaline cliffs, glades, talus slopes, fens, and white cedar swamps support rare terrestrial snails.

Cold and coolwater streams are abundant in the NES, providing habitat for native brook trout and rare invertebrates such as extra-striped snaketail and pygmy snaketail dragonflies. Medium-sized warmwater rivers, including the Menominee, Peshtigo, and Pike, Pine, and Oconto provide habitat for rare mussels and aquatic invertebrates.

Game Species

The extensive forests and high-quality waters of the NES EL provide habitat for diverse and abundant populations of game species. White-tailed deer, bear, ruffed grouse, woodcock, waterfowl, and furbearers such as beaver, otter, fisher, and bobcat are common. Cold and coolwater streams support brook and brown trout, and warmwater rivers and impoundments contain populations of game fish such as northern pike, walleye, smallmouth and largemouth bass, bluegill, yellow perch, black crappie, and other panfish.

SOCIO-ECONOMIC AND CULTURAL CONTEXT

SOCIO-ECONOMIC CHARACTERISTICS

A significant proportion (approximately 38%) of the land in the NES EL is in public ownership (federal, state, or county). The Landscape also includes the eastern portion of the Menominee Reservation, which occupies the majority of Menominee County. Three-quarters of the land is forested, with about 62% of that being in private ownership. Agriculture makes up only 7% of the land area and is mostly concentrated in the southeastern and northernmost portions of the EL.
The four counties making up the majority of the NES EL (Florence, Marinette, Menominee, and Oconto) are traditionally rural, with a low population density – 27 persons/square mile in 2010, compared to 105 for the state as a whole. Population density is higher in Marinette and Oconto counties and lower in Menominee and Florence counties. The population is largely homogenous white with the exception of Menominee County, which is 87% Native American. Population trends are mixed for the four NES counties, with Florence and Marinette counties projected to lose population between the period 2010-2040 while Menominee and Oconto counties are expected to increase in population. Oconto and especially Menominee counties are projected to be among the fastest-growing counties in terms of percent population increase over this period. As with the state as a whole, the populations of the NES counties are aging. The proportion of residents age 65 and over is expected to increase in all counties over the period 2010-2040, most dramatically in Florence and Marinette counties which are projected to have at least 3 out of every 10 residents age 65 and over by 2040 (Egan-Robertson 2013).

Housing density across the NES counties is substantially lower than that for the state as a whole. As with population density, housing density is highest in Oconto and Marinette counties and lowest in Florence and Menominee counties. Seasonal and recreational homes are prevalent, accounting for over a quarter of housing stock, well above the state average. Florence County has the highest proportion of housing in seasonal homes, followed by Menominee, Marinette, and Oconto counties.

Oconto County is the most urban-influenced of the NES counties, due to its proximity to the Green Bay metropolitan area. Marinette County is considered to have moderate urban influence, while Menominee and Florence counties are more remote and rural, with little urban influence. Florence and Marinette counties also are considered nonmetro recreation counties, due to a combination of economic factors indicating dependence on tourism and recreation dollars, as well as retirement destination counties, due to recent significant increases in the proportion of residents age 60 and over. Menominee County is distinguished from the others in suffering from much higher rates of poverty and unemployment.

Residents of the NES counties have generally had lower educational attainment than much of the rest of the state, particularly in terms of higher education. Per capita and median household income levels generally are lower than the state average. Per capita income for the NES counties in 2016 was lower than the state average of $29,253, ranging from a high of $28,358 in Florence County to a low of $15,171 in Menominee County. Median household income in 2016 ranged from $55,018 in Oconto County to $37,147 in Menominee County, compared to the statewide median household income of $54,610 (USCB 2018). The NES counties, particularly Menominee County, have also experienced unemployment rates higher than the state average. Economic sectors accounting for the highest percentages of jobs in the NES counties are Government, Manufacturing (non-wood), Tourism, Health Care and Social Services, and Retail Trade. However, several other sectors, including Mining, Forest Products and Processing, and Agriculture, Fishing, and Hunting, contribute more jobs in the NES counties than the state average for those sectors. In some cases, these sectors contribute more income in the NES counties than jobs in other sectors, demonstrating the economic importance of the region’s natural resource base.

CULTURAL CONTEXT

There is a long history of human resource use and settlement in the NES EL, though the archaeology of northern Wisconsin is fragmentary and poorly understood. There is little evidence of habitation in the NES until the time of the Woodland tradition (approximately 2,500 to 350 years ago, although starting somewhat later in northern Wisconsin than in the south). By the 1630s, the Menominee were established in much of northeastern Wisconsin, centered on the NES EL, along the Menominee River. They likely had
contact with French fur traders, who arrived in Wisconsin in the 1650s. The fur trade was firmly established in Wisconsin by the end of the 1600s and lasted into the early 1800s, when overexploitation of furbearers caused the fur trade to move north into Canada. The U.S. Government acquired land from various Wisconsin tribes through removal treaties after the Indian Removal Act of 1830 and relocated tribal members to lands west of the Mississippi River, although the Menominee signed a treaty in 1854 establishing a reservation of over 250,000 acres, mostly in present-day Menominee County (WDNR 2015d). Permanent Euro-American settlement in the region began in 1851 with the founding of Oconto County.

Archaeological explorations have been challenging in many parts of the region due to the dense forest cover, lack of access to the rivers, and few active farms. Both archaeological and historical sites have been documented. Although other sites likely remain to be discovered, it is reasonable to assume that the region was sparsely settled historically (as it is now) and did not support a large number of people. Cultural resource investigations are ongoing.

RECREATIONAL RESOURCES AND OPPORTUNITIES

SIGNIFICANT RECREATION RESOURCES

The NES EL has over 375,000 acres, or 38% of all land and water, in public ownership, ranking fifth out of the 16 ELs in Wisconsin. This gives the NES an abundant land and water base for public recreation:

- Over 32,000 acres of public waters
- 231,000 acres of county lands
- 72,000 acres of federal lands
- Over 40,000 acres of DNR-managed recreational lands, including:
  - Almost 11,000 acres of State Forest
  - Over 6,300 acres of State Trails and Wild Rivers
  - Over 5,500 acres of Fishery and Wildlife Areas
  - Over 7,600 acres of State Parks and Recreation Areas
  - Over 8,800 acres of State Natural Areas
  - Almost 1,000 acres of Forest Legacy land (privately owned but open to public recreation)

The public lands in the NES EL offer a wide variety of recreational activities, including hunting, fishing, trapping, motorized and non-motorized trail activities, paddling, camping, wildlife watching and nature appreciation, and scenic viewing. Water-based pursuits are a special draw here, with the many high-quality, scenic rivers and streams. The Menominee, Peshtigo, Pike, and Pine-Popple rivers are very popular for paddling and fishing, drawing thousands of visitors each year. The Roaring Rapids section of the Peshtigo is considered to be the finest whitewater paddling opportunity in the Midwest. Fishing on the numerous high-quality trout streams that flow into the major rivers is also very popular, and the larger rivers and flowages contain quality warmwater game fisheries. The many waterfalls and rapids that exist in the northern portion of the EL add to the scenic appeal. Hunting, particularly for deer and ruffed grouse, is another major draw. Hiking, bird watching, swimming, and bicycling are other popular activities.
CHAPTER 3: Regional and Property Analysis

The *Wisconsin Land Legacy Report* (Pohlman et al. 2006), which identified those places most important to meeting the state’s conservation and recreation needs over the next 50 years, identified 12 sites located partially or completely within the NES EL. This is fewer Legacy Sites than exist in other ELs. However, three of the sites – Athelstane Barrens, Chequamegon-Nicolet National Forest, and the Menominee County Forest – have the highest rating for conservation significance, and two of the sites – the Chequamegon-Nicolet and the Peshtigo River – have the highest rating for recreation potential.

The number of recreational facilities such as trails and campgrounds in the NES is not as high as in other parts of the state. The NES counties have over 1,700 miles of recreational trails (motorized and non-motorized), but rank 11th out of 16 ELs in overall trail density (miles of trail per square mile of land). The density of hiking, biking, and cross-country ski trails is lower compared to the rest of the state, though the density of ATV trails is higher. Similarly, the NES ranks 12th out of the 16 ELs in both the number and the density of campgrounds (both public and privately owned).

![Recreation Regions of the Northeast Sands EL](image)

### REGIONAL RECREATION PARTICIPATION AND NEEDS

A recent *Recreation Opportunities Analysis* (ROA) solicited public input about popular recreational activities in different recreation regions around the state, as well as regional recreational needs and shortages, through open house meetings and online public input forms. The recreation regions encompassing the NES EL are mostly Upper Lake Michigan Coastal (WDNR 2018b) with a small portion in Northwoods (WDNR 2017a) (Figure 3.3). A small area also falls into the Lake Winnebago Waters region, but there are very few DNR properties here, all of them small. Using the information gathered through this effort, as well as from the results of a 2016 survey about recreation participation and needs administered to a random sample of Wisconsin residents statewide as part of the development of the 2019-2023 [SCORP](http://www.wdc.state.wi.us/∼scorp), the ROA identified recreation opportunities most needed in the Upper Lake Michigan Coastal (ULMC) and Northwoods regions and the potential role of DNR properties in helping to meet these needs.

Table 3.2 lists popular activities in the ULMC and Northwoods regions according to the results of the ROA public input and the SCORP survey. Overall, the results from both efforts are similar, although there are some differences, especially for the ULMC. For both regions, activities that were noted as popular in the ROA public input but not in the SCORP survey are shown in red font.

In terms of recreation shortages and needs, additional opportunities for trail-based activities, especially hiking/walking trails, were commonly cited as needs by respondents in both regions. More camping and more public shore access to lakes and streams were also widely identified as needs.
### Table 3.2. Popular Recreation Activities in the Upper Lake Michigan Coastal and Northwoods Recreation Regions.

<table>
<thead>
<tr>
<th>Upper Lake Michigan Coastal</th>
<th>Northwoods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROA</strong></td>
<td><strong>SCORP</strong></td>
</tr>
<tr>
<td>Bicycling – paved trails</td>
<td>Bicycling – paved trails</td>
</tr>
<tr>
<td>Bicycling – mtn. biking, single track</td>
<td>Fishing – from boat, canoe, kayak</td>
</tr>
<tr>
<td>Camping – tent</td>
<td>Hiking, walking, trail running</td>
</tr>
<tr>
<td>Camping – RV/pop-up</td>
<td>Swimming</td>
</tr>
<tr>
<td>Canoeing/kayaking</td>
<td>Wildlife/bird watching</td>
</tr>
<tr>
<td>Cross-country skiing/snowshoeing</td>
<td>Fishing – from shore</td>
</tr>
<tr>
<td>Fishing – from boat, canoe, kayak</td>
<td>Harvesting berries, mushrooms, etc.</td>
</tr>
<tr>
<td>Hiking, walking, trail running</td>
<td>Hiking, walking, trail running</td>
</tr>
<tr>
<td>Horseback riding</td>
<td>Swimming</td>
</tr>
<tr>
<td>Swimming</td>
<td>Wildlife/bird watching</td>
</tr>
<tr>
<td>Wildlife/bird watching</td>
<td></td>
</tr>
</tbody>
</table>

(Activities shown in red font were noted as popular in the ROA public input but not in the SCORP survey.)

The SCORP results noted where responses from specific regions of the state differed from the state average. Residents of the ULMC counties identified the following recreation need in their home counties at a higher rate than the state average:

- Public shore access to lakes, rivers, and streams

Residents of the ULMC counties identified the following recreation needs in their home counties at a lower rate than the state average. An asterisk (*) indicates where the SCORP results differ from the ROA, as the marked activities were among the top 10 most frequently identified as needed in the region by ROA respondents:

- Bicycling trails*
- Ball fields
- Outdoor courts for tennis, handball, and basketball
- Local parks and playgrounds*

Similarly, residents of the Northwoods counties identified the following recreation needs in their home counties at a higher rate than the state average:
Residents of Northwoods counties identified the following recreation needs in their home counties at a lower rate than the state average:

- Ball fields
- Local parks and playgrounds

The ROA used the information from both the SCORP survey and the ROA public input to group most-needed recreation activities into high, medium, and low categories. Table 3.3 lists activities ranked as high future recreation needs for the two regions.

Table 3.3. High-ranked Future Recreation Needs for the Upper Lake Michigan Coastal and Northwoods Recreation Regions.

<table>
<thead>
<tr>
<th>Upper Lake Michigan Coastal</th>
<th>Northwoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bicycling – bicycle touring/road biking</td>
<td>• ATV/UTV riding</td>
</tr>
<tr>
<td>• Bicycling – mountain/off-road biking</td>
<td>• Bicycling – bicycle touring/road biking</td>
</tr>
<tr>
<td>• Bird or wildlife watching</td>
<td>• Bicycling – mountain/off-road biking</td>
</tr>
<tr>
<td>• Camping - developed</td>
<td>• Camping - developed</td>
</tr>
<tr>
<td>• Camping - primitive</td>
<td>• Camping - primitive</td>
</tr>
<tr>
<td>• Canoeing or kayaking</td>
<td>• Canoeing or kayaking</td>
</tr>
<tr>
<td>• Fishing – lake fishing from boat, canoe, kayak</td>
<td>• Fishing – lake fishing from boat, canoe, kayak</td>
</tr>
<tr>
<td>• Fishing – lake fishing from shore, pier</td>
<td>• Fishing – lake fishing from shore, pier</td>
</tr>
<tr>
<td>• Fishing – stream/river fishing from shore, wading</td>
<td>• Fishing – stream/river fishing from shore, wading</td>
</tr>
<tr>
<td>• Hiking, walking, trail running, backpacking</td>
<td>• Four-wheel vehicle driving</td>
</tr>
<tr>
<td>• Horseback riding</td>
<td>• Hiking, walking, trail running, backpacking</td>
</tr>
<tr>
<td>• Motorboating – waterski/tubing/personal watercraft</td>
<td>• Hunting – big game</td>
</tr>
<tr>
<td>• Visiting a beach, beach walking</td>
<td>• Off-highway motorcycle riding</td>
</tr>
<tr>
<td></td>
<td>• Participating in nature-based education programs</td>
</tr>
<tr>
<td></td>
<td>• Snowmobiling</td>
</tr>
</tbody>
</table>

LANDSCAPE CONSIDERATIONS FOR PLANNING AND MANAGEMENT

The NES EL has significant public land holdings which provide abundant recreation opportunities, particularly in settings that are remote or wild. Extensive forests provide diverse forest habitats, support local economies, and offer varied management opportunities. Restoration and landscape-scale management opportunities exist for globally imperiled pine barrens.

There is a shortage of older forest and of large patches. Many stands are composed of young or medium-aged trees dominated by one or a few species. Older, structurally complex, or floristically diverse stands are rare. A focus on early-successional aspen management has led to the creation of large amounts of
edge habitats that have promoted generalist species at the expense of interior or area-sensitive species. Many areas of former pine barrens have succeeded to forest or been replaced by plantation pine. Opportunities exist to maintain large habitat patches, improve connectivity between smaller patches, and include areas of extended rotation or development of old-growth characteristics within working forests. There also are opportunities to increase the conifer component in different forest types, especially species like white pine, hemlock, red pine, and jack pine.

Early-successional management could be extended to include species like jack pine and scrub oak, much reduced from their historical abundance. Dry forest, barrens, and bracken grassland management could be coordinated (including across ownerships) to connect barrens remnants and increase effective habitat size. Prescribed fire is potentially an important management tool in many parts of the NES, to maintain and enhance dry forest and barrens communities.

As in other parts of the state, high white-tailed deer populations are exerting heavy browse pressure on seedlings and saplings of forest trees such as hemlock and white cedar as well as on shrubs and herbs, with negative impacts on forest composition and structure. A number of invasive species are established in the region, with others likely to appear in the near future. Aggressive species like European swamp thistle and glossy buckthorn threaten conifer swamps. Glossy buckthorn is widespread and locally common in the southern and eastern portions of the NES, particularly in disturbed white cedar swamps, and has the potential to completely overwhelm the understories of these wet-mesic forest communities. Emerald ash borer threatens the black ash component of hardwood swamps.

Forested river and stream corridors help to maintain high water quality of surface waters. Some of these corridors offer good opportunity to connect small, scattered stands of older forest, especially coniferous forest, that support species rare elsewhere in the EL. Hydrologic modifications include large dams on several of the major rivers. Installation of fish passage structures at hydroelectric dams would allow migratory fish to access spawning, wintering, and foraging habitats. Shoreline development along rivers and streams is a significant concern and is likely to increase in the future.

Recreationally, the NES is a destination for a variety of outdoor recreation activities taking place mostly in lightly-developed, rural, or remote settings. Hunting, fishing, trapping, paddling, wildlife viewing, and a variety of both motorized and non-motorized trail activities are popular. The high proportion of public recreation land provides a variety of recreation facilities with a range of amenities, including campgrounds, trails, and boat launches. Some existing federal, state, and county ownerships are extensive and can accommodate a range of recreation activities, including those that are potentially incompatible.

Recreational needs and shortages have been identified for the region. Additional opportunity for trail-based activities – especially hiking and bicycling – camping, and more public access to rivers and lakes are high-ranked needs for the NES. There is potential to add or expand recreation activities on department properties in the NES to meet some of these shortages. Proper siting will be necessary in order to ensure a quality recreational experience for users that is compatible with property designations and physical capabilities. Road access, proximity to population centers, and trail connections to regional networks are important recreation factors to consider in planning for new or expanded uses. Ecologically, extensive wetlands in portions of the NES limit the variety of recreational activities that can be supported. Fragile vegetation and thin or erodible soils in other areas may limit trail-based pursuits. Some areas that are rugged in character and challenging to access may be more suited to activities that can be pursued in remote settings with few facilities.
SIGNIFICANCE OF THE PROPERTIES WITHIN THE LANDSCAPE

This analysis focuses on significance of the properties for which the NES plan establishes management; it does not include the properties that already have NR 44-compliant plans.

PROPERTY ECOLOGICAL MANAGEMENT OPPORTUNITIES

The properties to be planned within the NES are major contributors to the ecological significance of the Landscape. Collectively, the properties present opportunities to protect, manage, and restore all the major ecological features of the NES: extensive forests, high-biodiversity-value forest communities; barrens and bracken grasslands; river/stream corridors and other aquatic/wetland habitats; and bedrock features (WDNR 2011, 2012a, b, c, 2013a, b, c, 2014b, 2017b, 2018a, 2018c). Table 3.4 summarizes the major ecological management opportunities offered by the ten major properties in the NES EL plan.

Table 3.4. Ecological Management Opportunities on Properties of the Northeast Sands EL Plan.

<table>
<thead>
<tr>
<th>Property</th>
<th>Extensive Forests</th>
<th>High-biodiversity-value Forest Communities</th>
<th>Barrens &amp; Bracken Grasslands</th>
<th>River/stream Corridors, Aquatic, Wetlands</th>
<th>Bedrock Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amberg Wildlife Area</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dunbar Barrens SNA</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Haley Creek Swamp SNA</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Miscauno Wildlife Area</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Peshtigo Brook Wildlife Area</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pike Wild River</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pine-Popple Wild Rivers</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>S. Branch Oconto River Fishery Area</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spread Eagle Barrens SNA</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town Corner Wildlife Area</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

The Pine-Popple and Pike Wild Rivers, three of only five state-designated Wild Rivers in Wisconsin, feature densely forested corridors with diverse forest communities and significant tracts of older forest, including hemlock-hardwoods, drier pine-oak-aspen, lowland hardwoods, and conifer swamps. These forests host a high diversity of breeding birds, including forest-interior species, conifer-dependent species, and forest raptors. All three Wild Rivers are designated as Outstanding Resource Waters with excellent water quality, and both properties protect high-quality aquatic and wetland habitats such as springs, seeps, ephemeral ponds, peatlands, and sedge meadows. The central portion of the Pike Wild River property presents restoration and management opportunities for pine barrens, dry forest, and bedrock glade communities. Both properties contain bedrock features such as glades, cliffs, and outcrops.

Haley Creek Swamp State Natural Area (SNA) is within and adjacent to the project boundary of the Pine-Popple Wild Rivers, and protects similar habitats, including an undisturbed wetland complex of spring ponds, fen, and conifer swamp, a mile-long coldwater stream segment, and hemlock-hardwood forest in the uplands. Both the lowland and upland forests on this property represent the only remnant of the
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former Goodman timber block that still retains old forest characteristics with mature stand structure, and constitute one of the best opportunities in this landscape to manage for old-growth conditions.

**Spread Eagle Barrens SNA** and **Dunbar Barrens SNA** offer opportunity to manage for the globally imperiled pine barrens community. Spread Eagle Barrens is the best place in the state for bracken grasslands. Bracken grassland is a regionally unique type of pine barrens, composed of a mix of native and non-native species, known only from the NES EL. It occurs on gently rolling uplands and frost pockets (treeless depressions where frost may occur at any time of year) in pitted outwash. Although not contributing significantly to native botanical diversity, bracken grasslands support a variety of rare and declining species dependent on open grassland/barrens habitats. Opportunity exists on both Spread Eagle and Dunbar Barrens for landscape-scale restoration and management of these open habitats, including through coordination of management with adjacent landowners (We Energies, Florence County Forest, and Marinette County Forest).

The **Wildlife and Fishery Areas** contain extensive forests of aspen, oak, and pine, and wetland complexes of conifer and hardwood swamps, shrub wetlands, and sedge meadow. Three embedded SNAs on these properties protect extensive, undisturbed sedge meadows, white cedar-black spruce-tamarack conifer swamps, fens, and springs. Opportunities exist to manage for dry pine-oak barrens, encourage and perpetuate older forest, structural diversity, and larger patches, and increase representation of conifers such as hemlock, pines, and balsam fir.

**Department Habitat Priorities**

The department has identified habitat management priorities for DNR managed lands in different regions of the state that generally correspond to Bureau of Wildlife Management administrative districts. This prioritization is intended to focus available resources in order to maximize habitat benefits. The majority of department habitat management resources will be focused on the highest priority habitats in each district. The NES EL falls within the North and Northeast Districts. Table 3.5 lists the top terrestrial/wetland and aquatic habitat priorities for these two districts.

**Table 3.5. DNR Priority Habitats for the Northeast and North Districts.**

| Northeast Terrestrial/Wetland | Aquatic Item
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep marsh/shallow lakes (hemi-marsh goal)</td>
<td>Coldwater streams</td>
</tr>
<tr>
<td>Emergent wetlands (wet/sedge meadow, shallow marsh, mudflats)</td>
<td>Large lake – shallow, hard and very hard (marl), drainage</td>
</tr>
<tr>
<td>Great Lakes dunes, wetlands, and shores</td>
<td>Large lake – shallow, soft, drainage (includes Winnebago system)</td>
</tr>
<tr>
<td>Oak/pine barrens</td>
<td>Lake Michigan</td>
</tr>
<tr>
<td>Old forests (natural origin pine, hemlock, cedar, n. hardwood)</td>
<td>Springs and spring runs (hard)</td>
</tr>
<tr>
<td></td>
<td>Springs and spring runs (soft)</td>
</tr>
<tr>
<td></td>
<td>Warmwater rivers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Northeast Terrestrial/Wetland</th>
<th>Aquatic Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep marsh/shallow lakes (only those with significant wild rice opportunity)</td>
<td>Coldwater streams</td>
</tr>
<tr>
<td>Great Lakes dunes, wetlands, and shores</td>
<td>Large lake – deep, soft and very soft, seepage</td>
</tr>
<tr>
<td>Oak/pine barrens</td>
<td>Large lake – deep, soft, drainage</td>
</tr>
<tr>
<td>Old forests (natural origin pine, hemlock, cedar, n. hardwood)</td>
<td>Lake Superior</td>
</tr>
<tr>
<td>Young forest (primarily aspen)</td>
<td>Spring pond, lake - spring</td>
</tr>
<tr>
<td></td>
<td>Springs and spring runs (hard)</td>
</tr>
<tr>
<td></td>
<td>Springs and spring runs (soft)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>North Terrestrial/Wetland</th>
<th>Aquatic Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep marsh/shallow lakes (hemi-marsh goal)</td>
<td>Coldwater streams</td>
</tr>
<tr>
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<tr>
<td>Old forests (natural origin pine, hemlock, cedar, n. hardwood)</td>
<td>Springs and spring runs (hard)</td>
</tr>
<tr>
<td>Young forest (primarily aspen)</td>
<td>Springs and spring runs (soft)</td>
</tr>
</tbody>
</table>
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SITES OF HIGH CONSERVATION SIGNIFICANCE

Conservation Opportunity Areas

The Wisconsin Wildlife Action Plan identified Conservation Opportunity Areas (COAs) in each EL, places that contain significant ecological features, natural communities, or habitat for Species of Greatest Conservation Need (SGCN). COAs represent sites that Wisconsin has a responsibility to protect or conserve from global, continental, upper Midwest, or state perspectives. COAs are described in more detail in WDNR (2008). The following COAs encompass all or portions of properties included in the NES EL plan:

Global significance
- Dunbar Barrens COA: Dunbar Barrens SNA

Continental significance
- Nicolet Hemlock-Hardwoods COA: Haley Creek Swamp SNA; Pine-Popple Wild Rivers

Upper Midwest significance
- Pine-Popple Rivers COA (aquatic): Pine-Popple Wild Rivers
- Spread Eagle Barrens COA: Spread Eagle Barrens SNA

State significance
- Amberg COA: Amberg Wildlife Area; Pike Wild River
- Brazeau Swamp COA: Peshtigo Brook Wildlife Area
- Northeast Wisconsin Forest COA: South Branch Oconto River Fishery Area

Primary Sites

Primary Sites are those identified by the department for special consideration during the planning process. These sites generally encompass the best examples of 1) rare and representative natural communities and 2) documented rare species populations with opportunities for restoration or connections. Primary Sites warrant high protection and/or restoration consideration during the development of a property master plan, and can be considered High Conservation Value Forests for Forest Certification. The following properties included in the NES EL plan have identified Primary Sites:

Amberg Wildlife Area (WDNR 2018a)
- Amberg Swamp Conifers

Haley Creek Swamp SNA (WDNR 2011)
- Goodman Wild Lakes and Pine River

Miscauno Wildlife Area (WDNR 2018a)
- Miscauno Cedar Swamp SNA
CHAPTER 3:
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Peshtigo Brook Wildlife Area (WDNR 2018a)
- Peshtigo Brook Floodplain and Shrub-carr
- Peshtigo Brook Meadow and Woods SNA

Pine-Popple Wild Rivers (WDNR 2011)
- Goodman Wild Lakes and Pine River

Pike Wild River (WDNR 2012a)
- Pike Wild River Corridor
- Little South Branch Pike River
- Pike Wild River Conifer Hardwoods

Spread Eagle Barrens SNA (WDNR 2011):  
- Spread Eagle Barrens SNA

Town Corner Wildlife Area (WDNR 2018a)
- Town Corner Cedars SNA

PROPERTY RECREATIONAL OPPORTUNITIES

As with ecological opportunity, the properties provide regionally significant recreational resources, particularly for those seeking a more remote or wild experience. All the major properties offer extensive tracts for hunting and trapping. The Pine-Popple and Pike Wild Rivers feature outstanding paddling and fishing, as well as scenic enjoyment of their many rapids, waterfalls, and bedrock outcrops. Various coldwater streams on the properties are excellent for trout fishing. The properties also offer opportunity for a variety of other activities, including hiking, wildlife viewing, gathering of wild edibles, and cross-country skiing/snow-shoeing.

The Wisconsin Land Legacy Report (Pohlman et al. 2006), which identified those places most important to meeting the state’s conservation and recreation needs over the next 50 years, identified 12 Legacy Sites located partially or completely within the NES EL. The following Legacy Sites encompass all or portions of properties included in the NES EL plan:

Brazeau Swamp:
- Peshtigo Brook Wildlife Area

Oconto River:
- South Branch Oconto River Fishery Area

Pike River:
- Pike Wild River

Pine-Popple River:
- Pine-Popple Wild Rivers
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**Spread Eagle Barrens:**
- Spread Eagle Barrens SNA

The *Land Legacy Report* assigned each Legacy Site a rating for both conservation significance and recreation potential. Recreation potential for Legacy Sites was assigned on a five-point scale with 1 being lowest and 5 being highest, taking into account factors like the types and variety of recreation activities offered, potential to fill gaps in recreation demand and reduce conflict between current and future users, accessibility to residents, proximity to large population centers, and ability to link recreation areas together (Pohlman et al. 2006, p.43).

**The Brazeau Swamp Legacy Site** was assigned a recreation potential score of 1, indicating that the site “possesses limited recreation potential, could offer a few (generally low-impact) land and/or water-based recreation opportunities, might meet some existing or anticipated future recreation demands, is likely not of an adequate size to accommodate potentially incompatible activities, could link recreation areas, and/or is near small population centers.”

**The Spread Eagle Barrens Legacy Site** was assigned a recreation potential score of 2, indicating that the site “possesses good to moderate recreation potential, could offer some land and/or water-based recreation opportunities, might meet some existing or anticipated future recreation demands, may not be of adequate size to accommodate potentially incompatible activities, could link recreation areas, and/or is near mid-sized population centers.”

**The Oconto River, Pike River, and Pine-Popple River Legacy Sites** all were assigned a recreation potential score of 3, indicating that each site “possesses very good recreation potential, could offer a variety of land and/or water-based recreation opportunities, could meet some existing or anticipated future recreation demands, may be of adequate size to accommodate some potentially incompatible activities, could link important recreation areas, and/or is near mid to large population centers.”

A *Recreation Opportunities Analysis (ROA)* conducted by the department identified existing outdoor-based recreation opportunities and future recreation needs in each of eight recreation regions around the state. The study identified future needs for providing high-quality recreation experiences and evaluated the potential role of department properties in helping meet those needs. The analyses for the recreation regions covering the NES EL properties were completed in 2017 and 2018. Eight of the ten major properties in the NES EL plan are included in the Upper Lake Michigan Coastal recreation region. Two properties fall into the Northwoods recreation region. Table 3.3 (above) lists the activities that the ROA reports for each of these two regions (WDNR 2017a, 2018b) ranked as high future recreation needs.

Some properties in the NES EL plan may have potential to meet recreational shortages and high-ranked recreation needs, including non-motorized trail activities and additional public access to lakes and rivers for fishing and paddling. The following properties were identified as having the potential to add the following recreational activities:

- **Pine-Popple Wild Rivers:** bicycling – bike touring/road riding
- **Spread Eagle Barrens State Natural Area:** bicycling – mountain biking/off-road biking
- **Dunbar Barrens State Natural Area:** bicycling – mountain biking/off-road biking
- **Wausaukee Timber Demonstration Forest:** primitive camping
The ROA reports also made more general (not property-specific) recommendations for opportunities that might be added or expanded at several or many properties, noted specific features needed for these different activities, and described general opportunities or considerations to take into account. These are summarized in Table 3.6.

Table 3.6. Summary of General Recommendations for New/Expanded Recreational Activities in the Upper Lake Michigan Coastal and Northwoods Recreation Regions.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Needs</th>
<th>Opportunities/Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycling – bike touring/road biking</td>
<td>Surfaced trails</td>
<td>Expansion of existing networks linking cities, villages, campgrounds</td>
</tr>
<tr>
<td>Bicycling – mountain/off-road biking</td>
<td>Constructed single-track trails</td>
<td>Expand existing opportunities; new destinations; varying difficulties, including “technical” skill areas</td>
</tr>
<tr>
<td>Camping – developed</td>
<td>More electrified sites</td>
<td>Existing campgrounds</td>
</tr>
<tr>
<td>Camping – primitive</td>
<td>More sites</td>
<td>Pit toilets, no electricity/generators; serving hunters, wilderness adventurers, water recreationists</td>
</tr>
<tr>
<td>Canoeing/kayaking</td>
<td>More carry-in sites with walk-in trails</td>
<td>Many waterbodies</td>
</tr>
<tr>
<td>Hiking/walking/running trails</td>
<td>Designated loop trails of varying lengths</td>
<td>Proximity to cities &amp; villages would be most popular; linking cities/villages to local &amp; state parks</td>
</tr>
<tr>
<td>Horseback riding</td>
<td>More trails</td>
<td>Trails connecting to a network; loop trails within a single property</td>
</tr>
<tr>
<td>Hunting – big game</td>
<td>Access</td>
<td>Easier access to remote areas</td>
</tr>
<tr>
<td>Lake fishing - boat</td>
<td>Improved boat access sites (ramps for trailered boats)</td>
<td>Access to Lake Michigan or Green Bay</td>
</tr>
<tr>
<td>Lake fishing – shore/pier</td>
<td>More docks/piers</td>
<td>Properties near cities &amp; villages with easy road access</td>
</tr>
<tr>
<td>Motorized recreation trails</td>
<td>More trails/routes</td>
<td>Connections to existing networks; access during the hunting season</td>
</tr>
<tr>
<td>Nature-based education programs</td>
<td>More programs</td>
<td>Partners adding/expanding offerings at larger properties</td>
</tr>
<tr>
<td>Stream/river fishing – shore or wading</td>
<td>More access</td>
<td>Acquisition of key parcels</td>
</tr>
</tbody>
</table>

The planning process will evaluate the potential and suitability of the NES EL properties to add or expand these activities to help meet future recreation needs.

Property-specific Considerations

The three state-designated Wild Rivers in the NES EL plan have unique management guidance described in administrative code that must be adhered to when evaluating potential recreational activities.

Per NR 302.02(4), Wis. Admin. Code, Wild Rivers have an established protection zone comprising “the area of land within 400 feet of the waters or to the visual horizon from the water whichever is greater on either side of the wild river”. No development, including campgrounds, is allowed on DNR-managed lands adjacent to shorelines in the protection zone, nor beyond the protection zone up to at least a ¼-mile from either side of the wild river other than that which is necessary to accommodate users of the wild rivers. Additionally, no vegetation control (save for erosion control or restoration activities) is allowed within 150 feet from the bank on either side of the wild river.
CHAPTER 4: ANALYSIS OF IMPACTS

INTRODUCTION

This chapter describes the anticipated environmental impact of resource management and public use actions included in this master plan. Impacts of common habitat management practices and recreational use/management activities occurring on DNR properties are described in separate Common Elements documents: Impacts of Habitat Management Practices and Impacts Associated with Outdoor Recreation. The analysis presented here focuses on the impacts of specific actions, particularly those that are new or constitute changes to the current management, development, or use of a property. Actions representing practices that are commonly applied on DNR properties, and whose impacts are adequately described in the two Common Elements documents cited above, are not discussed here.

IMPACTS OF EXISTING MANAGEMENT ACTIONS AND PUBLIC USES

Chapter 2 of the NES plan describes existing habitat and public use objectives and strategies that the department proposed to continue using at the properties in the NES. The proposed continuation of management actions in this plan provide for the protection, maintenance, and enhancement of upland and lowland deciduous and coniferous forests, open and forested wetlands, globally imperiled pine barrens, rare bracken grassland habitats, and high-quality surface water features. These actions are expected to have many net beneficial environmental effects, including for a wide variety of game and non-game species, such as forest-interior breeding birds, rare reptiles and amphibians, aquatic invertebrates, and coldwater fish.

Recreation facilities on most of the properties in the NES plan are few and simple in nature, supporting dispersed recreation in largely remote or lightly developed settings.

The impacts associated with the existing management actions at department properties in the NES are expected to be consistent with those described in the Common Elements documents cited above. Any adverse impacts that result from these continuing management and use actions at NES properties are expected to be minor, local, or temporary in nature. No unusual, unique, or exceptional outcomes are expected from the department continuing existing management actions on its properties in the NES.

IMPACTS OF PROPOSED NEW ACTIONS

RESOURCE MANAGEMENT ACTIONS

Chapter 2 also describes new habitat and public use objectives and strategies that the department proposes to use at properties in the NES. Proposed new actions include:

- Establishment of a new State Natural Area on the Pine-Popple Wild Rivers property. Proposed management does not represent a substantive change to current management objectives and strategies. Management proposed for the new SNA will protect high-quality natural communities and promote and enhance underrepresented successional stages and existing characteristics of older forest while continuing to provide for timber production. The proposal maintains public access to the
area as well as existing recreational activities. The new SNA is expected to have a positive impact on the resources of the Pine-Popple Wild Rivers property.

- Expansion of aspen management on Governor Thompson State Park. This proposal will follow all existing sustainable forest management practices and Best Management Practices (BMPs) while maintaining the aesthetic values of the park. Management for a range of forest age classes will enhance habitat diversity for a variety of species. Proposed expansion of aspen management is expected to have a positive impact on species associated with earlier-successional forest, and will reduce the incidence of potential recreation hazard trees. The majority of forested acreage on the property will remain unmanaged (forested wetlands) or continue to emphasize longer-lived species. Substantive impacts on later-successional forest species are not anticipated.

**PUBLIC USE MANAGEMENT AND DEVELOPMENT ACTIONS**

The NES plan does not propose any new recreational activities nor significant expansion of existing activities or facilities on any of the properties. New recreation developments and proposals are few and intended to enhance existing low-impact activities. They include:

- Additional carry-in boat access, small parking areas, access road improvements, signage improvements, one new hiking trail, modest expansions of two existing non-motorized trails, and development of modest trail head facilities in one location. These will all be primitive or lightly developed features. Construction/installation of these features is not expected to have any substantial impacts on the physical environment and will expand and enhance recreation opportunities on the properties.

- Closing a total of 7.83 miles of roads to public motor vehicle access on Dunbar Barrens State Natural Area (4.29 miles), the Pike Wild River (0.94 miles), and the Pine-Popple Wild Rivers (2.6 miles) and changing the public access designation from Open to Open Seasonally on 2.4 miles of roads on Spread Eagle Barrens State Natural Area. The intent of these proposals is to limit damage and the need for costly repairs on roads where soils and topography greatly increase susceptibility to erosion and damage (rutting, wash-outs), particularly in wet conditions, or to restrict winter access when conditions are not suitable for street-licensed vehicles. In the case of the Pike and Pine-Popple Wild Rivers, there is also the intent to close roads that are in close proximity to the riverway and that provide limited connectivity or utility for resources management, in order to protect the scenic qualities of the wild rivers pursuant to NR 302. The proposed closure of a limited number of miles of road will not substantively impact public motorized access on these properties. In all cases, the roads closed to motor vehicles will remain available for foot travel.

- Closure of a small area (14.7 acres) on the Potato Rapids Flowage Unit of the Governor Earl Peshtigo River State Forest. This parcel contains a network of trails that currently allow recreational uses including hiking, biking, hunting, horseback riding, and snowshoeing. It has been discovered that a small portion of this informal trail network is impacting an archaeological site. In accordance with federal and state laws and department policy, the NES plan proposes to close this area to public use to prevent further soil disturbance and impacts to the site. The area proposed to be closed represents a very small portion of the informal trail network. The closure does not represent a barrier to use of the remainder of the trail network and is not expected to materially impact trail users.
WEPA COMPLIANCE

Property planning under Ch. NR 44, Wis. Admin. Code is an integrated analysis action under NR 150.20(2)(a)1, Wis. Admin. Code, and therefore complies with the Wisconsin Environmental Policy Act (WEPA), s. 1.11, Wis. Stats. and Ch. NR 150, Wis. Admin. Code.

Sitting by Meyers Falls, Pine River; photo by WDNR
CHAPTER 5: ANALYSIS OF ALTERNATIVES

This chapter describes those alternatives, along with their anticipated impacts, that were considered by the DNR planning team but not selected during the development of this master plan.

LAND MANAGEMENT ALTERNATIVES

The resource assessment of the properties included in the NES plan that the department conducted prior to initiating the NES master planning process determined that the overall current land management objectives and actions on the properties were appropriate and should generally be continued. No new resource management objectives (alternative management purposes) were identified for consideration in the planning process.

During the planning process, the planning team evaluated the assessment data and determined the most appropriate actions for protecting and perpetuating high-value resources and general habitats and recreational environments. The proposed master plan maintains the overall current resource management focus on each property and adds language to provide additional protection or enhancement of high-value natural resources that were identified in the resource assessment process. The result is that these resources are now more precisely defined and managed under the proposed plan. Thus, the planning team did not consider any significant land management alternatives.

PUBLIC USE ALTERNATIVES

RECREATIONAL FACILITY DEVELOPMENT ON SPREAD EAGLE BARRENS STATE NATURAL AREA

During the plan initiation public input process, the department received various requests for recreational activities on Spread Eagle Barrens State Natural Area (SNA). At over 8,000 acres in size, Spread Eagle Barrens is the second largest SNA in the state, and portions of the property that were acquired from Florence County have a history of public use. While the primary purpose of SNAs is to preserve the best examples of the state’s diverse natural communities, recreational uses that do not threaten the site’s natural values are allowed. Accordingly, the planning team evaluated various recreational enhancements on the property, including: mapping existing access ways as trail networks; developing new hiking/interpretive trails or routes; and camping.

Spread Eagle Barrens has many access ways – designated and undesignated roads, trails, firebreaks, etc. – that provide motorized and non-motorized access to the property. Some of these access ways are mapped, maintained seasonally, and designated, but most are not. Many of the property’s prescribed burning breaks and interior property management trails are maintained periodically (i.e., annually, semi-annually) and currently serve as informal hunter walking or hiking trails for property users. The planning team considered identifying and mapping these additional access ways. The team also considered providing additional primitive camping on the property, or moving the existing campsite to a different area of the property.

Spread Eagle Barrens is managed to restore and maintain pine barrens and bracken grassland, rare natural communities for which this property presents one of the best opportunities in the state. Pine barrens and bracken grassland require regular active management (prescribed fire, timber harvesting, etc.) to restore
and maintain. Due to the management-intensive nature of these communities, the focus for DNR staff assigned to this property is to maintain existing barrens and expand barrens restoration where possible. Therefore, the master plan recommends the status quo for recreational facilities at Spread Eagle Barrens, with most available resources targeted for wildlife habitat and natural community management work. Additional annual or semi-annual maintenance of specific burn breaks and interior management trails will be considered on a case-by-case basis.

RECREATION OPPORTUNITIES ANALYSIS PROPERTY-SPECIFIC RECOMMENDATIONS

A Recreation Opportunities Analysis (ROA) recently conducted by the department identified existing outdoor-based recreation opportunities and future recreation needs in each of eight recreation regions around the state. The study identified future needs for providing high-quality recreation experiences and evaluated the potential role of department properties in helping meet those needs. The recreation regions covering the NES EL properties were completed in 2017 and 2018. Most of the properties in the NES EL plan are included in the Upper Lake Michigan Coastal recreation region (WDNR 2018b); two properties fall into the Northwoods recreation region (WDNR 2017). In these two ROA reports, four newly planned NES EL properties were identified as having the potential to add the following recreational activities:

- Pine-Popple Wild Rivers: bicycling – bike touring/road riding
- Spread Eagle Barrens State Natural Area: bicycling – mountain biking/off-road biking
- Dunbar Barrens State Natural Area: bicycling – mountain biking/off-road biking
- Wausaukee Timber Demonstration Forest: primitive camping

The planning team evaluated the feasibility of adding these recreational activities at these properties, considering property locations, statutory designations, physical characteristics and suitability, features of a high-quality recreation experience, and staff capacity. The team’s analysis concluded that a combination of factors related to these considerations makes these properties unsuitable for the stated activities.

The Pine-Popple Wild Rivers is a remote and rugged property located in a sparsely populated part of the state. The property is long and linear as it follows the corridors of the two rivers, has very few roads suited to bike touring/road biking and no surfaced trails, and little potential to provide linkages between towns, campgrounds, etc., or other features that would create a high-quality experience for users.

Spread Eagle Barrens and Dunbar Barrens are both State Natural Areas (SNAs), properties whose primary purpose is to protect high-quality examples of Wisconsin’s native communities. Both properties have DNR roads open to public motor vehicle access that may also be used by bicyclists. However, fragile barrens vegetation and thin/erodible soils on both these properties make them unsuitable for constructed single-track trails that would create a high-quality experience for this user group, and potential damage to rare natural communities conflicts with the properties’ statutory purpose.

The Wausaukee Timber Demonstration Forest is part of a network of “Stewardship Demonstration Forests” maintained throughout the state by the Division of Forestry. The purpose of these properties is to demonstrate active timber management and sustainable forest management and provide educational opportunities to students, private woodland owners, and professional foresters related to responsible stewardship and sustainable forestry. The property is small, isolated, and has no existing facilities, and its primary purpose makes it unsuited to development of camping.
Finally, there is very limited staff capacity to absorb additional workload related to maintenance and inspection of these types of new facilities on any of the four properties. Therefore, the master plan does not recommend development of these activities on these properties.
CHAPTER 6: SUMMARY OF PUBLIC INVOLVEMENT

INTRODUCTION

In accordance with Ch. NR 44, Wisconsin Administrative Code, the Northeast Sands Ecological Landscape (NES EL) regional planning process includes an effort to involve the public in the process of developing a master plan. The department’s goals for public involvement in regional planning are to offer the public meaningful ways to be involved in shaping the future management and use of department properties, and to provide a means for interested people to stay informed about the properties and planning progress. There are three formal public input points in the planning process:

- At the initiation of the planning process, to help identify important issues to be considered in the plan;
- when the draft regional plan is released for public review and comment; and
- when the Natural Resources Board considers approval of the proposed plan.

PUBLIC INPUT PROCESS FOR PLAN INITIATION

The DNR initiated the master planning process for the NES EL with a public input process during the months of June and July, 2018. A statewide news release was sent out on June 12 announcing the start of the planning process. The public was invited to attend a public meeting on June 26 at the Florence County Wild Rivers Interpretive and Resource Center in Florence and office hours on June 27 at the DNR Ranger Station in Wausaukee, where they could learn more about the planning region and the properties involved, speak one-on-one with department staff, and submit comments identifying issues to be evaluated in the planning process. Background information on the region and properties and an online questionnaire were also made available on the DNR website. The public comment period was open through July 11. Some 21 people attended the public meeting and office hours, and 53 written comments were received. A public comment summary was posted on the NES regional plan webpage in late July.

Comments generally expressed support for sustainable forest management, for both early-successional and older forest condition, and for management of rare natural communities. General public use comments mentioned better signage and property information on recreational activities, and requests for more hiking trails, campsites, and river access. Property-specific comments centered on the Pine-Popple Wild Rivers, where respondents expressed support for wild river protection and management, requested additional facilities (signage, walking trails, boat access sites, campsites) and access to Breakwater Falls. Several comments expressed support for the Wild Rivers Advisory Committee. Respondents also requested additional facilities on Spread Eagle Barrens (hiking trails, campsites, interpretive information) and Governor Earl Peshtigo River State Forest (ATV connector trails).

PUBLIC INPUT PROCESS FOR DRAFT PLAN

The DNR released the Northeast Sands Draft Regional Plan for public review and comment on July 22, 2019. The draft plan and maps were made available on the DNR website. A news release was distributed to media in the Northeast Sands counties (Florence, Marinette, Menominee, Oconto, and Shawano) on
July 22 and sent out statewide on July 23, announcing the availability of the draft plan and public input opportunity. The public was invited to attend public open house meetings on July 30 at the Florence County Wild Rivers Interpretive and Resource Center in Florence and on July 31 at the Crivitz Youth Community Center in Crivitz where they could learn more about the draft plan, speak one-on-one with department staff, and submit comments. An online comment form was also made available on the DNR website. The public comment period was open through August 21. Approximately 87 people attended the public meetings, and 91 written comments were received.

SUMMARY OF COMMENTS RECEIVED

Major themes identified in the comments are presented below, organized by topic. Department responses are included as appropriate.

General Comments

Comments were received indicating both general support and disapproval for the plan overall.

Public input: Several comments stated that the plan did not take the views of local citizens into account and that the department should have disclosed specific proposals during the kick-off public meeting. One comment indicated that there was insufficient time between when the draft plan public meetings were announced and when they took place. Another comment asked whether the department notified local governments in Forest County, since part of the Pine River is located in that county, and also asked how counties and towns will be included if there are revisions to the draft plan. Several comments expressed dissatisfaction with the format of the public open house meetings for the draft plan. The department received a request from Florence County for government-to-government coordination on the draft plan.

Department response: As stated in the Northeast Sands Public Involvement Plan, the department offers three formal opportunities for public involvement during the planning process: when the planning process begins, when the draft plan is released for public review and comment, and when the proposed plan is presented to the Natural Resources Board (NRB) for consideration. However, public comments are welcome and considered at any time.

The purpose of the kick-off or scoping public meeting is to inform the public that the planning process is starting, provide information about the planning process, region, and properties, and invite the public to provide their input about the properties and issues they believe need to be addressed in the plan. Department staff do not typically come to public scoping meetings with specific resource management or public use proposals ready to present. Specific proposals come during the development of the plan, taking many factors into account: ecological and recreational context of the region; property designations; property ecological and public use data and information; physical capability and suitability of properties; public input; and applicable laws and policies. The department received public comments during the scoping public input opportunity, and considered them in the development of the draft plan. Similarly, comments received during the draft master plan public comment period will be considered for the revised draft of the plan that will be presented to the NRB. This comment summary provides a response to comments and indicates where changes have been made to the draft. There will be another opportunity for the public to review and comment on the plan when it goes before the NRB.

The department’s typical practice is to announce public meetings at least two weeks ahead of when they occur to give the public sufficient notice to plan to attend. We acknowledge that this did not happen for
the Northeast Sands draft plan public meetings, which were announced one week ahead of time. However, the comment period did extend a full 30 days from the date the draft plan was released so as to give the public enough time to review the draft and submit comments.

The Pine River does flow through Forest County. However, the entirety of the department’s Pine-Popple Wild Rivers property is located in Florence County. The department does not manage any land along the Pine River in Forest County; therefore, that county was not included in the Northeast Sands planning process.

The department has scheduled a face-to-face coordination meeting with Florence County for October 1, 2019.

**Several respondents expressed concern that the draft plan applies to non-DNR lands.**

**Department response:** The draft plan applies only to DNR-managed lands. As stated on page 1 of the draft plan, “The purpose of this master plan is to guide management on Department of Natural Resources (DNR; also referred to as “department”) properties within the Northeast Sands Ecological Landscape”.

There are non-DNR lands located within the property project boundaries of several Northeast Sands properties. It is common for DNR property project boundaries to include lands that are not DNR-managed. The NR 44 land management classifications assigned in the draft plan are mapped to property project boundaries, as explained on page 8 of the draft plan. This is done to ensure that any parcels acquired after the plan’s approval have management objectives assigned. However, the management objectives and prescriptions described in the plan apply only to DNR-managed lands. Lands that are not DNR-managed are indicated with a diagonal hatching on master plan land management classification maps.

**General Resource Management**

Several comments commended the department for a thorough analysis of the natural resources of the Northeast Sands, using the best available science to aid in decision-making, implementing recommendations in the *Ecological Landscapes of Wisconsin* book and the Wildlife Action Plan, and for specific elements in the plan to pursue management of pine barrens and old-growth forests, two habitats that currently occur at less than 2% of their original distribution. One respondent expressed disagreement with maintaining surrogate grassland/planted prairie in northeast Wisconsin and with controlling the planted lupine on Dunbar Barrens SNA.

**One comment asked how the plan is addressing endangered species along the wild river shorelines.**

**Department response:** The department follows Chapter NR 302, Wis. Admin. Code for management of lands adjacent to the wild rivers. The draft plan focuses on protection, maintenance, and enhancement of wildlife habitat, including for rare species, through a combination of habitat and native community management using both passive management and a variety of active techniques. These include fish stocking, forest management, prescribed fire, invasive species control, and protection and management of special habitats or features such as ephemeral ponds, bedrock outcrops, and turtle nesting sites. Except as provided for in NR302.03, active management is not performed in the 0-150-foot portion of the river protection zone. All these passive and active management efforts take into account the rare, threatened, and endangered species that occur along the wild river shorelines.
CHAPTER 6:
Summary of Public Involvement

General Public Use

Support was expressed for maintaining remote, unimproved access (i.e., primitive trails, no development), for additional backcountry camping opportunities, and for more silent-sport trails. One comment also indicated support for ATV trails or routes across DNR properties that improve the connectivity of regional trail networks.

Several respondents requested off-road, slow-speed trail opportunities for street-licensed four-wheel-drive (4WD) vehicles, noting the lack of opportunities for this activity in the state. Advocates for this activity are seeking places to drive their street-legal 4WD vehicles on designated “challenge courses” that typically involve climbing steep, boulder-strewn, or bedrock hills. These courses are designed to test the driver’s ability to slowly maneuver around and over various rocks, logs, and other obstacles.

Department response: The department is committed to providing high-quality opportunities on DNR-managed lands for the full range of outdoor nature-based recreational activities, including motorized trails, and recognizes that the demand for low-speed, technical off-road driving opportunities is not being adequately met in Wisconsin. Although over 1,000 miles of forest logging roads are open to off-road vehicles on public lands around the state, there are very limited opportunities for the type of challenge course desired by some 4WD vehicle owners. The department is committed to trying to determine how this need could be met in Wisconsin and the potential role that DNR-managed lands might play in helping meet this demand.

Challenge courses do not require large spaces but can be difficult to site both because of the features required for a high-quality experience (e.g., steep topography, boulders, bedrock exposure or other types of obstacles) as well as the need to ensure that the locations are environmentally sustainable. The department properties of the Northeast Sands do not appear able to support a sustainable, high-quality experience for a 4WD vehicle course. Many DNR-managed lands here have wetland and other soils that could not support a challenge course or are long, narrow properties that follow rivers and have limited accessibility.

The department recently established a group of agencies and organizations focused on the outdoor recreation industry in Wisconsin to help address a range of different needs throughout the state. This group, known as the Recreation Stakeholders Council (RSC), includes representation from the major public landowners (federal, state, and county agencies) as well as groups advocating for and providing outdoor recreation opportunities. To address the need for more and better places for 4WD vehicle owners to engage in low-speed, technical off-road driving, the DNR proposes to bring this issue to the RSC with a request that representatives from the national and county forests (and potentially others) work with the DNR and the 4WD community to collaboratively identify regional needs and opportunities. The goal of this effort would be to work across land ownership types to identify which landowners may be best positioned to provide opportunities and which agencies or groups are best positioned to manage potential operations.

General Real Estate

One comment expressed opposition to sale of DNR properties. Other comments expressed opposition to additional land acquisition.
CHAPTER 6:  
Summary of Public Involvement

**Property-Specific Comments**

*Pine-Popple Wild Rivers*

The majority of property-specific comments received had to do with the Pine-Popple Wild Rivers property. Comments addressed various issues, noted below.

**Pine Dam**

Both written comments received by the department and verbal comments expressed by attendees at the Florence public meeting indicated concern over the fate of the Pine Dam and fear that DNR was proposing or intending to remove the dam. Comments cited renewable, reasonably-priced energy generated by the dam, recreational opportunities provided by the Pine River Flowage and the Oxbow area (higher water levels maintained by the dam make summer tubing around the Oxbow a very popular activity), and positive economic impacts as reasons for wishing the dam to remain. The department also received a request from WEC (We Energies and WPS) to remove references to the Pine Dam from the draft plan.

**Department response:** Language in the draft plan, specifically for the *Pine River Flowage Scenic Resources Management Area-Type 2 Setting*, has been revised to clarify management for DNR-managed lands around the Pine Flowage. The department does not have jurisdiction over this dam. The Pine Dam is owned and operated by We Energies. The Pine Hydro Project Area (including the Pine Dam) falls under the jurisdiction of the Federal Energy Regulatory Commission (FERC) and is regulated by FERC processes that are separate from, and outside the scope of, the Northeast Sands regional plan. The future of the Pine Hydro Project Area will be determined by We Energies and FERC.

**Pine-Popple Recreational Facilities**

Several verbal and written comments expressed concern that the draft plan is reducing or closing public access to recreational facilities including the Oxbow area and the LaSalle Falls trail. Other comments stated that trails to view waterfalls need more development and requested features such as railings (for safety reasons). Several respondents expressed support for the proposed new trail to view Breakwater Falls; one respondent indicated a preference for a trail on the south side of the river rather than the north side, as this would provide a better view of the falls and could also provide access for paddlers wishing to put in at the base of the falls.

**Department response:** The draft plan is not changing access to the Oxbow or the LaSalle Falls trail. The plan does not propose any changes to the Oxbow area at all, and proposes to evaluate the LaSalle and Big Bull Falls trails for potential enhancements. The draft plan also proposes to develop a new primitive trail (and small parking area) to view Breakwater Falls (just downstream of the Pine Flowage).

The Pine-Popple Wild Rivers property has various trails that provide access to the Pine and Popple rivers for viewing waterfalls (see Table 2.29, page 79 in the draft plan). These trails are currently maintained to the *NR 44 trail development standard* of “Primitive”, and the draft plan proposes maintaining this development standard (including for the proposed new trail to Breakwater Falls). This is in keeping with provisions in NR 302, Wis. Admin. Code, which the department follows for resource management and facility development on its wild rivers properties. The department will continue its efforts to provide public access while maintaining the scenic character of the wild river.
The land on the south side of the river along Breakwater Falls is owned by We Energies. Any trail or viewing points established here would require their approval. We Energies currently maintains a portage trail located on the south side of the river, which traverses around the Pine Dam and Breakwater Falls. This trail allows paddlers to put in on the river below the falls area.

Balancing Public Use and Resource Protection

Several respondents took exception to the statement in the draft plan about the increased popularity of the Oxbow area creating challenges for balancing use and protection in that area, interpreting this statement to mean that the department does not support efforts to promote public use of this area.

Department response: The department did not intend to imply a lack of support for public use of this property. The challenge of balancing use and protection is not unique to the Pine-Popple Wild Rivers, but is a challenge common to all DNR lands. The DNR strives to provide the public with safe, high-quality recreational opportunities on its properties, balancing the many and varied requests for different activities with each property’s statutory designation and physical capabilities, while also safeguarding and sustainably managing the natural resources that are a key part of what attracts people to these properties in the first place. Increased public use of an area often results in management issues that typically require time and resources to address. For example, DNR staff at the Florence public meeting reported hearing complaints about increased litter and parking problems at the Oxbow in one-on-one conversations with attendees. The master plan is the appropriate place to note the management challenges that exist on a property, so that staff are aware of them moving forward and so the issues can be addressed as appropriate and feasible.

Forest Management

Several respondents had comments or questions about proposed forest management on the property, specifically, management in the 150-400-foot portion of the river protection zone. Comments indicated concern about what is perceived as ‘lack of management’ and impacts of proposed management on timber revenues. Comments addressing land management classifications stated that the Pine-Popple Rivers Habitat Management Area should instead be classified as a Forest Production Area, and that the 150-400-foot portion of the wild river protection zone is currently, and should continue to be, classified as Forest Production Area. Several respondents expressed opposition to what they perceived as a “re-classification” of acres of Forest Production Area in Table 2.1 (p. 8) in the draft plan, which summarizes acres of land management classifications across all the properties in the Northeast Sands plan. Other comments suggested that the Pine-Popple Wild Rivers property should be administered by the Division of Forestry rather than the Bureau of Parks and Recreation, with Forestry writing the management prescriptions for the property, or expressed concern that Forestry did not have input on proposed management. Two comments expressed opposition to managing for early-successional forest habitat on the property, particularly in proximity to areas being managed for older forest, citing the abundance of these young-forest habitats elsewhere and the concern that attracting deer to these areas will impact browse-sensitive species that are already rare and declining such as hemlock, Canada yew, and many native herbs.

Department response: The department typically considers many factors when proposing management objectives and prescriptions for a property in a master plan. These include the property’s statutory designation, ecological and landscape context, past management, department priorities, and applicable
laws. In this case, the property is a state-designated Wild River and the department follows the Wild Rivers Administrative Code, NR 302, which defines a protection zone extending to 400 feet on either side of the wild river or to the visual horizon, whichever is greater. Regarding vegetation management in the protection zone, NR 302 specifies “no vegetative control within 150 feet from the bank on either side of a wild river. Outside timber cutting in accord with the guidelines established in the department’s silvicultural and forest aesthetics handbook shall be practiced.” (NR 302.03 (1)e)

Because the overall intent of NR 302 is to protect and maintain the natural beauty and unique aesthetic values of wild rivers, the department defined an objective of scenic management for the 150-400-foot portion of the protection zone. This objective is appropriate to the property designation, in keeping with NR 302, and consistent with wild river management on other department lands.

The proposed forest management is to maintain or increase the conifer component, favor species that can attain large diameters, and encourage structural characteristics of old forests. Old forest is a department habitat management priority for both the northern and northeast areas of the state. The proposed management calls for a combination of passive and active techniques. Generally, passive management is proposed for open and forested wetlands, which is not a significant change from current management. For upland forest types, active techniques, including harvest and planting, are proposed to achieve the stated objective. As the intent is not to maximize production, cutting cycles will typically be longer with less volume harvested. The proposed management is completely “in accord” with the department’s Silviculture and Forest Aesthetics Handbook, as well as with other handbooks, guidelines, and policies that currently guide forest management practices on DNR-managed lands.

Regarding the comments about the land management classifications, this property does not currently have any assigned land management classifications because this property does not currently have a NR 44-compliant master plan. NR 44 land management classifications are being assigned to this property as part of the Northeast Sands plan. DNR manages many different property types. A property’s statutory designation, as described in state statute and administrative code, indicates its primary purpose, and proposed land management classifications for a property reflect its designation. The Forest Production Area land classification is typically applied on state forests. However, the department practices sustainable forest management on all its lands, and forest management is compatible with a wide range of other objectives for a property or management area. Multiple benefits, including timber revenue, can be, and are, realized even when the primary objective is not forest production.

We apologize for the confusion caused by Table 2.1. This table has been modified to improve its clarity (see below). In its regional plans, the department differentiates between properties that do not currently have a NR44-compliant plan and those that do. For properties that already have NR44-compliant plans, the regional plan incorporates those plans by reference and may also propose modifications to those plans. In the Northeast Sands region, there are three properties that have existing NR 44 plans – Governor Thompson State Park, Menominee River State Park and Recreation Area, and Governor Earl Peshtigo River State Forest.

In Table 2.1, the column entitled “Proposed in NES Plan” indicates the acres of each land management classification that are proposed as part of the Northeast Sands plan. These are all acres that do not have a NR 44 land management classification right now. The column entitled “Approved in Existing NR 44 Plans” provides the acres of land management classifications for properties that already have an existing NR 44-compliant plan. The 11,486 acres of Forest Production Area in the “Approved in Existing NR 44 Plans” column are on the Governor Earl Peshtigo River State Forest. Those acres are remaining Forest
Production Area and are not being “reclassified” to anything else. As part of the Northeast Sands plan, we are classifying an additional 44 acres of Forest Production Area.

### Table 2.37. Land Management Classifications of the Northeast Sands EL Properties.

<table>
<thead>
<tr>
<th>Land Management Classification</th>
<th>Proposed in NES GIS Acres</th>
<th>Approved in Existing NR 44 Plans GIS Acres</th>
<th>Totals for NES Plan Properties GIS Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat Management Area</td>
<td>21,063</td>
<td>2,016</td>
<td>23,079</td>
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<tr>
<td>Native Community Management Area*</td>
<td>16,210</td>
<td>3,391</td>
<td>19,601</td>
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<td>Scenic Resources Management Area</td>
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<td>Wild Resources Management Area</td>
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<tr>
<td>Special Management Area</td>
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<td>382</td>
</tr>
<tr>
<td>Forest Production Area</td>
<td>44</td>
<td>11,486</td>
<td>11,490</td>
</tr>
<tr>
<td>Recreation Management Area</td>
<td>28</td>
<td>3,933</td>
<td>3,961</td>
</tr>
</tbody>
</table>

* This classification includes State Natural Areas (SNAs); however, not all acres of NCMA are SNA.

DNR master plans are developed by integrated teams that include representatives from all affected resource management programs, including Facilities and Lands, Fisheries, Forestry, Natural Heritage Conservation, Parks and Recreation, and Wildlife Management. The resource management and public use objectives and prescriptions for all the properties in the Northeast Sands plan, including the Pine-Popple Wild Rivers, were developed with input from all these programs.

### Proposed Savage Lake State Natural Area

Several respondents questioned the proposed Savage Lake SNA. These comments expressed concern over proposed management (perceived as “hands-off” and negatively affecting the local timber supply), the value of old-growth, and fear that public access and use will be restricted in this area. Several comments indicated that past management history, which contributed to the current value of the area, is not acknowledged.

Several other respondents indicated support for the proposed SNA, and for using forest management to develop and maintain old-growth characteristics.

**Department response:** The proposed management for this area is not “hands-off”. A combination of passive and active techniques is called for in order to achieve the primary objective of developing and maintaining old forest ecological attributes. Passive management is proposed for forested wetlands, similar to historic management of these stands, while timber harvesting is prescribed for upland forest types as a tool to help create the desired compositional and structural features. We believe the management prescriptions proposed in this draft plan for the proposed SNA will result in on-the-ground forest management that follows the same practices utilized during the past 13 years of DNR ownership, as well as during ownership by the Goodman Lumber Company.

State Natural Areas (SNAs) are established under the authority of s. 23.28 (1), Wis. Stats. to protect outstanding examples of Wisconsin’s native habitats and natural features. The area being proposed as the Savage Lake SNA has long been recognized as containing high-quality natural communities. The area containing the proposed SNA was purchased by The Nature Conservancy (TNC) with the intent to manage it as a natural area. After the state acquired this acreage from TNC, the area was identified as a Primary Site (a site identified for special review and consideration during the master planning process due to the
presence of high-quality natural communities or rare species) in the department’s 2011 *Rapid Ecological Assessment for the Florence County Wild Rivers and Barrens Planning Group*. The area was also listed in the DNR’s *Old-growth and Old Forests Handbook* as a representative old-growth site. As stated in the draft plan, this area contains high-quality upland and lowland forest communities, undeveloped lakes, bedrock outcrops, exceptional breeding bird diversity, and significant potential to restore and manage under-represented successional stages and rare species.

Old forests (over 150 years) exhibit certain characteristics that are often absent from younger or more intensively managed forests, such as old trees, very large trees, multiple layers of vegetation, pit-and-mound microtopography, abundant coarse woody debris, large standing dead trees (snags), and scattered canopy gaps of various sizes filled with younger trees. This complexity provides habitat for a great variety of plants and animals. Old forests are rare in Wisconsin. Ecologists estimate that approximately 70% of Wisconsin was covered with old-growth forests in the early 1800s. Currently, less than 1% of forests in the state are 150 years old or older. As stated in the plan, this site presents a large-scale opportunity to manage for older forest. It is embedded in an extensively forested landscape and connects to federal lands across the Pine River that are managed as natural areas. This combination of rare habitats and landscape opportunity makes a SNA designation appropriate and warranted.

The draft plan does not make any changes to public use or access for this area. In fact, the plan proposes to improve the Savage Lake access road to address rutting and erosion, provide a turnaround for carry-in boat access, install a boat-slide if needed to control erosion, and provide interpretive signage in the parking area.

The plan does acknowledge past management history, stating that “many uplands stands have been actively managed for over a century” and that the forest in the surrounding landscape “has been selectively managed for large saw-logs” (page 87). The land that includes the proposed SNA is part of a 5,600-acre area purchased by TNC from International Paper in 2006 as part of a larger transaction that secured a working forest conservation easement on an additional 59,000 acres of land in the surrounding landscape. The fee title land and the easement were later transferred to the state. Several decades prior to state acquisition of this area, the lands were managed with long-term sustained yield harvesting practices by the Goodman Lumber Company going back to before 1900. The land changed hands many times since Goodman began divesting its ownership several decades ago, but has remained intact and not subdivided. These factors – long-term single ownership, management emphasizing selective harvest for large saw-logs, and no parcelization or fragmentation – kept the forests in this area from being clear-cut and burned, as happened throughout much of northern Wisconsin, and maintained ecological integrity (e.g., intact ground layer, rare plants, high breeding bird diversity) in some areas. It is this combination of restoration potential within the site and its location within a larger, intact forested landscape that will remain forested (as well as open to public recreation and managed for production forestry), that creates a unique opportunity to restore, develop, and maintain structural and composition characteristics of old forests, which are now very rare in the state. The management prescriptions proposed in the draft plan will align with many aspects of the long-term sustained yield practices employed by the Goodman Lumber Company for so many years.

The department has added additional language to the plan to better characterize this history.

**Emerald Ash Borer**

Several respondents expressed concern over potential ash mortality from emerald ash borer, including
loss of tree canopy over the river, river temperature changes, soil erosion, and impacts to the fishery and scenic quality.

**Department response:** The department is aware of the potential impact of emerald ash borer (EAB) to properties in the Northeast Sands. Several properties contain stands of pure or nearly pure ash where significant negative impacts are anticipated. The draft plan acknowledges this by including a prescription for those properties (including the Pine-Popple Wild Rivers) to monitor the effects of EAB, respond as appropriate using the most current version of the department’s Emerald Ash Borer Silvicultural Guidelines and the best available science and techniques, and maintain the potential to reforest the site and prevent conversion to non-native exotic species such as reed canary grass if possible. Unfortunately, wetlands or wet soils, steep slopes, and difficult access will make management options for EAB challenging on many Northeast Sands properties.

**Road Access Changes and Property Access**

Several comments addressed property access, including clarification of proposed public motorized access changes, concern over persons with mobility challenges being able to access the property, and whether some closed roads that provide foot access to the river could be mowed periodically. One comment expressed support for the proposed public motorized access changes.

**Department response:** The draft plan is proposing to close 2.6 miles of roads on the Pine-Popple Wild Rivers property. These roads are clearly marked in yellow highlight on Map J-2. The majority of these roads are not being maintained by the department at this time; however, they are not gated, bermed, or signed. These roads were identified by the department after careful analysis as roads that have limited public motor vehicle use or utility for resource management and come in close proximity to the wild river. These roads are proposed to be closed to public motor vehicle access, but they will continue to provide foot access for hunters and other property users. In recognition of this, the plan proposes to provide and maintain small off-highway parking areas for 1-2 vehicles as appropriate to accommodate these users. The property still has 11.16 miles of DNR roads as well as 92 miles of easement roads that provide public motor vehicle access. The proposal in the draft plan allows the department to balance public access with maintaining the unique and scenic qualities and character of the wild river.

It is the department’s policy to provide recreational opportunities around the state for users of all abilities. Property managers have the authority to make reasonable accommodations for persons with disabilities, including the use of power-driven mobility devices with a DNR-issued permit.

There are currently 18 points of access to the Pine and Popple rivers that are actively maintained by the department. The request to mow closed roads that provide access to the river would have to be evaluated on a case-by-case basis by the property manager and would be subject to applicable provisions in NR 302 regarding management of land within proximity to the river.

**ATV Trails**

One comment stated that there should be allowances on the property for ATV trail connections, especially where there are safety concerns. Another comment specifically requested a re-route of the CTH N ATV trail using the South Oxbow Snowmobile Connector trail, citing safety concerns just to the south where the trail continues onto a town road route.
**Department response:** The CTH N ATV trail is authorized by s. 30.26 (4)(a)3, Wis. Stats. Construction of new trail would be considered new development and therefore subject to the provisions of NR 302.03, Wis. Admin. Code.

**General Resource Management Comments**

Several comments were received expressing support for maintaining this property in a largely wild state.

**General Public Use Comments**

One respondent noted that tubing is not mentioned as a recreational activity on the property and worried that it is not considered an authorized use. Another respondent offered corrections to the language describing paddling on the Pine and Popple rivers.

Several comments expressed a need for additional staff to maintain this property. One comment stated that the Pine-Popple property manager should be stationed in Florence.

**Department response:** Tubing is, in fact, included in a sentence in the “Public Use and Recreation Facilities” section (page 77) that lists popular activities on the Pine-Popple Wild Rivers property. Tubing is an authorized use, and the department recognizes the popularity of the Oxbow for this activity. A sentence has been added to the “Water Access” section on p. 80 to reflect this. The corrections to the paddling language have been made.

Staffing decisions for department properties are made through a process that is separate from, and outside the scope of, the master planning process.

**Real Estate Comments**

Comments were received expressing both support for purchasing additional parcels for this property and for the status quo (i.e., no additional acquisition or changes). One respondent asked about proposed boundary adjustments and how these would affect private property owners.

**Department response:** Proposed real estate action items for the Pine-Popple Wild Rivers property are described in the Real Estate section of Chapter 2 of the draft plan, on page 116, and shown on Maps J-4 A, B, C, & D. Proposed boundary adjustments for Pine-Popple consist of expansions around parcels that are already DNR-managed or contractions in the Spread Eagle Barrens area to remove lands that are dedicated as State Natural Area. These are all considered routine or “clean-up” items. There are no effects on any surrounding landowners.

**Spread Eagle Barrens State Natural Area**

**Overlook Road:** There was a request from property neighbors to install signage near the north end of Overlook Road to deter cars and trucks from driving on it during snowmobile season.

**Department response:** In response to local requests, the public motorized access on this road is proposed to be changed from Open to Open Seasonally in the draft plan. This road is used as a snowmobile trail in winter and the proposed change will provide the option to use signage to close the road to highway-licensed vehicles in winter when conditions are not suitable for these vehicles. Language will be added to
the draft plan indicating that the department will consider adding a gate to enforce the seasonal closure if necessary.

**Recreational facilities:** Several comments requested additional recreational developments on this property, including paved bicycle trails, off-road mountain bike trails, horseback riding trails, mowing of firebreak loops near Overlook Road in summer for hikers, and a new parking area on the north end of Overlook Road.

**Department response:** The primary purpose of State Natural Areas (SNAs) is to protect high-quality examples of native communities. The target natural communities on Spread Eagle Barrens SNA are pine barrens and bracken grassland, communities that require regular active management (prescribed fire, timber harvesting, etc.) to maintain. The management-intensive nature of these communities means that the focus for staff time and resources on this property is on maintaining existing barrens and expanding barrens restoration where possible. SNAs are open to a variety of recreational activities that are compatible with and do not detract from the primary purpose of these properties (e.g., hunting, fishing, trapping, hiking, cross-country skiing, etc.). The 9.02 miles of DNR roads on the property that are open to public motor vehicle access may be used by bicyclists and horseback riders. However, fragile barrens vegetation and thin, erodible soils make Spread Eagle Barrens unsuitable for the types of constructed trails that would create a high-quality experience for these user groups, and potential damage to rare natural communities conflicts with the property’s statutory purpose. There is language in the plan (p. 145) stating that annual or semiannual maintenance of specific burn breaks and interior management trails will be considered on a case-by-case basis. In response to public comment, language has been added to clarify this in property-specific section for Spread Eagle Barrens in Chapter 2, as well as to allow for development of an area for winter parking at the north end of Overlook Road to facilitate access while the road is seasonally closed.

**Dunbar Barrens State Natural Area**

A comment was received praising the barrens restoration work being done on this property, supporting the proposal to limit public motorized access in steep/erodible areas, and supporting the proposal to plant dwarf bilberry to enhance habitat for Northern blue butterfly.

One comment was received requesting ATV access to this property.

**Department response:** As with Spread Eagle Barrens, Dunbar Barrens is a State Natural Area with a primary purpose to protect high-quality examples of native communities, specifically pine barrens on this property. While the property is open to a variety of compatible recreational activities and has 7.34 miles of drivable firebreaks open to public motorized vehicles. However, the fragile vegetation, thin, erodible soils, and steep, rugged terrain make the property unsuited to motorized trails.

**Governor Earl Peshtigo River State Forest**

**Recreational Facilities:** Several comments were submitted requesting additional non-motorized trail opportunities on this property. Mountain biking, trail running, dog walking, horseback riding, and hiking were specifically mentioned. Respondents indicated that they use the trails on the Potato Rapids Flowage Unit, and would welcome additional trails, including both “single-track” and “dual-track” trails and trails that provide a variety of experiences. Respondents also requested additional facilities, including a shelter and restrooms, for users at the parking area on the south end of the property. A comment submitted by
a local mountain bike association indicated an interest in making this area a silent sport destination. The group would like to work with the department to expand the trail network on Potato Rapids Flowage into the former archery range west of the Peshtigo River, and also to develop trails in the Kirby Hills area on the main unit of the state forest.

One respondent requested additional boat access camp sites on this property.

One comment was received in support of ATV trail development on identified corridors on the property, indicating that trails that route ATVs away from highway traffic create a higher quality experience for users.

**Department response:** The recreational trails on the Potato Rapids Flowage Unit accommodate multiple non-motorized uses. In response to public comment, the department will work with trail users on expansion of this network onto existing trails in the old archery range, as well as trailhead development for the Potato Rapids Flowage Unit.

Addition of boat access campsites on the Governor Earl Peshtigo River State Forest is something that is in the planning stages. The 2007 NR 44-compliant master plan for this property calls for nine sites, total. Currently, there are three sites on Caldron Falls Reservoir and four on the High Falls Reservoir. The plan authorizes an additional site on the High Falls Reservoir north of the Old Veterans Campground and another site located on the north shore of the Johnson Falls Reservoir.

**WEC Request:** A request was submitted by WEC (We Energies and WPS) regarding the recreational trails on the Potato Rapids Flowage Unit. WPS owns and operates the Potato Rapids dam and other hydro facilities on the Peshtigo River. The company requested that the portions of the recreational trail network that cross WPS land and that fall within the FERC project boundary on DNR-managed land be removed from Map M-2 pending evaluation by the company and any necessary FERC approval in compliance with FERC license requirements.

**Department response:** The department has made these modifications to Map M-2 (now L-2) as requested.

**Governor Thompson State Park**

**Recreational Facilities and Staffing:** Several respondents requested additional recreational facilities on this property, including:

- Additional mileage on the Otter hiking/cross-country ski trail
- Additional boat access camp sites
- More electrified sites at the existing campground
- Development of group camp sites
- A beach on the Caldron Falls Flowage close to the campground
- A playground
- A designated canoe/kayak launch site to keep these users off the concrete boat launch

There was also a request for additional staff to maintain the park.

**Department response:** The 2004 NR 44-compliant plan for Governor Thompson State Park provides for a range of seasonal and year-round non-motorized opportunities for education and recreation in a rustic,
forested setting. This plan will continue to guide operation and development of the state park. The 2004 plan does include the opportunity for the department to expand development of boat access campsites (up to six more) and to add an additional 14 electric sites to the current campground. The plan includes group camp facilities and a playground. The beach on Caldron Falls Flowage is also included in the 2004 plan, and the project was approved by the State Building Commission. However, the department has decided not to develop the beach at this time. This decision does not eliminate the beach from the plan and the department could decide to construct the Caldron Falls beach in the future.

In response to public comment, the department will include additional mileage on the Otter hiking/cross-country ski trail and designation of a canoe/kayak launch at South Bay Landing in the Northeast Sands plan.

The 2004 plan made staffing recommendations. However, as stated in the General Property Management – General Administration Common Element, implementation of master plans is dependent upon staffing and funding allocations that are set by a process outside of the master planning process. Thus, the plan gives no guarantee that the staffing level originally recommended will be implemented.

**WEC Request:** A request was submitted by WEC (We Energies and WPS) to add language to the Governor Thompson State Park property-specific section of the Northeast Sands plan acknowledging the presence of a Federal Energy Regulatory Commission (FERC) project boundary associated with the WPS-owned and operated Peshtigo River Hydroelectric Project on a portion of the property.

**Department response:** The department has added this language as requested.
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Badger on Spread Eagle Barrens; photo by Stu Boren
APPENDIX A: NORTHEAST SANDS PROPERTY DESIGNATIONS AND MAP LINKS

The properties included in the Northeast Sands EL have a variety of property designations. Some properties also have existing NR 44-compliant master plans. Table A1 lists the name or proposed name of each property included in the NES plan along with its designation, and indicates the NR 44-compliant plan where management of the property is described. The table also includes links to the various map themes in the Property Planning Viewer for each property. All properties listed in Table A1 will have NR 44-compliant plans and be included in subsequent updates of the Northeast Sands Regional Master Plan upon approval of this plan. Properties are listed in alphabetical order by name or proposed name.

Table A.1. Northeast Sands Properties and Map Links.

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## APPENDIX A: PROPERTIES AND MAP LINKS

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* Entire property is public access easement; no other map data available.
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<td>NES Regional Master Plan</td>
<td>DNR &amp; Other Lands</td>
<td>Recreation</td>
<td>Roads</td>
<td>Land Cover</td>
<td>Land Management Classification</td>
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<td>DNR &amp; Other Lands</td>
<td>Recreation</td>
<td>Roads</td>
<td>Land Cover</td>
<td>Land Management Classification</td>
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<td>NES Regional Master Plan</td>
<td>DNR &amp; Other Lands</td>
<td>Recreation</td>
<td>Roads</td>
<td>Land Cover</td>
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<td>DNR &amp; Other Lands</td>
<td>Recreation</td>
<td>Roads</td>
<td>Land Cover</td>
<td>Land Management Classification</td>
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<td>DNR &amp; Other Lands</td>
<td>Recreation</td>
<td>Roads</td>
<td>Land Cover</td>
<td>Land Management Classification</td>
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<td>NES Regional Master Plan</td>
<td>DNR &amp; Other Lands</td>
<td>Recreation</td>
<td>Roads</td>
<td>Land Cover</td>
<td>Land Management Classification</td>
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* Proposed name
** Proposed to be re-designated to Peshtigo Brook Wildlife Area.
† Proposed to be re-designated to Governor Earl Peshtigo River State Forest.
‡ Proposed re-designation from Statewide Habitat Areas to Shawano Lake Fishery Area.
## APPENDIX B: REAL ESTATE ACTION TABLES

### Table B.1. Overview of Real Estate Recommendations for the Northeast Sands Ecological Landscape

<table>
<thead>
<tr>
<th>Property Name (Acquisition Authority)</th>
<th>Fee Title Acres (Statewide)</th>
<th>Easement Acres (Statewide)</th>
<th>Existing Project Boundary (Acres)</th>
<th>Proposed Project Boundary (Acres)</th>
<th>Changes in Project Boundary (Acres)</th>
<th>Existing Acquisition Goal (Acres)</th>
<th>Proposed Acquisition Goal (Acres)</th>
<th>Changes in Acquisition Goal (Acres)</th>
<th>Percent Complete</th>
<th>Parcel Re-designations (Acres)</th>
<th>Proposed Land Sales (Acres)</th>
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<td>NA</td>
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<td>100%</td>
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<td>0</td>
<td>51,076.41</td>
<td>51,017.55</td>
<td>-58.86</td>
<td>56,200.00</td>
<td>51,017.55</td>
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<td>23%</td>
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<td>6,198.51</td>
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<td>4.70</td>
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<td>4.59</td>
<td>4.59</td>
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<td>23.32</td>
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<td>16,067.65</td>
<td>14,988.27</td>
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<td>1,469.37</td>
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<td>899.71</td>
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<td>40.00</td>
<td>40.00</td>
<td>0.00</td>
<td>100%</td>
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Northeast Sands
Proposed Regional Master Plan
### APPENDIX B: REAL ESTATE ACTION TABLES

<table>
<thead>
<tr>
<th>Property Name (Acquisition Authority)</th>
<th>Fee Title Acres (Statewide)</th>
<th>Easement Acres (Statewide)</th>
<th>Existing Project Boundary (Acres)</th>
<th>Proposed Project Boundary (Acres)</th>
<th>Changes in Project Boundary (Acres)</th>
<th>Existing Acquisition Goal (Acres)</th>
<th>Proposed Acquisition Goal (Acres)</th>
<th>Changes in Acquisition Goal (Acres)</th>
<th>Percent Complete</th>
<th>Parcel Redesignations (Acres)</th>
<th>Proposed Land Sales (Acres)</th>
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<td>NA</td>
<td>NA</td>
<td>NA</td>
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## Table B.2. Property Naming Summary Table for the Northeast Sands Ecological Landscape

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<tr>
<th>Proposed Name</th>
<th>Existing Acquisition Authority/Name</th>
<th>Existing Administrative Owner</th>
<th>Proposed Administrative Owner</th>
<th>Proposed Re-designation (if changed)</th>
<th>Acreage</th>
<th>County</th>
<th>Map Reference</th>
<th>Fee/Easement</th>
</tr>
</thead>
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<td>Fee</td>
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<td>Easement</td>
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<td>Fee</td>
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<td>AK</td>
<td>Fee</td>
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<td>Wildlife</td>
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<td>Fee</td>
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<td>Fee</td>
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