



Interim Forest Management Plan

Property Identifiers

Property Name: Perrot

Property Designation or Type: State Park

DNR Property Code: 9430

Forestry Property Code: 6238

Property Location - County: Trempealeau

Property Acreage: 1271

Master Plan Date: 1988; variance for Trempealeau Mountain SNA designation (2002)

Property Manager: Lois Larson

Property Assessment

The following should be considered during the property assessment:

A. Ecological Landscape description and property context:

Perrot State Park is located in the Western Coulee and Ridges ecological landscape. This ecological landscape is characterized by its highly eroded, un-glaciated topography with steep sided valleys and ridges, high gradient headwaters streams, and large rivers with extensive, complex floodplains and terraces. Many rare species have been documented here due to the diversity, scale, types, condition and context of the natural communities present. Oak forests are more abundant here than any other ecological landscape, and mesic maple-basswood forests are also widespread. All of these forest types can provide critical breeding and/or migratory habitat for significant populations of native plants and animals. Maintaining large blocks of these forest types, including areas with combinations of these types, is a major conservation opportunity. Fire-dependent oak ecosystems are well-represented in this ecological landscape, including Oak Openings, Oak Barrens, Oak Woodland, and dry to mesic oak forests.

Bedrock is mostly Paleozoic sandstones and dolomites of Cambrian and Ordovician age. Precambrian quartzite occurs in the Baraboo Hills, near the eastern edge of the ecological landscape. Thin beds of shale occur with other sedimentary rocks in some areas. Bedrock is exposed as cliffs and, more locally, as talus slopes. Soils are windblown loess of varying thickness, and alluvium in the floodplains. Organic soils, especially peats, are rare. Dendritic drainage patterns are well-developed in this mostly un-glaciated ecological landscape. Natural lakes are restricted to the floodplains of large rivers. Large, warm-water rivers are especially important here and include the Wisconsin, Chippewa, and Black. The Mississippi River forms the Ecological Landscape's western boundary. Numerous spring-fed (cold-water) headwaters streams occur here. Cool-water streams are also common.



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Most of the park is in the Mississippi River Valley Train-North (222Lc08) Landtype Association (LTA). The characteristic landform pattern in this LTA is nearly level river islands and floodplains. The characteristic landform pattern is nearly level river islands and floodplains.

B. General property description – management, adjacent land uses, topography, soils, etc.:

An initial 1000 acre gift to the State of Wisconsin by John A. Latsch of Winona, Minnesota led to the establishment of Perrot State Park in 1918. Mr. Latsch asked that the park be named for Nicholas Perrot, a French explorer and diplomat who forged positive relationships with between the indigenous peoples and the French fur traders during the late 1680s. The CCC established a camp in Perrot in 1935 and in two years developed many of the hiking trails and a shelter on top of Brady's Bluff. The park currently has 104 campsites, 15 miles of trails for hiking, skiing, and snowshoeing, and multiple picnic areas. The Nature Center houses interpretive displays about the cultural history and natural features of the park.

Perrot State Park lies along the Mississippi River just upstream from Lock-and-Dam 6. The park is just to the west of the village of Trempealeau. The park is bounded by the Mississippi and Trempealeau rivers to the south and west. The Great River State Trail is on the northern edge of the park. A railroad line passes along the floodplain of the Mississippi on the southern edge of the park.

The extensive Mississippi River floodplain both up- and down-stream of the park is largely undeveloped and consists of floodplain forest, shrub-carr, and a variety of open wetland types. There is extensive additional public land in the floodplain consisting of the Upper Mississippi River and Trempealeau National Wildlife Refuges. Some of the floodplain is in agriculture.

The uplands on the Wisconsin side of the Mississippi are on fairly level ground outside of the park and row crop agriculture is the predominant land use. There are scattered conifer plantations and other woodlots and a couple of low density housing developments and other dispersed houses. The uplands on the Minnesota side of the Mississippi are much more dissected with bluffs, steep slopes and fairly narrow valleys. Consequently, the Minnesota side is more heavily forested with agriculture and development mainly on the ridgetops and valleys.

Thirty-seven acres of pine plantation were established the early 1950s. The pines have periodically been thinned, with the most recent being in the late 1980s. Hardwoods determined to be hazard trees along trails, in the campground and those in designated use areas have been addressed individually. In the fall of 2013, the emerald ash borer was confirmed to be in the park. Over 450 trees in the campground were cut and chipped for biomass in the winter of 2014-15. Additional ash are removed by park staff in the picnic areas, campground and along the park roads as they become hazardous. Routine prescribed burns take place on the Brady's Bluff and Trempealeau State Natural Areas to maintain remnant bluff prairies. Other prescribed burns are done to control invasive species and maintain smaller prairies for visitor education and enjoyment. In addition to prescribed fires, herbicide treatment and mechanical removal are used to control invasive species.

The topography ranges from level near the rivers to steep slopes and tall bluffs. Soils in Perrot State Park consist of sand, fine sand, sandy loam, silt loam and muck. The muck soils along the rivers are frequently flooded. Slopes range to 60%, and some of the soils on the slopes are classified as moderately eroded.



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C. Current forest types, size classes and successional stages:

- **Oak** (61%) 770 acres; dates of origin 1900-1929; large sawlogs; dominated by red oak, basswood, black oak, white oak, black oak, shagbark hickory, walnut, etc.
- **Central hardwoods** (8%) 98 acres; dates of origin 1931 and 1988; large sawlogs and hardwood poles; dominated by black oak, basswood, walnut, bitternut hickory, box elder, etc.
- **Aspen** (4%) 54 acres; date of origin 1947; hardwood small sawlogs; dominated by aspen, box elder, white birch, red oak.
- **Bottomland hardwoods** (3%) 36 acres; date of origin 1929; large sawlogs; dominated by white ash, river birch, black oak.
- **Walnut** (2%) 25 acres; date of origin 1932; hardwood small sawlogs; dominated by black locust, walnut, white ash, white birch.
- **Red pine** (1%) 18 acres; dates of origin 1946-1953; softwood small sawlogs; plantations; dominated by red pine, Scots pine, white pine.
- **White pine** (1%) 15 acres; date of origin 1951-1988; softwood poles to large sawlogs; plantation; dominated by white, aspen.
- **Northern hardwoods** (1%) 10 acres; date of origin unknown; hardwood small sawlogs; maples.
- **Miscellaneous conifers** (1%) 9 acres; date of origin 1948; large sawlogs; Scot's pine, ash.
- **Other types** (19%) 236 acres; include developed areas, 'muskeg', rock outcrops

D. NHI: Endangered, threatened, Special Concern species, Species of Greatest Conservation Need (SGCN):

Eleven rare plant species (1 threatened, 10 special concern) have been documented at or in the vicinity of Perrot State Park. Excluding fish and mussels, 15 species of rare animals have been documented at or in the vicinity of the park including 6 rare bird species (2 endangered, 2 threatened, 2 special concern), 3 butterflies (1 endangered, 2 special concern), 1 terrestrial snail (threatened) 1 mammal (threatened) and 4 herptiles (all special concern). All of the animal species are SGCN, and three of the animal species are also federal Species of Concern.

E. Wildlife Action Plan Conservation Opportunity Areas (COA), Important Bird Areas (IBA):

The park is within the Mississippi Bluffs and Floodplain COA, abuts the Mississippi River and the Trempealeau River river system COAs, and is adjacent to the Upper Mississippi River IBA.

F. Significant cultural or archeological features

Archeological and historical features are present at Perrot State Park. The park contains both conical and effigy mounds along with documented archeological sites. There is a CCC camp location with remnant foundations on the south side of the park near the park headquarters building.

G. Invasive species:

Buckthorn, black locust, barberry, honeysuckle, oriental bittersweet, leafy spurge, crown vetch, garlic mustard, and reed canary grass have been noted.

H. Existing State Natural Areas (SNA) designations/natural community types limited in the landscape:

There are two state natural areas at Perrot State Park: Brady's Bluff Prairie and Trempealeau Mountain.



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Brady's Bluff Prairie is a dry bluff prairie on a steep, southwest facing Mississippi River bluff that rises nearly 460 feet above the river. The prairie contains over 100 species of native Wisconsin plants including big and little blue-stem, needle grass, hairy grama, silky aster, and rough blazing-star. Other species of note include hairy four-o'clock, prairie larkspur, and plains muhly, all species of the Great Plains that are at or near their northeastern limit here. Brady's Bluff is managed as a dry prairie and oak opening reserve and as an ecological reference area.

Surrounded by the Mississippi and Trempealeau Rivers, the steep-sided Trempealeau Mountain is one of only three solid rock islands along the entire stretch of Mississippi River. The mountain is mostly wooded with black and white oak and basswood. Red oaks are found on the southeast-facing hollow with large patches of interrupted ferns while sugar maple and basswood dominate on the cooler northeast facing slopes. On dry south-facing slopes are small patches of dry prairie with big blue-stem, needle grass, side-oats grama, hairy grama, white and purple prairie-clover, prairie larkspur, and partridge pea. The mountain is rich in archeological features with numerous Native American mounds, burial sites, and habitation sites. Trempealeau Mountain is managed as a southern dry-mesic forest and dry prairie reserve, as an ecological reference area, and as a significant archaeological site.

No limited natural community types are present.

I. Primary public uses:

Camping, hiking, fishing and boating access to Mississippi River at two boat landings. Perrot is visited by about 150,000 persons each year and realizes about 32,000 camper visitor days each year. Visitors come to hike trails that give them views of the Mississippi River valley from the top of 2 bluffs within the park. There is direct access to the adjacent Trempealeau Bay and the Mississippi River for fishing, canoeing, kayaking and boating. Visitors enjoy picnic areas, scenic overlooks and the nature center which hosts summer interpretive programs and interpretive displays. The park is used year round including hunting in the fall and cross country skiing and snowshoeing during the winter.

J. Biotic Inventory status: [rapid ecological assessment report](#), 2012

K. Deferral/consultation area designations: Perrot Forests and Prairies consultation site

IFMP components

Management Objectives:

Management objectives are based on the park's [1988 master plan](#), Section A, Annual Objectives 6 and 8 and Section B. Management 2. Vegetative management paragraphs 2-9:

1. Conifer plantations will be managed periodically to maintain them in a healthy and vigorous condition. All Scot's pines will be removed from conifer stands.
2. Defective (i.e., hazard) trees will be removed in developed areas to insure visitor safety.
3. Preserve the integrity of known archaeological features by following MC1810.1, the department's Burials, Earthworks, And Mounds Preservation Policy & Plan, and applicable state and federal laws.
4. Oak stands (approximately 310 acres as shown in 1988 master plan, Figure 4; includes portions of stands 9, 15, 16 in most recent forest reconnaissance)
 - Managed exposed areas (south, southwest, west facing slopes) as open (50-60% canopy closure) woodland.
 - Manage protected areas (north, northeast, east facing slopes) as older-aged forest.



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Property Prescriptions

Conifer plantations – Thin according to silvicultural handbook. Commercial or non-commercial methods can be used. Favor long-lived species such as red and white pine and discriminate against Scots pine to promote natural appearing stands. Leave dead and dying trees for wildlife habitat and coarse woody debris development if those trees are not a potentially hazardous.

All stands – Control invasive plant species using accepted practices including mechanical, manual, chemical, and biological control methods such as prescribed fire. Manage hazard trees per department standards. Ash trees in use areas that may be affected by emerald ash borer may be managed prior to infestation.

Oak in 1988 master plan management areas –

Commercial or non-commercial methods can be used in the oak management area.

- Oak woodland restoration: conduct the first-stage harvest of a shelterwood, reducing canopy closure to 50-60% (50-60 ft of basal area per acre). If possible, a whole tree harvest is preferred. Implement prescribed burns to mimic natural disturbance patterns, reduce brush and stimulate native woodland herbs. Where possible, incorporate existing dry prairie management units into oak woodland prescribed fire units.
- Older-aged oak dominated forest: the preferred alternative is an emphasis is on passive management, allowing for invasive species control. If sufficient volume and/or value are needed to enhance the salability of the oak woodland restoration, non-oak canopy species may be thinned from below within this area. In either alternative, oaks would then be retained throughout their biological lifespan.

Summary of Public Involvement and Comments Received

Maps (Optional)

- a. Property Locator Map
- b. Cover Types from Forest Reconnaissance



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PREPARED BY:

Property Manager

Date

APPROVED:

Area Program Supervisor

Date

REVIEWED BY:

Forester

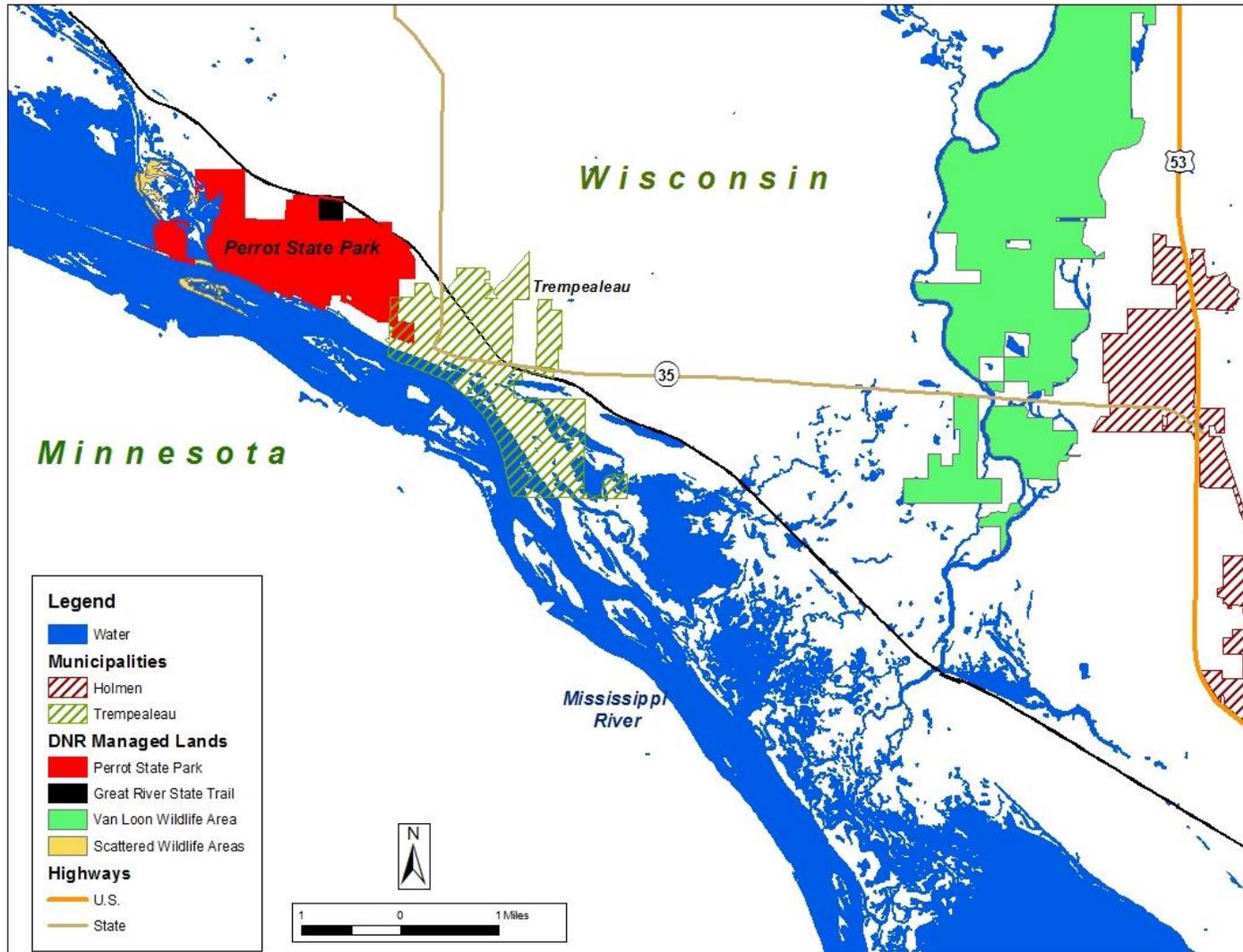
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District Ecologist

Date

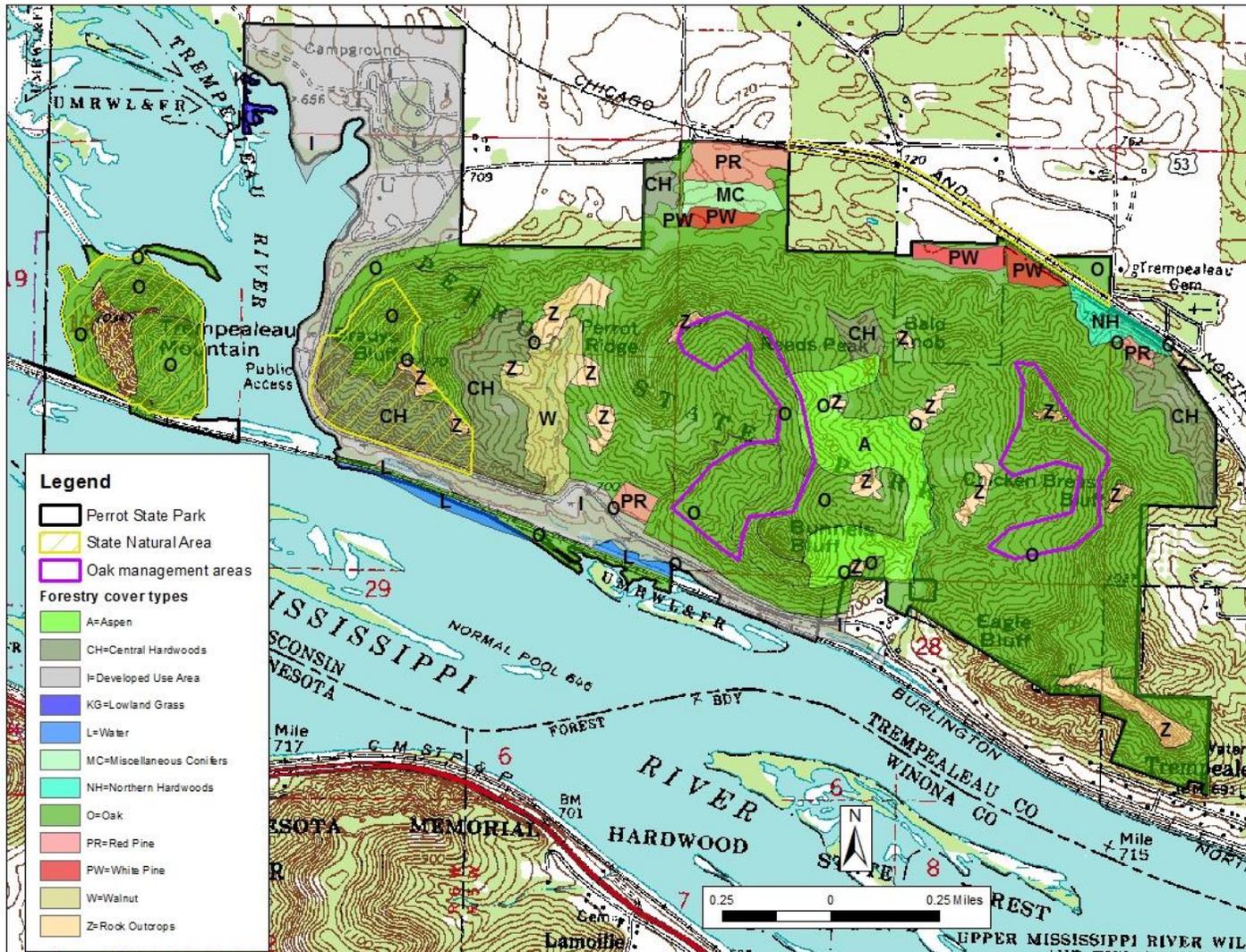


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a. Location of Perrot State Park

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b. Cover types from forest reconnaissance at Perrot State Park. The oak management areas are shown as purple polygons.