Prairie River Fishery Area
Interim Forest Management Plan

Property Identifiers

Property Name: Prairie River Fishery Area, Spring Lake Fishery Area, Miscellaneous state lands (Spring Creek River Corridor and Deer Trail Property), Alta Springs Fishery Area. Collectively, these properties will be referred to as the Prairie River Fishery Area in the remainder of this document.

Property Designation or Type: All are designated as Fisheries Areas except the Spring Creek River corridor is Statewide Habitat Area and the property on Deer Trail Road is State Wide Public Access.

DNR Property Code(s) (DNR Prop Code Number): 2020 (Prairie River Fisheries Area), 20 (Alta Springs Fishery Area), 2410 (Spring Lake Fishery Area), 5401 (Statewide habitat areas (Spring Creek), 5551 (Statewide Public Access (Deer Trail).

Forestry Property Code(s): 3407 (Prairie River Fisheries Area), 3501 (Alta Springs Fishery Area), 3523 (Spring Lake Fishery Area) and 3599 Compartment 3 (Deer Trail and Spring Creek).

Property Location - Counties: Lincoln and Langlade

Property Acreage: 2,453 acres

Master Plan Date:
(If property has one) Prairie River (10-23-1980). Other properties have no master plan.

Property Manager: Gary Bartz

Property Assessment

The Prairie River Fishery Area and other related properties on tributaries to the Prairie River are located in Lincoln and Langlade Counties and comprise a corridor of land consisting of approximately 2,453 acres on both sides of the river. Figure 1 below shows the locations of the Prairie River project and other related properties in relations to larger cities and county boundaries. The land within the project boundary and associated properties has been donated or purchased since 1959 when the Prairie River Project boundary was first approved by the Natural Resources Board. One of the first trout stream habitat improvement projects was conducted on the Prairie River in1950 on an area that was leased for the project. Subsequent habitat projects have helped to develop the Prairie to support good populations of native and non-native trout and a reputation as one of the premier trout streams in north central Wisconsin. The fish population includes

brook trout and brown trout. Several dams have been removed from the river making it free flowing all the way from the Wisconsin River to the headwaters. The lower portions of the river also support bass, walleye, northern pike, musky and forage species. The majority of the property adjacent to the river is wooded. Outside the Fishery Area project boundary the land is primarily woodlands with scattered wetlands and low density residential and agricultural uses. All of the Prairie River, Spring Creek, the North Branch of the Prairie River and Alta Springs are classified as Exceptional Resource Waters (ERW) or Outstanding Water Resources Areas (ORW).

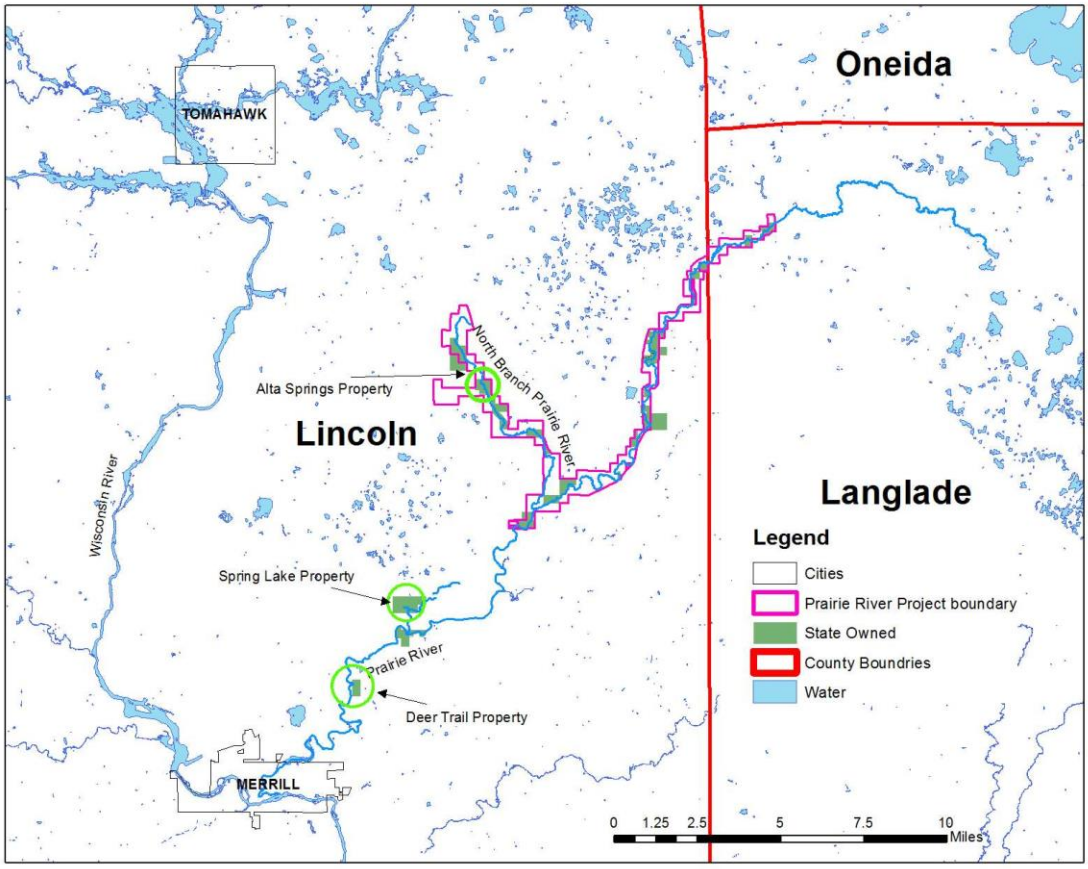


Figure 1. Relative location of the Prairie River project, current state ownership and related properties included in this Interim Forest Management Plan (IFMP) in relation to county boundaries and cities.

LANDSCAPE AND REGIONAL CONTEXT

The property is located along the northern boundary of the Forest Transition landscape. This region in Wisconsin is characterized by a mix of forest, agriculture and swamp. Vegetation is mainly northern hardwood forest dominated by sugar maple and hemlock with some yellow birch. Where significant past disturbance occurred, aspen forests dominate. These have largely been managed to perpetuate aspen for wildlife habitat. The major land uses along the project are agriculture and forestry.

Hydrology:

The Prairie River originates from Pine Lake and flows into Minito Lake in Langlade County. The outflow from Minito Lake becomes the Prairie River. The volume increases as the River flows southwesterly being fed by numerous springs and spring ponds. The main tributaries of the Prairie River are the North Branch of the Prairie River, Hay Meadow Creek, Spring Creek, Black Alder Creek and Barnes Creek. It eventually joins the Wisconsin River at Merrill. The river varies in width from 10'-70' and averages 10"-18" deep. Many deep pools of four feet or more are found within the property. The stream bottom is predominantly rubble and gravel with lesser amounts of sand, boulders, and silt present. The watershed is approximately 50% forested and 50% agricultural. Water levels fluctuate greatly and lowland flooding is common.

Historical Vegetation:

Notes from public land surveys are often used to infer forest composition and tree species dominance for large areas in Wisconsin prior to widespread Euro-American settlement. Public Land Surveys for the area comprising the Prairie River Fishery Area were conducted during 1851 and 1861. These notes were summarized and used to develop a pre-settlement map of vegetation. Based on this analysis the uplands within this property were dominated by mixed forests of eastern hemlock, sugar maple, yellow birch, eastern white pine, and red pine. Scattered wetland pockets in the area contained swamp conifers of white cedar, black spruce and tamarack.

Current Land Cover – non forested areas:

The Prairie River Fishery Area properties consist of 64% productive forest land and 36% non-forested areas. Of the non-productive cover types tag alder is most prevalent with 329 acres. Open grass lands in various stages of succession occupy 271 acres and 61 acres is currently being used for agriculture and is sharecropped. 84 acres of the property is stream bed and another 127 acres is in various upland and lowland shrub areas. Currently 2 acres is occupied by the wastewater treatment plant for the town of Gleason. The productive forest cover types will be discussed in greater detail in the section entitled "Current Forest Types, Size Classes and Successional Stages" section of the IFMP.

HISTORY OF LAND USE AND PAST MANAGEMENT

Like much of Northern Wisconsin the areas surrounding the Prairie River saw wide scale logging in the mid 1800's. The Prairie was extensively used for floating logs down to the Wisconsin River. Remains of some of the old logging dams can still be seen adjacent to the stream and old white pine logs still appear each spring after snowmelt that were churned up from the sediment by spring melt waters. After the timber was cut and prior to 1950, agricultural activities, including cattle grazing caused destruction of stream bank vegetation. These two early periods caused sedimentation and shallowing and widening

of the stream. In 1950 a one mile stretch was leased by the Department and the first stream bank habitat project was installed. In 1959 the Prairie River Fisheries property boundary and concept was approved by the Natural Resources Board.

In an earlier management plan written just for the Prairie River the management objectives were described as the following: Improve or maintain the trout fishery. Provide opportunities for hunting and fishing, trapping, hiking, sightseeing, and other outdoor recreational pursuits. Maintain a 38 acre scenic area at the Dudley Pines. Maintain habitat for endangered and threatened species. Benefit non-game species that are indigenous or pass thru the area. Manage adjacent upland timber types to maintain aesthetics and enhance the stream corridor and wildlife habitat while providing for sustainable forest product removals.

The classification of the majority of the property as a fishery area dictates that timber production shall be of secondary consideration. However, it is recognized that the removal of mature trees and the maintenance of healthy tree densities is essential to maintain a vigorous, healthy and aesthetically pleasing forest cover. Maintenance of grassy forest openings and some brushy areas are desirable for wildlife species. Vegetative management techniques are directed toward perpetuating an aesthetic forest cover while incorporating techniques to encourage an abundance and variety of wildlife.

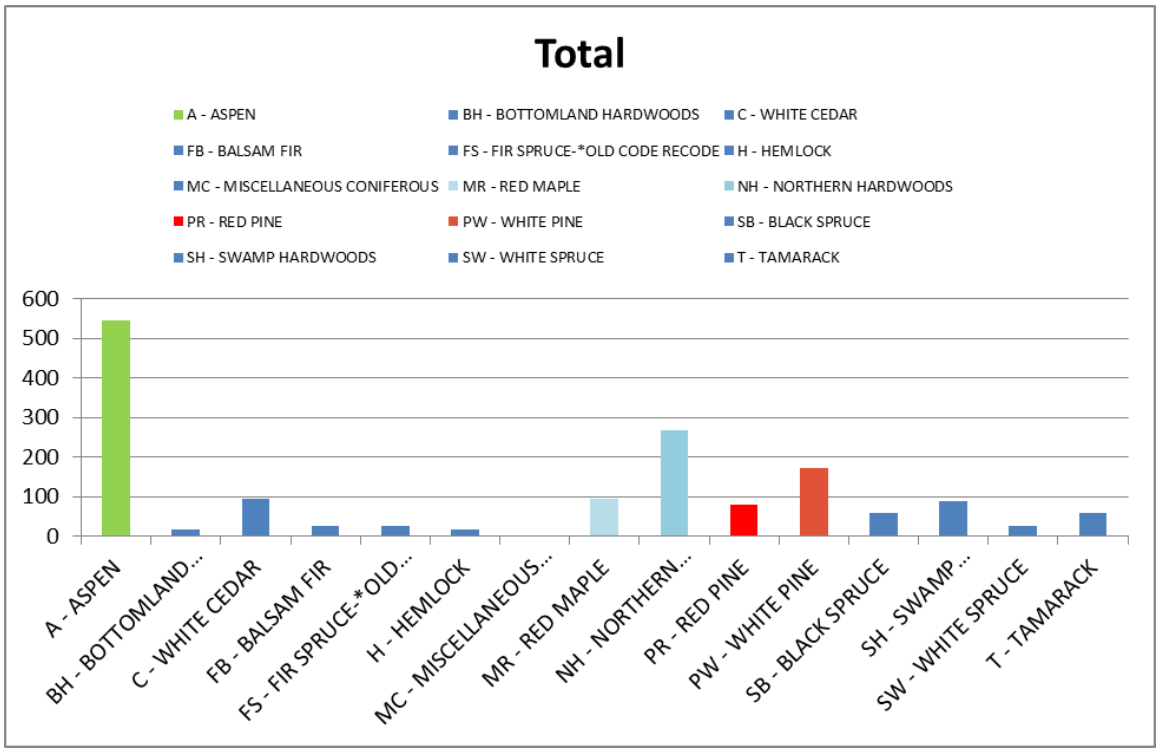
Forest Management practices have been ongoing on these properties for many years. Management activities have included aspen regeneration harvests (94 acres since 1980), improvement thinning of white and red pine (110 acres since 1980), and Northern hardwood individual tree selection harvest (64 acres since 1980). A number of open fields were planted to pine trees in the 1980 and 1990. A Tornado damaged timber on the Deer Trail, Spring Lake and Prairie River Properties in 2011 and all of these tracts were salvaged and regenerated to aspen or white pine through natural reforestation or to red pine and red oak through planting. All harvests since the 1980's have maintained a 100 foot buffer along the Prairie River where forest management has not been implemented.

Non forest management activities have included a number of small wildlife shrub plantings, prairie plantings and grassland maintenance through mowing and prescribed burning. Parking areas and access trails, along with rustic steps to waterways are maintained or constructed where needed, and in stream trout habitat projects have worked to improve cover and habitat quality over many stretches of the river.

CURRENT FOREST TYPES, SIZE CLASSES AND SUCCESSIONAL STAGES

The Prairie River properties consist of 64% productive forest land and 36% non-forested areas. The non-forested were discussed previously in the IFMP and include open water, upland brush, road right-of-ways, grass farm fields which are sharecropped or planted with prairie grasses and lowland tag alder. Since much of this property was purchased from private landowners the range of timber types and conditions are as varied as the objectives of the previous owners. The 1579 acres of productive forest land consist of 15

different timber types. Figure 2 depicts the distribution of timber types by acres across the property. Aspen is the single largest type by acres comprising 36% of all uplands. The next major type is northern hardwoods at 17% followed by white pine at 11%. From there the areas grow smaller with the next three types by area being eastern white cedar, red maple and red pine. The remaining 19% productive forest land consists of minor amounts of bottomland and swamp hardwoods, fir, spruce, hemlock and tamarack. A small acreage is Scotch pine that has invaded open fields is labeled as Miscellaneous.



The aspen (545 acres) is evenly distributed geographically on the property with this timber type occurring all across the property but the aspen is not evenly distributed by age class. Almost half of the aspen 41% (223 acres) is mature or over mature (over 50 years of age), 68 acres of aspen is between 40 and 50 years, and 37 acres is between 30 and 40 years of age, 154 acres is between 20 and 30 years of age, 19 acres is between 10 and 20 years of age and 69 acres is younger than 10 years of age. Most of the youngest age class of aspen was the result of salvage harvests conducted after the 2011 Merrill Tornado damaged multiple tracks within the Prairie River Fishery Area property.

Northern Hardwoods occupy 269 acres of uplands. The majority of these stands are pole size (175 acres), small or large saw timber sized stands (90 acres) and 4 acres are sapling sized in areas where old fields are being reforested.

The third most prevalent timber type on the property is white pine (172 acres).White pine makes up the vast majority of large saw timber sized trees (89 acres) on the property. Another 56 acres of white pine is small saw timber in size and the balance is younger pole and sapling pine that have invaded open areas in the last 15 to 50 years. Twenty Five acres is old growth white pine growing on a very rocky site just south of Bridge road.

RARE SPECIES

NHI screening will be conducted prior to all future management activities. Currently, the Prairie River lists two state threatened reptiles that have been found on the properties or within a two mile buffer of the properties. Impacts on these reptiles will be avoided by following the management guidance for these species and may include seasonal restrictions and avoidance to preclude an impact to local populations. A number of natural communities have been identified as occurring on the property or within the two mile buffer. These communities are identified by the ecological landscapes of Wisconsin handbook as opportunities to sustain and manage. These communities include northern dry mesic forest and northern mesic forests. The goal will be to managed these communities to sustain them and maintain them if present. Finally a number of communities associated with water were identified.

HIGH CONSERVATION VALUE FORESTS (HCVF) OR OTHER RESOURCES/ NATURAL COMMUNITY TYPES LIMITED IN THE LANDSCAPE

High Conservation Value Forests have been identified on the property. The area identified as the "Dudley Pines" has been designated a State Scenic Area (Compartment 242 stand 14 of the State inventory). This 25 acres of old growth white pine with components of cedar and hemlock occurring on a boulder plain along the Prairie River. The Scenic Area designation encompasses the entire NW1/4 SW1/4 of section 14, T33N R8E which includes some younger stand of swamp hardwood along Highway 17 (Compartment 242, stand 15) and a boulder strewn drainage of black ash and large diameter white pine and spruce (Compartment 242, stand 13). The old growth white pine stand extends south of this legal description, but all of stand 13, 14 and 15 will be managed as part of the Scenic Area and a buffer.

White Cedar stands occur in two areas on the property (Prairie River, Compartment 241 stand 21, Spring Lake, Compartment 200 stand 1). These areas are occurring on wet organic soil associated with springs. These areas are often too wet and seldom freeze even in cold winters making management highly uncertain. The combination of difficult logging chance with uncertainties in regenerating the stand back to cedar makes management highly problematic and the decision to defer these areas from management has been made. Finally, one very good quality, highly aesthetic stand of hemlock occurs on the property along the banks of the Prairie River (Compartment 241, stand 18). This stand will also be deferred from management until a plan for establishing natural regeneration can be determined.

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BIOTIC INVENTORY STATUS:

A Rapid Ecological Assessment focusing on rare plants, selected rare animals, and high-quality natural communities has not been completed for the Fishery Areas.

DEFERRAL/CONSULTATION AREA DESIGNATIONS

There are no Deferral or Consultation sites present on either property.

CULTURAL AND ARCHEOLOGICAL SITES (INCLUDING TRIBAL SITES)

The Lincoln and Langlade County Archeological and other Cultural Resources maps indicated the presence of 2 cemeteries adjacent to state property. If management activities are proposed for these properties, a consultation with the State Historical society and the DNR Archeologist will be implemented to avoid impacts on any site.

RECREATIONAL USES

The Prairie River Fishery Areas is used extensively by a wide variety of recreationalists. Fishermen, canoeists, kayakers, hunters, trappers, sightseers, skiers and berry pickers are common visitors to the properties. Portions of the property include the Ice Age Trail.

INVASIVE SPECIES

Some non-native honeysuckle species is present in various concentrations on the Prairie River Fisheries property and honeysuckle and buckthorn have been found and treated once on the Deer Trail property but are still present.

SOILS

This area was glaciated during the Wisconsin glaciation period. Glacial till is the major type of material deposited throughout, and the prevalent landforms are till plains or moraines. Throughout the area, post-glacial erosion, stream cutting, and deposition formed floodplains, terraces, and swamps along major rivers. Wind-deposited silt material (loess) formed a layer 6 to 24 inches thick. Soil type association is classified as an Ossmer-Minocqua-Sconsin Association. This association is characterized as outwash plain with seasonally high water tables. Soils are silt loams and range from poorly drained to moderately well drained.

FUTURE MANAGEMENT

MANAGEMENT OBJECTIVES

Forest management activities are restricted in the designated scenic areas. On all properties, a 100-foot minimum timber harvest buffer will be observed along the Prairie River, North Branch of the Prairie River, spring ponds and natural lakes and ponds. Smaller creeks and drainages will follow guidelines established in the Best Management

Practices for Water Quality Manual. Buffers may be increased or decreased to address resource concerns on a case-by-case basis. All timber harvests will follow BMP's at a minimum to generally address invasive species, erosion, water quality, and fish and wildlife resource concerns.

Aspen

The primary objective is promoting the conversion of this timber type where practical to longer lived species. This will be accomplished by retaining longer lived tree species after harvest to create conditions that are more conducive to the regeneration of more shade tolerant species. It is recognized that several aspen stands will not have sufficient quantities of longer lived species to promote conversion and it may take several rotations of aspen harvesting to accumulate enough shade tolerant trees to convert the stand. Additional objectives include increasing age class diversity while facilitating the conversion process where opportunities exist

Northern Hardwoods

The primary objective for this type is to maintain and/or regenerate stands to enhance aesthetic values and wildlife habitat, with timber production as a secondary objective. Depending on quality and species composition, objectives may include uneven-age and even-age management.

White Pine

The primary objective is to maintain and enhance the growth and quality of the white pine stands, prevent insect or disease outbreaks, and promote white pine regeneration. This is accomplished through careful improvement thinning every 10 to 15 years. These tending operations remove diseased or insect infested trees along with poorer individual trees that give the best and healthiest white pine room to grow. Tree species that proliferate in shade and cause difficulty for white pine regeneration should also be removed or thinned. Finally, consider implementing shelterwood harvests accompanied by scarification of the forest floor to facilitate the establishment of white pine seedlings when the stands begin to show signs of deterioration due to advanced age (extended rotations).

Forested Wetland Species

Forested wetland species that comprise significant acreage in this property group include black spruce, tamarack, and black ash. The objective for managing these types is to maintain these areas as productive forest and manage on an even aged basis. Various even aged regeneration methods will be employed when these stand reach maturity to reforest them though natural regeneration. Regeneration methods include strip regeneration cuts and seed tree harvests. Extended rotations may be used on some of these stands (depending on stand heath) to minimize aesthetics.

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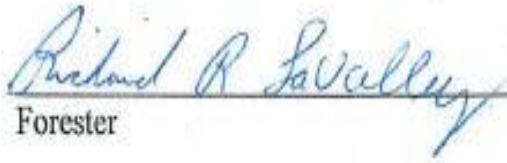
APPROVALS:

Property Manager — Date: 1-22-14



Forester — Date: 1-22-14

Area Program Supervisor — Date: 1-22-14

District Ecologist — Date: 2-27-14