

Appendix D - Roadless/Wilderness Inventory

Background

Roadless and Wilderness Areas were evaluated during the development of the 1986 Forest Plan.

Two areas were evaluated in the 1986 Forest Plan and carried through the planning period - the Sensibar Tract (Nordhouse Dunes) and Bear Swamp. Since the plan was signed, the Nordhouse Dunes Wilderness has been established and amended into the 1986 Forest Plan (Amendment #7, December 20, 1988) and will not be addressed any further in this documentation. Bear Swamp has been carried throughout the planning period as a special area.

Review of the Huron-Manistee National Forests

The Forests have a net acreage change of approximately 25,000 acres since the 1986 Forest Plan was signed. The ownership of the Huron-Manistee National Forests is very fragmented. National Forest ownership of the Huron National Forest is 63 percent and the Manistee National Forest is 40 percent (FS-383 dated January 2004). This fragmented nature of the Forests does not lend itself to large blocks of undeveloped lands, and many areas of National Forest System lands are bounded by county roads, utilities, or state or private ownerships.

Process

Criteria for identifying roadless and potential wilderness areas in the eastern United States recognize that most land shows some signs of human activity and modification even though they have shown highly recuperative capabilities. The purpose of identifying roadless areas during the revision of the Forest Plan is to identify areas for potential wilderness. This is supported by the 1982 Code of Federal Regulations [36 CFR 219, section 219.17 (a)] which states, "...roadless areas within the National Forest System shall be evaluated and considered for recommendation as potential wilderness areas during the forest planning process..." Forest Service Manual and Handbook direction, in addition to further clarification by the Regional Forester in a letter dated August 13, 1997, provides the framework for identification of roadless areas.

Step 1 - Determine Areas to be Evaluated:

- Using Geographic Information System (GIS) techniques, areas were mapped on the Forests that were contiguous and met the following:
 - contain more than 5,000 acres.
 - contain less than 5,000 acres but:
 - are manageable in their natural condition,
 - are self-contained,

- are contiguous to existing wilderness, primitive areas, or roadless areas regardless of their size.
- GIS Procedures-The Forests' maps were queried for areas greater than 2,500 acres that were contiguous and had no through roads (passenger vehicle travel). This included all levels 1 through 5 roads and other roads not under Forest Service jurisdiction, such as county and state roads. Very few areas were identified that met this coarse screen.
- Roads - Improved roads included other jurisdictional roads, such as state, county, private and Forest Service, that are open and maintained for travel. These account for over 95 percent of the roads on the Forests. These are roads that can be driven by passenger vehicles. Note: Level 1 roads (closed) were also reviewed in this analysis because some are used for administrative purposes.
- The Huron-Manistee National Forests had a limited number of areas greater than 2,500 acres. A query of areas greater than 2,000 acres provided more areas and was the basis and starting point of the review. There were 36 areas identified as greater than 2,000 acres, of which three were greater than 5,000 acres (Table D-1).

Table D-1. Contiguous Areas Greater Than 2,000 Acres.

Area	Acres	Area	Acres
Briar Hills North	2,005	Lower Manistee	2,500
Briar Hills South	2,025	Comstock	2,581
Whitewater Creek	2,035	Wallace Creek	2,634
Pentwater	2,043	Croswell	2,668
Lower Pine River	2,051	Winnepesaug	2,684
Benton	2,064	Condon West	2,750
Oxford	2,097	Upper Manistee River	2,800
Pine Lake	2,100	South Cooke	2,819
Lower Au Sable	2,102	Big Creek	2,844
Whalen Lake	2,107	Bear Swamp	3,246
Maltbly Hills	2,118	Reid Lake SPNM ^{1/}	3,423
Blockhouse Creek	2,124	Stiles Swamp	3,479
Au Sable River	2,199	Upper Pine River	3,695
Caberfae	2,290	McGillis Creek	3,836
Hungerford	2,313	Cooke Potential SPNM	4,003
Brandy Brook	2,319	White River	5,568
Wilber Creek	2,427	Hoist Lakes SPNM	8,780
Black River	2,438	Au Sable River SPNM	10,045

^{1/} SPNM = Semiprimitive Nonmotorized Area.

Step 2 - Initial Screening:

Initial screening eliminated 24 areas based on shape (long or amoeba); existence of a county or state road that bisected an area; or ownership breaks in the middle with a small corridor of land connecting the areas. Management for roadless values was not viable in these areas due to the “breaks.” The Forests reviewed each area as possible roadless units but found that they were too small to manage for roadless values. The following 12 areas remained in the potential inventory:

Table D-2. Contiguous Areas Greater Than 2000 Acres Which Could be Managed for Roadless Values (Shape and Ownership).

Area	Acres	Area	Acres
Briar Hills North	2,005	Winnepesaug	2,684
Briar Hills South	2,025	Condon West	2,750
Benton	2,064	Reid Lake SPNM ^{1/}	3,423
Maltbly Hills	2,118	McGillis Creek	3,836
Wilber Creek	2,427	Cooke Potential SPNM	4,003
Comstock	2,581	Hoist Lakes SPNM	8,780

^{1/} SPNM = Semiprimitive Nonmotorized Area.

Step 3 - Determination of One-Half Mile Per Thousand Acres:

The mileage of roads within the 12 potential inventory areas per thousand acres was calculated. Those areas with road densities exceeding one-half mile per thousand acres were dropped from consideration with only three potential inventory areas remaining.

Table D-3. Potential Inventory Areas.

Area ^{1/}	Acres
Reid Lake SPNM	3,423
Cooke Potential SPNM	4,003
Hoist Lakes SPNM	8,780

^{1/} SPNM = Semiprimitive Nonmotorized Area.

Step 4 - Review the Human Influences and Improvements of the Areas:

An interdisciplinary review of the remaining three areas was completed for known utilities, mineral ownership, non-native species, harvesting activities, dwellings, human influences, designated motorized trails and existence and maintenance of other improvements, such as impoundments.

Results

Hoist Lakes and Reid Lake semiprimitive nonmotorized areas have less than one-half mile of road per 1,000 acres, but also contain impoundments, one in Hoist Lakes and two in Reid Lake semiprimitive nonmotorized areas, that will be maintained for other resources, such as fisheries and wildlife. They also have evidence of harvesting and planting and an obvious improved road system in place for the maintenance of the impoundments.

Cooke potential semiprimitive nonmotorized area also has less than one-half mile of road per 1,000 acres but is located on Cooke Pond. This impoundment of the Au Sable River is heavily influenced by summertime motorized traffic on the impoundment, including powerboats and jet skis, and on the county road systems adjoining the area. There is also a private road that accesses private land in this area. It is not conducive to wilderness values because the amount of motorized watercraft on the impoundments and motorized traffic on the county roads.

Summary

The results of the inventory did not identify any areas as eligible for further evaluation.

Table D-4 summarizes the evaluation of all criteria identified in FSH 1909.12 for the three areas having less than one-half mile of road per one thousand acres.

Table D-4. Summary of Potential Areas Evaluated for Roadless Inventory on the Huron-Manistee National Forests.

Evaluation Criteria	Area Name		
	Hoist Lakes Semiprimitive Nonmotorized	Reid Lake Semiprimitive Nonmotorized	Cooke Potential Semiprimitive Nonmotorized
Acres	8,780	3,423	4,003
Land is regaining a natural, untrammled appearance	Yes	Yes	Yes
Improvements existing in the area are being affected by the forces of nature rather than humans and are disappearing or muted	No - 1 Impoundment	No - 2 Impoundments	Yes
The area has existing or attainable National Forest System ownership patterns, both surface and subsurface, that could ensure Wilderness values	No	No	Yes

Table D-4. Summary of Potential Areas Evaluated for Roadless Inventory on the Huron-Manistee National Forests (Continued).

Evaluation Criteria	Area Name		
	Hoist Lakes Semiprimitive Nonmotorized	Reid Lake Semiprimitive Nonmotorized	Cooke Potential Semiprimitive Nonmotorized
The location is conducive to perpetuation of Wilderness values	Yes	Yes	No
The area contains no more than one-half mile of improved road for each 1,000 acres, and is under Forest Service jurisdiction (Miles of road - density)	2.6 miles managed of 18.92 total miles - 0.3 mile/1,000 acres	0.9 mile managed of 5.99 total miles - 0.3 mile/1,000 acres	1.37 miles - 0.34 mile/1,000 acres
No more than 15 percent of the area is in non-native planted vegetation	Yes	Yes	Yes
Harvesting has occurred on 20 percent or less of the area within the past 10 years	Yes	Yes	Yes
The area contains only a few dwellings on private lands and the location of these dwellings and their access needs insulate their effects on the natural conditions of National Forest System lands	Yes	Yes	Yes