SAULT FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 3 ENTRY YEAR: 2010

Compartment Acreage: 2251 County: Chippewa

Revision Date: August 11, 2008

Stand Examiner: Jeff Wise

Legal Description: T42N-R6E Sections 2, 3, 9, 10, 11 & 14; Drummond Township
T43N-R6E Sections 34, & 35; Drummond Township

Management Goals: The compartment has been undergoing treatments for deer range improvement and has had continuous cutting for the past 20 years. The cuts were laid out in a checkerboard style with 40 acre payment units and no unit adjacent to another. The primary management objective was to regenerate the upland and lowland aspen types with a variety of age classes, along with a limited number of cedar seed tree cuts in some of the aspen stands for sustainability and wildlife benefits. At this time, two units remain on contract to be cut, therefore, with the intensive and successful management of the past, only one new treatment will be prescribed this decade and only because it was an uncut unit from the earlier DRIP I sale of the eighties. This compartment is within the proposed Drummond Island Management Area. Plans for this Management Area are currently being developed.

Soil and Topography: Pickford-Rudyard-Ontonogon Association, very deep, nearly level to very steep, poorly drained and well drained, loamy soils on lake plains. Shelter-Posen-Summerville Association, very deep and shallow, nearly level to very steep, somewhat poorly drained and well drained, loamy soils on ground moraines and glacial lake benches. Markey-Dawson Association, very deep, nearly level, very poorly drained, mucky and peaty soils on outwash plains, lake plains, and ground moraines. The land is generally flat with mostly lower ground.

Ownership Patterns, Development, and Land Use in and Around the Compartment: A contiguous block of State ownership with private land bordering the west side and a strip of 40's in the north part. This compartment, just south of the Maxton Plains Alvar area, is a primary hunting area. There are no ORV trails in the compartment. There is a probable cabin trespass in Sec 35. Resolution is being handled by the Trespass Specialist due to the complicated nature of this particular issue.

Unique, Natural Features: There is a small amount of Alvar in the north part of the compartment. Part of the Potagannising Flooding is in the south part of the compartment with access to First and Second Lakes. MNFI has been consulted and comments received regarding potential and documented T & E species. The North West corner of the compartment is an ERA designated as Great Lakes Marsh, locally known as Paw Point. MNFI shows no element occurrences in or near the proposed treatment area but will be monitored closely when conducting field work.

Archeological, Historical, and Cultural Features: None known at this time.

Special Management Designations or Considerations: There is one Ecological Reference Area (ERA), a Great Lakes Marsh in Sec 3 known as Paw Point. The ERA plan is under development.

Watershed and Fisheries Considerations: This compartment contains portions of Lake Huron Coastline (Potagannissing Bay), Potagannissing River, and Potagannissing River dam/rock ramp structure. The Potagannissing River and associated floodings provide important fish spawning and nursery habitat for a variety of game and non-game species, including walleye and northern pike that migrate from Potagannissing Bay.

The Potagannissing Dam and rock-ramp structure requires periodic, on-going maintenance, for removing built-up debris or rocks that been moved in the structure, and general structure maintenance. Debris is generally removed by hand or mechanical means (a brush grapple). General maintenance activities have been previously approved in FTP No. F45-159 but should be added to the stand comments and documented at this compartment review. Dam maintenance activities are also covered by the dam maintenance plan approved by the DEQ's Dam Safety Program.

This compartment also contains McCormick Creek and McCormick marsh. The current road crossing over McCormick Creek has undersized, perched culverts, creating a barrier to fish passage. Fisheries Division, along with the Drummond Island Sportsmen's Club, U.S. Fish and Wildlife Service, and the Chippewa County Road Commission, will be replacing this crossing with appropriately sized culverts to improve fish passage. The marsh area will provide additional pike spawning and nursery habitat.

Wildlife Habitat Considerations: This compartment is dominated by early successional communities and has been managed intensively over the past 20 years as part of the Deer Range Improvement program. The goal of the intensive management regime within the compartment is to provide a matrix of multiage aspen stands to provide habitat for species such as ruffed grouse, hare, and deer. Areas of cedar were left uncut within this complex to provide mature coniferous habitat for species such as Blackburnian warbler, boreal chickadee, black bear, and marten.

Alvar communities located just to the north of the compartment support several rare plant species such as Alaska orchid, false pennyroyal, Hill's thistle, prairie smoke, beauty sedge, and flattened spike-rush. One of the predominant threats to this delicate community compartment is off-road vehicle use. Vehicles not only damage soils and native plants but also introduce non-native species. Access to the compartment will not occur from the north because of potential impacts from roads.

The compartment is bordered by several wetland communities – Great Lakes Marsh of Paw Point, Scott Point, mixed emergent within the interior and adjacent to First Lake and the Potagannissing River, and also Scotts Bay. Management of wetland areas promotes species such as the American bittern, Blanding's turtle, Common Loon, Bald Eagle, Black Tern, and Osprey.

General Wildlife Objectives and Considerations:

1. Ephemeral wetlands/intermittent streams

Despite their small size, ephemeral wetlands and intermittent streams are critically important to reptile and amphibians and contribute to the overall forest biodiversity (MI Wildlife Action Plan – wetlands: ephemeral wetlands).

Terrestrial habitats within 100 ft of ephemeral wetlands and intermittent streams will be left uncut following to protect water quality BMP guidelines. Mature, undisturbed forests surrounding wetlands are important because harvest practices can degrade habitat suitability for dependent wildlife species, particularly reptiles and amphibians. Soil temperatures increase and humidity decreases with loss of canopy closure, rutting in low areas can disrupt species movement, harvested areas have lower dead and down woody debris, and exposed soils combined with large rain events after harvest can introduce sedimentation impacting water quality and quickly fill in small isolated wetlands.

Adjacent to the water quality buffer, management of the adjacent terrestrial habitat up to 500 ft will incorporate the life requirements of reptile and amphibian species. Harvest within this core habitat zone will avoid peak breeding periods of Apr. 15 – July 15th, when logistically feasible. Retention patches, particularly with clear cut stands, will be placed adjacent to wetland buffers or between wetlands within a stand to increase protection and connectivity.

2. River/Marsh

Maintaining mature, closed canopy forest types adjacent to rivers, lakes, ponds will benefit numerous wildlife species. Wood ducks, hooded mergansers, bald eagle, osprey, numerous passerines, red-shouldered hawk, black bear, fisher, marten, and other aquatic fur bearers are some species which utilize mature forests adjacent to water bodies.

Emphasis of mature forest community elements adjacent to water quality buffers will maximize wildlife value. Retention patches, particularly with clear cuts, will be placed adjacent to or between wetlands within a stand increase protection and connectivity. Harvest within 500 ft will avoid peak breeding reptile and amphibian breeding periods of Apr. 15 – July 15th, when logistically feasible.

3. Oak

Retention of oak is now particularly important given the significant loss of beech across the landscape. Management which encourages and protects mast producing species such as oak will benefit numerous wildlife species such as white-tailed deer, grouse, bear, rodents, and wild turkey.

4. Cedar/conifer/fir/spruce within deer yards

One of the primary objectives within deer yards is to maintain a dense canopy cover which serves as an intercept to snow accumulation during winter. To maintain this cover, retention of these species is important. Because of the low probability of cedar regeneration within concentrated areas of deer use, harvest should be avoided. If harvest of cedar has been conducted within the yard, evaluating harvest techniques and regeneration will be critical to the success of future management.

5. Cedar management outside of deer yard boundaries with regeneration challenges

Where cedar is not regenerating outside of deer yards, clear criteria should be developed to judge adequate regeneration and appropriated actions to correct understocked areas (SFI Performance Measure 2.1). It must be determined where and how much this lower stocking rate is acceptable. Because of the high economic and ecological value of cedar, the priority should be to evaluate regeneration of past harvest areas and to limit or clearly define sustainable harvest levels until status within these areas is determined. Monitoring results will take time (30 - 50 yrs) but will not jeopardize cedar communities as they are long-lived.

In stands where cedar is harvested, actions will be taken to protect desirable or planned advanced natural regeneration during harvest (SFI Performance Measure 2.1):

1) Leave cedar seed trees every 30 ft.
2) Avoid cutting leaning cedar ($\sim \leq 45^{\circ}$) - trees provide better opportunities for vegetative regeneration.
3) Avoid harvesting large trees (> 12”dbh) - good seed dispersal.
4) Create slash piles and downed whole trees adjacent to retained cedar.
5) Avoid harvesting in low areas with hummock microtopography as equipment can flatten and result in site conversion to species that are more adapted to wet areas.
6) Clearcutting of cedar on shallow organic soils, poorly decomposed acid peats, or wet mineral soils frequently result in inadequate regeneration. Harvest should be restricted to the most productive organic soils.

Citation:
Chimner, R.A., and J.B. Hart 1996. Hydrology and microtopography effects on northern white-cedar regeneration in Michigan's Upper Peninsula. Can. J. For. Res. 26:389-393.

Lanasa, M. 1989. Northern white-cedar management and whitetail deer habitat. In: Proceedings of the National Silvicultural Workshop: Silviculture for all resources; 1987 May 11-14; Sacramento, CA. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management: 19-24.

Verme, L.J., and W.F. Johnson. 1986. Regeneration of Northern white cedar deeryards in upper Michigan. J. Wild. Manag. 50:307-313.

6. Northern hardwood

Retention of large diameter living trees and snags will provide cavity, den, and foraging habitat and future dead and down woody debris for numerous wildlife species.

7. Hemlock

Hemlock communities provide habitat for rare raptor species such as red-shouldered hawk and Northern goshawk and is also important to black-throated blue, cerulean, black-throated green warblers, and scarlet tanagers, black bear, moose and marten.

Closed canopy structure results in lower snow levels and lower energy expenditures for deer. When harvesting other trees species within a stand where hemlock is retained, equipment should refrain from removing trees from hemlock inclusions to avoid damaging the canopy.

8. Poor conifer swamp

This natural community is dominated by black spruce, Labrador tea, and sphagnum mosses and is important to many rare plants and animals such as the yellow pitcher plant, black crowberry, spruce grouse, wood turtle, and merlin. When managing for biodiversity within poor conifer swamps, large unharvested tracts may be left to allow natural processes to operate unhindered to generate a range of successional stages. Examples of this community with late successional characteristics are relatively rare and should be considered for retention with the presence of large trees, treefall gaps, snags and downed wood.

Dead and dying wood will be retained to become snags, stumps, and fallen logs. Long rotation periods (over 100 years) will favor numerous species, such as epiphytic lichen and trunk foraging birds that depend on old, large trees.

Where management does occur, patches of residual trees, all snags, and dead and downed wood will be retained. High retention (> 20 %) will be important because spruce is not very windfirm, thus isolated retention patches blow over easily. Retention of both spruce and fir is important to maintain the multi-storied structure within the stand.

Citation:
Kost, M.A., D.A. Albert, J.G. Cohen, B.S. Slaughter, R.K. Schillo, C.R. Weber, and K.A. Chapman. 2007. Natural Communities of Michigan: Classification and Description. Michigan Natural Features Inventory, Report No. 2007-21, Lansing, MI.

MDNR FMFM Within-Stand Retention Guidelines. 2006. Cover type specific considerations – spruce-fir. Pgs. 25-26.

9. Aspen
Maintaining a component of interspersed large (saw log) living aspen or aspen patches within managed stands will provide for future snag age class and a food resource for ruffed grouse. This aspen multi-age class juxtaposition also provides benefits for deer and hare.

Oak and cherry retained within aspen stands serve as important mast producers.

Retention of longer-lived species such as maple, oak, cedar, and white pine enhance vertical structure and assure a steady supply of snags and downed woody debris.

Retention of conifer < 4" dbh within stands provides cover for ruffed grouse.

10. Red pine
Retention of some red pine at final harvest in plantation stands provide wildlife values in terms of super-canopy nesting trees, a good long-term cavity resource, and live/wood legacy tree retention. The benefit of these patches to wildlife will be maximized by placing retention of red pine adjacent to 100 ft, unharvested, water quality buffers.

The retention zone beyond the buffer can be managed to maximize ecological complexity and natural plant diversity with variable density thinning and longer rotations. Retention within this zone of 60 – 80 ft^2 per acre of residual red pine at the initial harvest will result in development of two-age cohort stands and potentially multi-cohort stands when this level of harvest is repeated in the future. Economic rotation ages of 50 – 90 years are shorter than those to develop complex stand structures (120 – 200 years). Thus the primary determinant of harvest within the retention zone will be the acceptable level of structural complexity and within-stand heterogeneity.

Because large continuous stands of red pine of the same age are susceptible to severe pest outbreaks, having zones of red pine of varying age classes broken up with alternate non-pine species will prove beneficial.

Management within red pine plantations will enhance and perpetuate oak components which are an important hard mast source for numerous wildlife species.

Citation:
Gilmore, D. W., and B. J. Palik. 2006. A revised manager's handbook for red pine in the North Central Region. Gen. Tech. Rep. NC-264. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 55 p.

MDNR FMFM Within-Stand Retention Guidelines. 2006. Cover type specific considerations – red pine. Pgs. 22-23.

Michigan State Forest Red Pine Management Guidelines. 1991.

Nicholls, T. H., and D. D. Skillings. 1997. Pocket guide to red pine diseases and their management. U.S. Department of Agriculture, Forest Service, North Central Research Station.

11. Limestone Boulders
These unique geologic features serve as micro-habitat for several rare plant species including Hart's tongue fern, green spleenwort, and walking fern. Harvesting too close to these boulders can interrupt the canopy cover and micro-climate for these plants. In areas where plants have been found, retention guidelines will be followed (pg. 15). In areas within the plant species distribution (see MNFI summaries) harvest will not

occur at a minimum of 10 ft of large boulders (approximately ≥ 4 x 4 ft) to protect micro-climate and possible future colonization sites.

12. Retention considerations

• Retention patches placed within a stand for water quality, inoperability, or protection of sensitive habitat can contribute toward but not fully satisfy retention requirements (pg. 10).

• Important to vary retention patterns across the landscape to encourage structural diversity (pg. 11).

- When retaining scattered trees, important to capture the size diversity by assuring that large diameter trees / trees with desirable wildlife characteristics are included.
- For stands greater than 10 acres, patches are recommended. This also assures that a representation of the current species community is retained.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of thin to discontinuous lacustrine (lake) glacial deposits over bedrock. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Queenston Shale and the Silurian Manitoulin Dolomite subcrop below the glacial drift. The Manitoulin could be used for stone. A gravel pit is located in Section 15 and there could be potential in Section 10. There is no current economic oil and gas production in the UP.

Vehicle Access: Colton Bay Rd borders the compartment on the north side. A network of winter only logging roads extends into the interior for logging purposes. These roads are generally blocked in spring, and will be permanently blocked when the present timber harvesting operation is complete.

Survey Needs: Sections 2, 3, 10, and 35 all need minor work just for corner location, not treatments.

Recreational Facilities and Opportunities: The snow trail winds its way through the compartment also utilizing the north part of Maxton Rd and Colton Bay Rd. Canoeing, camping, waterfowl hunting, nature watching, and fishing, occur at the flooding where the lakes can be accessed. Other than that, the compartment is primarily used for hunting. There are no ORV trails in this compartment.

Fire Protection: Maxton Rd on the west side and Colton Bay Rd on the north side would provide access. There are plenty of winter roads, but truly good access would be difficult. The only good water source is at Potagannissing Flooding.

Additional Compartment Information:

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

- **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**

Cover Type & Treatment Map

Compartment 3
T43N, R06E, Sec. 34, 35
T42N, R06E, Sec. 2, 3, 9-11, 14
County: Chippewa
Unit: Sault Ste. Marie
YOE: 2010
Acres: 2,251 GIS Calculated
Stand Examiner: Jeffrey Wise
Map Revised: 8/12/2008
Map Phase: Pre-review

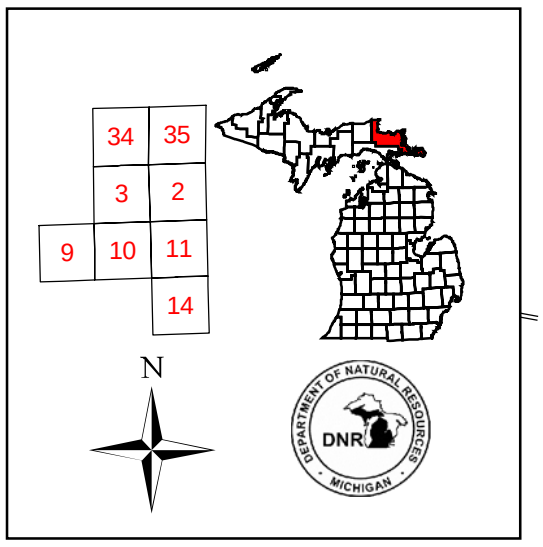
Stand # 23
Stocking Density
(412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code

Legend

- RLS Corners
- Miris Corners
- Paved Road
- Gravel Road
- Poor Dirt Road
- Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- Cabins
- Gate
- Snowmobile Trails
- Clearcut with Reserves

Forest Stands
LVL3COVER
- 413 - Aspen Types
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands
LVL3COVER
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



34
35
3
2
9
10
11
14
Bruce Point Rd
Maxton Rd
Colton Bay Rd
Potagannising Flooding Rd
First Lake
Potagannissing River
1 0.5 0 1 Miles
83°41'0"W
83°40'0"W
83°39'0"W
83°38'0"W
46°5'0"N
46°4'0"N
46°3'0"N
46°30"N
46°40"N
46°50"N

1 623-0
2 6121-T6
3 6120-C6
4 4319-UM3
5 6120-C6
6 310-0
8 6128-Q3
9 310-0
10 623-0
11 4135-A1
12 4135-A3
13 4135-A3
14 310-0
15 122-0
17 6115-E5
18 623-0
19 4135-A3
20 6120-C6
21 6112-P6
22 4135-A1
23 310-0
24 4134-A2
25 4135-A3
26 6128-Q6
27 6117-E6
28 6119-E3
29 4136-A1
30 310-0
31 4134-A2
32 310-0
33 4136-A1
34 6120-C6
35 6118-E3
36 6128-Q5
37 4232-F6
38 6117-E6
39 6128-Q6
40 6112-P6
41 6120-C6
42 6132-LM6
43 4136-A1
44 4136-A1
45 6132-LM6
46 6111-P6
47 320-0
48 6120-C6
49 4239-MC6
50 4136-A6
51 6117-E6
52 6120-C6
53 4135-A3
54 4136-A3
55 6120-C6
56 4239-MC6
57 6128-Q6
58 6128-Q6
59 622-0
60 6128-Q6
61 4136-A3
62 6111-P6
63 122-0
64 622-0
65 6112-P5
66 623-0
67 500-0
68 623-0
69 6111-P6

Stand Boundary Map

Compartment 3
T43N, R06E, Sec. 34, 35
T42N, R06E, Sec. 2, 3, 9-11, 14
County: Chippewa
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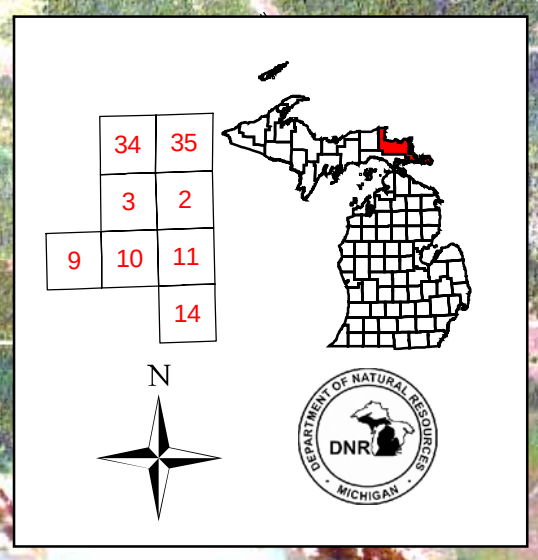
(412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code

Legend
- RLS Corners
- Miris Corners
- Paved Road
- Gravel Road
- Poor Dirt Road
- Trails
- Intermittent Stream/Drain
- Stream
- Gate
- Cabins
- Snowmobile Trails
- Stand Boundaries



83°40'0"W
83°39'0"W
83°38'0"W
46°50'0"N
46°40'0"N
46°30'0"N
83°41'0"W
83°40'0"W
83°39'0"W
83°38'0"W

Bruce Point Rd
Colon Bay Rd
Potagannising Flooding Rd
Potagannissing River
First Lake
Stony Creek
Mack Rd
Maxton Rd

1 0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

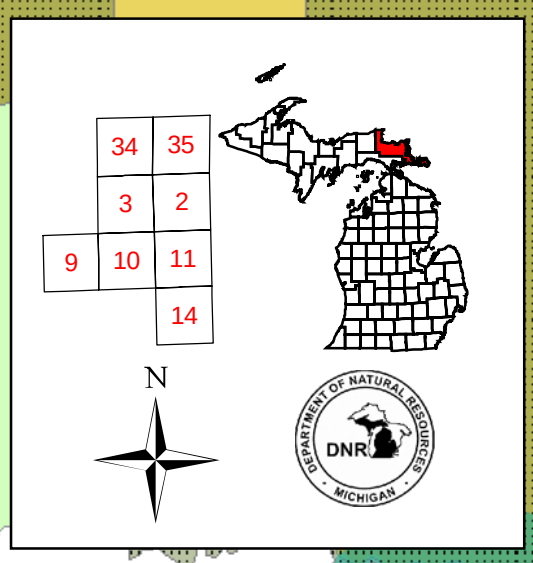
Compartment 3
T43N, R06E, Sec. 34, 35
T42N, R06E, Sec. 2, 3, 9-11, 14
County: Chippewa
Unit: Sault Ste. Marie
YOE: 2010
Acres: 2,251 GIS Calculated
Stand Examiner: Jeffrey Wise
Map Revised: 8/12/2008
Map Phase: Pre-review

Stand # 23
Stocking Density
(412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code

Legend
- Miris Corners
- Stand Boundaries
- Boat Access Sites
- Cold Water Streams
- SCA - Special Conservation Area
- Coastal Environmental Areas
- IFMAP Special Conservation Areas
- Non_Dedicated Natural Areas and National Natural Landmarks
- Great Lakes Islands

45002_SCA_Maxton_Plains
Unique Site

45001_SCA_Maxton_Plains
Unique Site



34 35 3 2 9 10 11 14

1 **623**-0
2 **6121**-T6
3 **6120**-C6
4 **4319**-UM3
5 **6120**-C6
6 **310**-0
7 **623**-0
8 **6128**-Q3
9 **310**-0
10 **4135**-A3
11 **4135**-A1
12 **4135**-A3
13 **4135**-A3
14 **310**-0
15 **122**-0
16 **6115**-E5
17 **6115**-E5
18 **623**-0
19 **4135**-A3
20 **6120**-C6
21 **6112**-P6
22 **4135**-A1
23 **310**-0
24 **4134**-A2
25 **4135**-A3
26 **6128**-Q6
27 **6117**-E6
28 **6119**-E3
29 **4136**-A1
30 **310**-0
31 **4134**-A2
32 **310**-0
33 **4136**-A1
34 **6120**-C6
35 **6118**-E3
36 **6128**-Q5
37 **4232**-F6
38 **6117**-E6
39 **6128**-Q6
40 **6112**-P6
41 **6120**-C6
42 **6132**-LM6
43 **4136**-A1
44 **4136**-A1
45 **6132**-LM6
46 **6111**-P6
47 **320**-0
48 **6120**-C6
49 **4239**-MC6
50 **4136**-A6
51 **6117**-E6
52 **6120**-C6
53 **4135**-A3
54 **4136**-A3
55 **6120**-C6
56 **4239**-MC6
57 **6128**-Q6
58 **6128**-Q6
59 **622**-0
60 **6128**-Q6
61 **4136**-A3
62 **6111**-P6
63 **122**-0
64 **622**-0
65 **6112**-P5
66 **623**-0
67 **500**-0
68 **623**-0
69 **6111**-P6

83°41'0"W 83°40'0"W 83°39'0"W 83°38'0"W
46°5'0"N 46°4'0"N 46°3'0"N

1 0.5 0 1 Miles

Covertype, Acres, and Age summary

(Level 3 Cover Type)

Sault Ste. Marie Mgt. Unit

Compartment 003 Year of Entry 2010

Report Date: 08/07/2008

Age Class

	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +	Uneven Age	Total
Aspen Types	0	161.6	470.9	0	0	0	0	0	0	0	0	0	0	0	128.3	**760.7**
Emergent Wetland	229.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**229.4**
Herbaceous Openland	28.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**28.2**
Lowland Coniferous Forest	0	0	0	0	0	0	0	0	0	33.3	77.1	0	0	0	186.2	**296.6**
Lowland Deciduous Forest	0	0	0	0	0	0	0	0	0	47.5	119.6	32.4	0	0	395.8	**595.2**
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34.7	**34.7**
Lowland Shrub	55.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**55.6**
Other Upland Conifers	0	0	28.3	0	0	0	0	0	0	0	0	0	0	0	136.4	**164.7**
Road/Parking Lot	12.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**12.7**
Upland Mixed Forest	0	0	19.9	0	0	0	0	0	0	0	0	0	0	0	9.5	**29.4**
Upland Shrub	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2.5**
Water	19.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**19.3**
Total	**347.8**	**161.6**	**519.1**	**0**	**0**	**0**	**0**	**0**	**0**	**80.9**	**196.7**	**32.4**	**0**	**0**	**890.8**	**2229.1**

PROPOSED TREATMENTS
NO LIMITING FACTORS

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
38	**45003038-Cut**	40.7	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	88	Harvest	Clearcut with Reserves	Lowland Deciduous, Mixed Coniferous

Rev Cmnt: On contract from 2000 YOE Drip II Unit #9 Sale 45-011-01-01. Green-up guidelines will be monitored and met with adjacent stand prescribed for treatment in YOE 2010.

Rev Spec: Cut all trees to a 4"top, reserve cedar and pine, den trees and snags

Next Steps: regeneration survey in year 4 after harvest, regeneration of present species is desired.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
40	**45003040-Cut**	41.1	6112 - Lowland Aspen	High Density Pole	88	Harvest	Clearcut with Reserves	Aspen, Spruce/Fir

Rev Cmnt: No survey should be needed for lines.

Rev Spec: Cut all trees that will make at least 1 pulpwood stick to a 4" top. Retain cedar, pine, a few scattered mature aspen, and all den trees and snags.

Next Steps: regeneration survey in year 4 after harvest, regeneration of present species is desired, monitor green up guidelines for adjacent stands already on contract from YOE 2000.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
50	**45003050-Cut**	17.9	4136 - Aspen, Mixed Conifer	High Density Pole	88	Harvest	Clearcut with Reserves	Aspen, Mixed Conifer

Rev Cmnt: On contract from 2000 YOE, DRIP II, Unit 8, sale 45-011-01-01, green-up guidlines will be monitored and met with adjacent stand prescribed for treatment tin YOE 2010.

Rev Spec: cut all trees to a 4" top, reserve pine and cedar seed trees at 27 per acre, den trees and snags

Next Steps: regeneration survey in year 4 after harvest, regeneration of present species is desired.

Total Treatment Acreage Proposed: **99.7**

Sault Ste. Marie Mgt. Unit
Inventory Method: IFMAP

PROPOSED TREATMENTS WITH LIMITING FACTORS

Compartment: 003 Entry Yr: 2010
Date 08/07/2008

Stand	Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective

Limiting Factor and Comment:

Rev Cmnt:

Rev Spec:

Next Steps:

No Treatment Reason

Total Treatment Acreage Proposed: **0**

PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatIves (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Inventory Method: IFMAP

Stand	SCA Name	Acres	Comments

DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.
HCVA	Coastal Environmental Areas	The public designation process is defined by Part 323, Shorelands Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the Michigan Department of Environmental Quality (DEQ). This is an inactive program with no new areas currently under consideration by the DEQ.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
SCA	Great Lakes Islands	Great Lakes Islands provide significant habitat for numerous species, including many rare plants and animals, several of which are endemic or largely restricted to the Great Lakes region. Due to their isolation, islands provide good examples of many Great Lakes-associated natural communities and ecosystems, and thus have potential to provide insights for understanding the consequences of human disturbance on the increasingly fragmented ecosystems of the mainland.
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.

DEDICATED CONSERVATION AREA DETAILS

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Conservation Area	Type	Description
SCA	Potential Old Growth Areas	This category contains stands were identified for a broad range of reasons and were coded in the OI database as stand condition 8 as potential old growth (POG). Approximately 310,000 acres have been identified through the Operations Inventory (OI)/Compartment Review process. For stands in Year of Entry 2008 and forward, potential old growth is managed for the identified objective until it is: 1) vetted through the Biodiversity Conservation Planning Process (BCPP) and given a specific designation and objective (as an ERA, HCVA, or other type of SCA) and is released from the potential old growth designation; or 2) it is released from the potential old growth designation via the Compartment Review process.