



**SAULT FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 133 ENTRY YEAR: 2009

Compartment Acreage: 1858 County: Mackinac

Revision Date: 10/01/2007

Stand Examiner: Matthew Edison

Legal Description: T44N-R7W Sections 8, 9, 16 & 17; Hendricks Township

RMU (if applicable):

Management Goals: During this entry period timber management will be minimal within this compartment. There will be a selection harvest of one northern hardwood stand and a clear cut with reserves harvest to regenerate a mixed aspen stand. A Northern Hardwood stand with limited access is being reserved for its wildlife habitat qualities and has been designated as a unique value SCA.

Soil and Topography: Topography is gently rolling upland divided by the West and South branches of the Hendrie River. There is lowland on the north and south edges of the compartment. Soils within the compartment include Wallace sand, Markey-Spot-Finch complex, Finch-Dawson-Pullup complex, Paquin – Finch sands, and Allendale-Wakely complex. Soil is thin in areas and Karst features are present.

Ownership Patterns, Development, and Land Use in and Around the Compartment: There are three 40 acre private holdings within the inner area of the compartment. An exchange has occurred since the last entry with 40 acres being swapped between State and Private ownership. Section 16 is adjacent to the compartment in the Southeast and is comprised entirely of privately owned land (Michigan Karst Conservancy) except for one 40 acre parcel that is state owned. The MKC land has many trails and is used recreationally for hiking, caving, etc. Sections 8, 9, and 17 are all surrounded by state ownership. There is a management easement through private land in sections 8 & 9 allowing access to state land.

Unique, Natural Features (include only non-site specific and non-sensitive information): Per MNFI, there is a potential for rare, threatened or endangered plant and animal species and natural communities within this compartment. Stands to be managed will be checked for species of concern. Management will be modified if species are found within those stands per management guidelines for that species.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): Michigan Karst Conservancy owns land in section 16. Caves found in section 16.

Special Management Designations or Considerations: Stand 50 is under special use permit to the Michigan Karst Society. The most extensive limestone cave system in Michigan is in section 16. Stand 43 is designated as a unique site SCA due to high wildlife habitat qualities.

Watershed and Fisheries Considerations: Good. All branches of the Hendrie River in Mackinac County are classified as Type 1 trout water. They support natural brook and brown trout populations, but Fisheries

Division does not actively manage them. Although the populations are not high enough to support a “bunch” of anglers, the streams will provide some harvest for the knowledgeable. They should be protected from new erosion. The stream corridors should be managed to discourage beaver as much as possible.

Wildlife Habitat Considerations: This stand is a mixture of hemlock, northern hardwoods, aspen, upland coniferous, wetland and openings. The east portion of the stand is within a deer yard and the management focuses on providing year-round values for this species. Unique mature hemlock areas in the southwest corner are bounded by creeks and will be reserved. Hemlock is important to wintering deer along with many other wildlife species. Porcupines have an interesting symbiotic relationship with deer in this habitat type. By cutting branches from the top of the canopy, porcupines supply food to wintering deer within mature hemlock inclusions. Hemlock are long-lived and tend to supply many foraging and cavity opportunities for woodpeckers, small mammals, and forest carnivores. Mature hemlock inclusions are also important to ruffed grouse as high quality fall and winter roosting locations.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of peat & muck and lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Silurian Burnt Bluff and Cabot Head Shale subcrop below the glacial drift. The Burnt Bluff is quarried for stone/limestone in Section 16 at Fiborn quarry. Gravel pits are not located in the area and potential is questionable. There is no current economic oil and gas production in the UP.

Vehicle Access: Vehicle access is fair in this compartment. Norton Camp road is a good quality dirt road and is the main access running through the compartment. There are numerous two tracks and old existing logging roads that reach well into each section of the compartment. The areas in section 9 east of Hendrie River and north of Norton Camp road has very limited access due to the lowland type.

Survey Needs: None needed for treatments this entry.

Recreational Facilities and Opportunities: All types of big and small game hunting is pursued in this compartment. The caves in section 16 offer unique recreational opportunities. Fishing is available in the branches of the Hendrie River.

Fire Protection: Fire activity within this compartment has been minimal historically. However, with areas of lowland conifer and limited access, there is potential for mop-up of intense fires if one occurs. The Hendrie River branches provide a readily available water source if needed.

Additional Compartment Information:

Cover Type details, Proposed Treatments, and Stand listings are listed in the attached reports:

- ◆ **Cover Type by Age Class**
- ◆ **Proposed Treatments – No Limiting Factors**
- ◆ **Proposed Treatments – With Limiting Factors**
- ◆ **Stand Listing – Forested**
- ◆ **Stand Listing – Non Forested**
- ◆ **Special Conservation Area (SCA) Details**

The following information is displayed, where pertinent, on the attached compartment maps:

- ◆ **Base feature information, stand numbers, cover types**
- ◆ **Proposed treatments**
- ◆ **Proposed road access system**
- ◆ **SCA – Special Conservation Areas**



Stage 1 Acres Summary By Level 3 Cover Type By Age

Compartment: 45133

Date: 10/3/2007

	0	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	>89	Uneven Age	Grand Total
Aspen Types	0	31.2	0	99.2	0	0	0	0	0	0	0	0	130.4
Herbaceous Openland	31.8	0	0	0	0	0	0	0	0	0	0	0	31.8
Low-Density Trees	23.1	0	0	0	0	0	0	0	0	0	0	0	23.1
Lowland Coniferous Forest	0	0	0	29.6	0	0	0	38.2	140.5	41.8	16.2	0	266.3
Lowland Deciduous Forest	0	0	15	0	0	10.6	0	0	0	0	0	0	25.6
Lowland Mixed Forest	0	0	0	0	0	0	0	156.2	0	0	0	0	156.2
Lowland Shrub	155.3	0	0	0	0	0	0	0	0	0	0	0	155.3
Mixed Upland Conifers	0	14.4	0	0	0	0	0	0	0	0	0	0	14.4
Mixed Upland Deciduous	0	0	0	8.8	0	32.1	13.2	0	0	0	0	0	54.1
Mixed non-forested wetland	12.8	0	0	0	0	0	0	0	0	0	0	0	12.8
Northern Hardwood	0	0	14.6	98.7	0	0	73.8	515.1	0	0	0	0	702.2
Other Upland Conifers	0	0	137.3	21.4	0	0	0	0	0	30.2	0	0	188.9
Upland Mixed Forest	0	0	58.8	26.1	0	0	0	0	0	0	0	0	84.9
Upland Shrub	12.4	0	0	0	0	0	0	0	0	0	0	0	12.4
Grand Total	235.4	45.6	225.7	283.8	0	42.7	87	709.5	140.5	72	16.2	0	1858.4

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Pg. 1
15 45133015-Cut	20.3	6128 - Lowland Coniferous, Mixed Deciduous	6	81	0	Clearcut with Reserves	Regeneration	Lowland Coniferous, Mixed Deciduous	

Rev

Cmnt: Mature Mackinac mix stand of predominantly conifer species (Spruce, Tamarack) with deciduous. Low/High ground mix. There is also some White Pine present. Deciduous is comprised of Red Maple, Aspen, and Paper Birch. Stand composition is dependent upon where you are standing.

Rev

Clearcut with reserves to regenerate. All White Pine and any trace Hemlock will be reserved. Stand retention guidelines will be followed to insure representative retention of pre-harvest species. Appropriate harvest specifications will be applied to prevent any disturbance to any sensitive soil areas. Leave wetter pockets as exclusions for retention.

Next

Steps: Following harvest stand will be surveyed in 4 years to insure adequate regeneration according to FMFM work instructions. Acceptable regeneration will consist of any mix of coniferous and deciduous species as present prior to harvest.

40 45133040-Cut	94.0	4119 - Mixed Northern Hardwoods	6	63	35	Single Tree Selection	Regeneration	Mixed Northern Hardwoods	
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Rev

Newly acquired Northern hardwood stand. Portion has been thinned and it appears new part has not been thinned in recent history. Mostly sugar maple with red maple. There is some yellow birch and white spruce.

Rev

Thin down to goal range of 75-85 BA by single tree selection. Crop tree release is main goal. Yellow birch are present and will be promoted by thinning around drip edges. Den/ wildlife trees will be protected appropriately and any trace mast tree species will be promoted. Leave white spruce and large black cherry. Extend barking season in this stand from April 1- June 30.

Next

Steps: Check in 4 years for acceptable regeneration per FMFM work instructions. Acceptable regeneration will predominantly consist of maple, beech, and yellow birch with some cherry, spruce, paper birch, hemlock and white pine. A presence of balsam fir will also be acceptable.

**Total Treatment
Acreage Proposed: 114.3**

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**

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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Pg. 1
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Limiting Factor and Comment:

Rev Cmnt:

No Stands with Limiting Factors

Rev Spec:

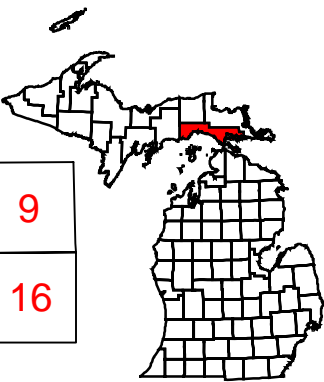
Next Steps:

**Total Treatment
Acreage Proposed: 0**


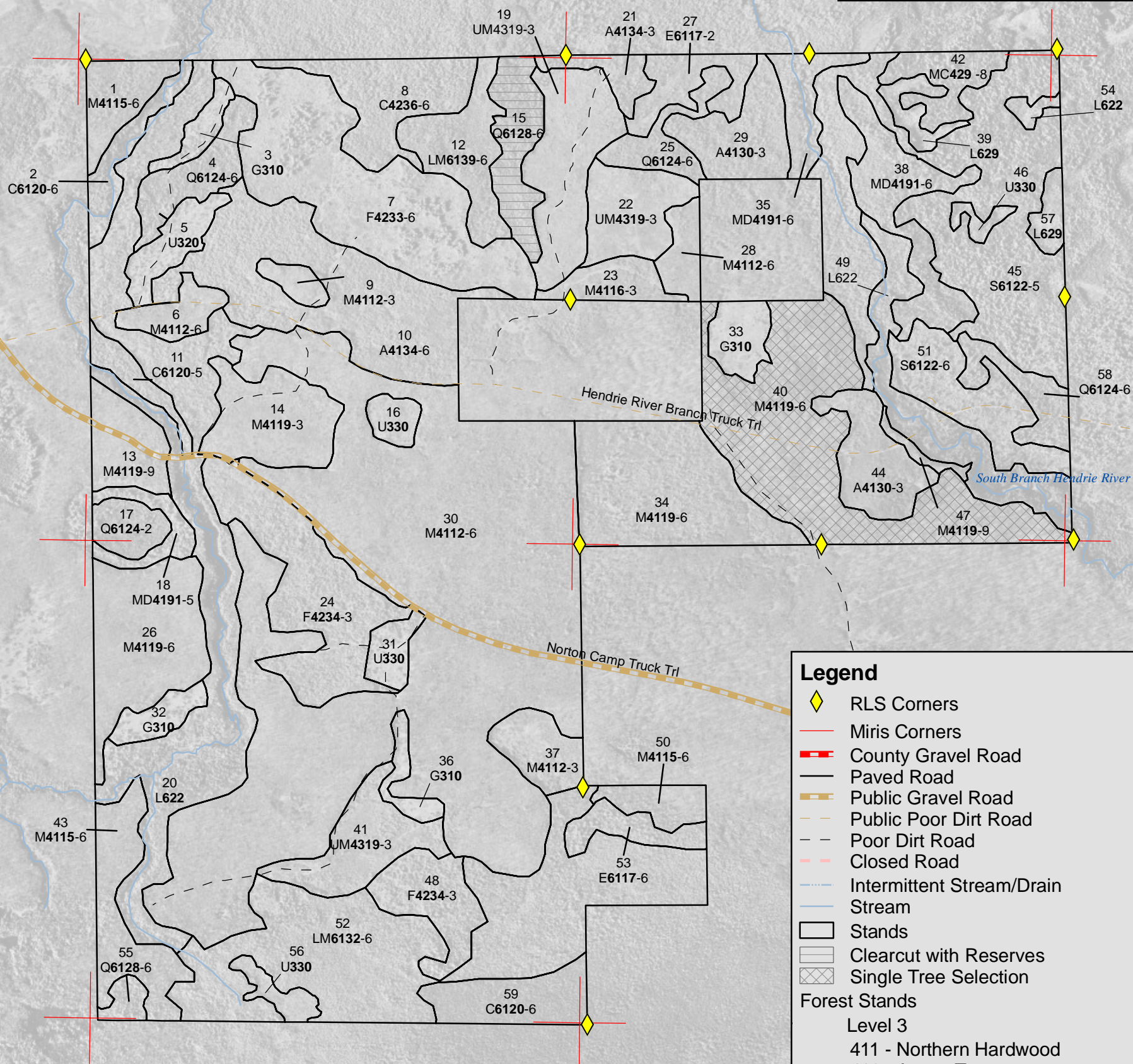
Field Map

Compartment 133
 T44N, R07W, Sec. 7, 8, 16, 17
 County: Mackinac
 Unit: Sault Ste. Marie
 YOE: 2009
 Acres: 1,859 GIS Calculated
 Stand Examiner: Matthew Edison
 Map Revised: 10/04/2007
 Map Phase: Pre-review

Stand # 23
 Stocking Density (A)(412)0 -7
 OI Level 3
 Code Level 4
 Cover Type Code



8	9
17	16

Legend

- RLS Corners
- Miris Corners
- County Gravel Road
- Paved Road
- Public Gravel Road
- Public Poor Dirt Road
- Poor Dirt Road
- Closed Road
- Intermittent Stream/Drain
- Stream
- Stands
- Clearcut with Reserves
- Single Tree Selection

Forest Stands

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland

