



Interim Forest Management Plan

Property Identifiers

Property Name and Designation: Name - Pike Wild River
Designation – Wild River

County: Marinette

Property Acreage: 4,505.39 acres

Forestry Property Code(s): 3819

Master Plan Date: Pike Wild River Project Master Plan Concept Element, 1989
<http://dnr.wi.gov/topic/lands/masterplanning/documents/MP-WR-PikeRiver-1989.pdf>

Part 1: Property Assessment (1-2 pages maximum)

The following items should be considered during the property assessment. Not all sections may be relevant for all properties.

General Property Description

- Landscape and regional context

The Pike Wild River property is located in northern third of Marinette County in the Northeast Sands Ecological Landscape (NSEL). The project boundary includes 61.3 miles of river corridor along the North, South, and Main river branches. The NSEL occupies a narrow, diagonal area of northeast Wisconsin. This ecological landscape formed in glacial outwash sand plains (some of them pitted), and has steep outcropping Precambrian bedrock knolls of basalt, rhyolite, or granite. Sandy ground moraines and end moraines are also interspersed in the ecological landscape.

Historically, extensive oak/jack pine-barrens and jack pine forests were found in the outwash sand portions of this ecological landscape. Moraines supported forests of hardwoods, red pine, and white pine. Outwash plains often contained pitted depressions, resulting in numerous wetlands and kettle lakes. Most of this area is still forested; aspen predominates, followed by northern hardwoods. Jack pine remains on the outwash plains along with northern pin oak. There are several ecologically significant examples of jack pine/oak barren communities. A small percentage of this ecological landscape contains spruce-fir-cedar forest and lowland hardwood forest.

The NSEL contains several important river systems as well as extensive wetlands. The Menominee is the largest river, located on the Michigan-Wisconsin border. The two original state Wild Rivers that were designated in 1965 under the then-new State Wild Rivers Act are in this ecological landscape; the Pine and Pike rivers. A 24-mile reach of the Menominee County section of the Wolf River, from the Langlade/Menominee County line to Keshena Falls, was designated a National Wild and Scenic River in 1968. The Upper Peshtigo River runs through the ecological landscape's center and includes the Caldron Falls Flowage and the High Falls Reservoir. Water quality in free-flowing rivers and streams is generally good across this ecological landscape, due to a combination of generous forest cover and a lack of significant industrial and other development. This is underscored by the fact that 221 individual rivers and streams, and one impoundment, are designated as either Outstanding Resource Waters (ORW) or Exceptional Resource Waters (ERW).



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- History of land use and past management

The Pike River watershed history is typical of the northern Wisconsin logging era. In addition to a succession of forest products removal, small scale agriculture occurred in the area. Hunting, trapping, and fishing were likely common. Wild fire, as well, likely once shaped the landscape and forest types in the area.

Site Specifics

- Current forest types, size classes and successional stages

About 90% (4,054 ac) of the property is forested. About 65% (2,465 acres) of the forest area is scheduled for timber management. The remaining 35% is not scheduled for one of the following reasons: it is within the Wild River Zone, which extends 150 feet from the river; it is unsuitable for harvest due to low productivity; it is inaccessible; or it has been identified as a Primary Site in the Rapid Ecological Assessment and therefore is in deferral status until a new master plan is complete.

Aspen is the most abundant timber type, covering about 38% (1,533 ac) of the forested acreage. Eighty-two percent of the aspen is either less than 20 years old (29%) or between 55 and 75 years old (53%). Seventy percent of the aspen is scheduled for timber management. The remaining 30% is not scheduled since it is within the Wild River Zone or inaccessible.

Swamp Hardwood is the second most abundant forest cover type on the property making up about 15% (596 ac) of the wooded acreage. Ninety-four percent of the swamp hardwood is over 75 years of age, and 50% of it is over 95 years of age. Only 18% of the swamp hardwood is scheduled for forest management.

The third largest forest cover type is white pine at 12% (492ac) of the forested area. The majority, approximately 67%, is between 65 and 85 years old. Twenty-two percent is older and 11% is younger. Fifty-four percent of the white pine is scheduled for timber management.

The remaining forest types represent much smaller components as follows: red pine 6%, red maple 5%, northern hardwood 4%, northern pin oak 4%, jack pine 4%, swamp conifer 3%, other oak 3%, fir/spruce 3%, bottomland hardwood 1%, white cedar 1%, tamarack 1%, hemlock <1%.

- State Natural Area designations:

None

- High Value Conservation Forests (HCVF) or other resources/natural community types limited in the landscape:

The *Rapid Ecological Assessment for the Pike River (Marinette County)* (May 2012) states that based on the current draft criteria for defining HCVFs, the best opportunities for HCVF on this property are in the three identified Primary Sites, as well as high quality natural communities and rare species habitat areas that are outside of the Primary Sites. The three Primary Sites are in a Deferral status until Master Planning take place.

- Biotic Inventory status:



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The *Rapid Ecological Assessment for the Pike River (Marinette County) May 2012* documents many of these elements in addition to Wis FIRS, the State forest reconnaissance tool and the Natural Heritage Inventory (NHI) for Threatened, Endangered, and Special concern species and natural communities.

- Deferral/consultation area designations:

Three Primary Sites identified by the *Rapid Ecological Assessment for the Pike River (Marinette County) May 2012* are in a Deferral/Consultation status, meaning that no forest management will take place in these areas until the Master Plan is re-written. The Primary Sites are the Pike Wild River Corridor (1,080 ac), Little South branch Pike River (163 ac), and Pike Wild River Conifer Woods (158 ac). The remainder of the property is being managed according to silvicultural practices, guidelines, and scheduled harvests.

- Rare species:

The *Rapid Ecological Assessment for the Pike River (Marinette County) May 2012* and NHI document numerous rare aquatic invertebrates, birds, fishes, mammals, reptiles, terrestrial invertebrates, plants, and natural communities present on the property. Publicly available version for those reports can be viewed on-line from the Wisconsin Department of Natural Resources website. These species are accounted for in management planning by internal established processes to avoid conflict and protect and preserve the resource.

- Invasive species (taken in part from *Rapid Ecological Assessment for the Pike River (Marinette County) (May 2012)*)

Many non-native invasive plants, animals and pathogens, both terrestrial and aquatic, are present at the Pike Wild River and surrounding landscape. Fortunately, with a few exceptions, populations of these species are small. Invasive species tend to be associated with recreational and anthropogenic disturbance. Invasive species that are found at the property pose the greatest immediate threat to native species diversity, rare species habitats, or high-quality natural communities.

Invasive species documented on the property are as follows by common name: Japanese barberry, spotted knapweed, leafy spurge, orange hawkweed, common St. Johnswort, butter and eggs, tartarian honeysuckle, rusty crayfish, reed canary grass, mullein. Additionally, common buckthorn has been found and removed at a single location. More information about them can be found within the document.

Emerald ash borer, an invasive, wood boring beetle that attacks ash trees, was positively identified in Wisconsin in 2008 and is now found in 12 counties. While not yet found in Marinette County, the many acres of lowland forest are vulnerable to this pest. Close monitoring of developments will be necessary as potentially managing ash stands earlier or differently than traditionally is done is possible.

Earthworm presence appears highest in the northern hardwoods forests of the property as well especially where maples are abundant.

Forestry best management practices guidance for invasive species are followed along with additional precautionary measures to limit the occurrence and spreading of any invasive species on the property. Proactive controls are already taking place for spotted knapweed, common buckthorn, tartarian honeysuckle and Japanese barberry.



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- Soils (from *Rapid Ecological Assessment for the Pike River (Marinette County)* (May 2012))

The soils of the Pike Wild River project area are characterized by the silt loams of the river bottoms and the Ishpeming soil and bedrock outcrops of the slopes and ridges of the river corridor (Lorenz 1991 *Soil Survey of Marinette County, Wisconsin*). Other soil types are excessively-drained sand and bedrock types. Arnheim silt loam is a deep, nearly level, poorly drained soil found in depressions and low areas on floodplains. These areas are typically dissected by old river channels and occur in an elongated shape. The Ishpeming soil and associated igneous bedrock outcrops are gently sloping to moderately steep and excessively drained. The Ishpeming soil occurs on the side slopes of ridges, moraines, and bedrock outcrops. The sandy loams that are also present are generally found on the sides of sloping to moderately sloping steep ridges and moraines.

Cultural and Recreational Considerations

- Cultural and archeological sites (from the *Pike Wild River Project Master Plan Concept Element* (1989))

The area of northeastern Wisconsin in which the Pike River drainage is located is almost completely unknown to the cultural historian. Robert J. Salzer in his paper entitled "An Archaeological Survey of the Pine, Pike, and Popple rivers (November 1, 1969) reported great difficulty in locating archaeological sites due to the dense forest vegetation, lack of access to the rivers, and the few numbers of active farms adjacent to the rivers. Salzer reported four sites within the Pike River drainage. The Twin Oaks Site located in the NE1/4, SE1/4 of Section 3, T34N, R21E in the Town of Wausaukee is within the project boundary of the Pike Wild River Project.

As a result of Salzer's survey, he concludes that the Pike River drainage was exploited by aborigines in both recent and prehistoric times. It is a reasonable assumption that then and now, the area was sparsely settled and did not support a large number of people. Since these areas have not been investigated thoroughly, any statements as to the early cultures is conjectural and extrapolated from studies done to the south and east.

All forest management plans by process, first review contemporary cultural and archaeological information available in a statewide database. Field personnel, as well, are trained to observe the management area for possible sites and report to the State archaeologist for additional consultation. Any future discoveries of historical, cultural, or archaeological significance within the project boundary will be protected.

Part 2: IFMP Components (1-2 pages maximum)

Management Objectives (Outline primary forest management objectives):

Forest management on this property is guided by State Statute 30.26; Administrative Code NR 302; Manual Code 1031.2; Pike Wild River Project Master Plan Concept Element 1989; the DNR Silvicultural Handbook.

Species compositions best suited to the site and the area's ecological capability will be encouraged. Big tree silviculture (managing longer-lived species until biological, not economic, maturity will be applied where there is a presence of red or white pine, oak, hemlock, or northern hardwoods. Whenever possible, species that can be perpetuated by



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selective silvicultural methods rather than clear-cutting will be promoted. Clear-cutting, however, may be used in instances of forest health concerns or where selective harvest methods will not maintain the desired forest type.

Forest management is prohibited within 150 ft. of the Pike River. On lands beyond 150 feet, to a distance of 400 feet or the visual horizon, whichever is greater, the forest will be developed to and maintained at its greatest scenic potential for public enjoyment. Where aspen is a major component within this zone, silvicultural techniques will be applied to discriminate against it. Beyond 400 feet or the visual horizon, scenic attractiveness will be maintained during forest production.

Forest management in the three Primary Sites, identified in the Rapid Ecological Assessment for the Pike Wild River, will be deferred until a new master plan is developed and approved.

Any forest management practices will address ecological, water quality, aesthetics, wildlife, recreation and resources of special concern considerations.

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives):

Within the zone from 150 feet to 400 feet or visual horizon from the river, species that can obtain large diameters and old growth status will be favored and rotation ages will be extended to approach biological maturity rather than maximum timber production. Whenever possible, species that can be perpetuated by selective silvicultural methods rather than clear-cutting will be promoted. Where aspen is a major component within this zone it will be selectively removed leaving a residual of longer lived species to reduce aspen sprouting and discriminate against its propagation.

Existing plantations beyond 150 feet from the Pike River will be periodically thinned to promote diameter growth, reduce the uniform appearance and to encourage understory development.

All timber management on the property will be designed to limit the visual impact of the sale following the aesthetic management recommendations in the Silviculture Handbook. Big tree silviculture will be applied where there is a presence of red or white pine, oak, hemlock, or northern hardwoods. Clearcutting on this property is only allowed to prevent or reduce the spread of an insect or disease infestation, salvage stands of dead or dying trees, or to maintain a forest type on sites where successfully promoting species that can be maintained by selective harvesting is unlikely.

Regeneration of timber stands will be accomplished through natural seeding or sprouting wherever possible. Where natural regeneration is unlikely or is absent after the lapse of normal regeneration period, direct seeding or planting of two or more native species may be used. Hand planting will minimize the appearance of rows.

Harvest activity on this property will normally be limited to the period From October 15th to April 1st, when public use is generally lower and potential negative environmental impacts are typically buffered.



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Approvals:

Joe Henry _____ 12/11/2013
Regional Ecologist Date

Chad Gottbeheit _____ 12-10-13
Forester Date

David Halfmann _____ 12-10-13
Property Manager Date

John Huff _____ 12/11/13
Area/Team Supervisor Date