



**Baraga Forest Management Unit  
Compartment Review Presentation**  
**Compartment #50**                      **Entry Year: 2012**  
**Compartment Acreage: 1,180**        **County: Houghton**

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**Revision Date:** 7/14/2010

**Stand Examiner:** Fred Hansen

**Legal Description:** Houghton County, Elm River and Laird Townships  
T51N R36W Sections 17, 18, and 19.

**RMU (if applicable):**

**Management Goals:** To maintain a healthy; sustainable forest with special consideration to wildlife and fisheries habitat.

**Soil and Topography:** The land is rolling to hilly in this compartment. The lowland soils are Cathro, Gay, Tawas, and Roscommon mucks; and Dawson peat. Upland soils are combinations of Kalkaska, Liminga, Halfaday, Au Gres, Yalmer, and Roscommon sands; Alcona and Munising loamy fine sands.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Adjacent lands are a combination of State Forest and private industrial forest lands managed primarily for timber.

**Unique, Natural Features:** None identified.

**Archeological, Historical, and Cultural Features:** None identified

**Special Management Designations or Considerations:** None identified

**Watershed and Fisheries Considerations:** Senecal Creek and some tributaries to the Firesteel River flow westerly from the compartment. Tributaries to the West Branch of the Otter River flow easterly from the compartment.

**Wildlife Habitat Considerations:** Favor retention of oak, and mesic conifer in hardwood stands.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of coarse-textured glacial till and lacustrine (lake) clay and silt, with an ancient shoreline in this area. There is insufficient data to determine the Glacial Drift thickness. The Precambrian Jacobsville Sandstone subcrops below the glacial drift. There is not a current economic use for the Jacobsville, but it was used as a building stone in the past. The nearest gravel pit is located four miles to the north. The abandoned Winona copper mine is located six miles to the north. This area has been leased for metallic mineral exploration in the past. There is no economic oil and gas production in the UP.

**Vehicle Access:** Access is from the: Otter Siding Road, Simar Grade, Motley Road, and Clear Lake Road.

**Survey Needs:** Some survey work will need to be done for timber harvest activities.

**Recreational Facilities and Opportunities:** This area provides hunting and fishing opportunities.

**Fire Protection:** This is not a fire prone area.

**Additional Compartment Information:**

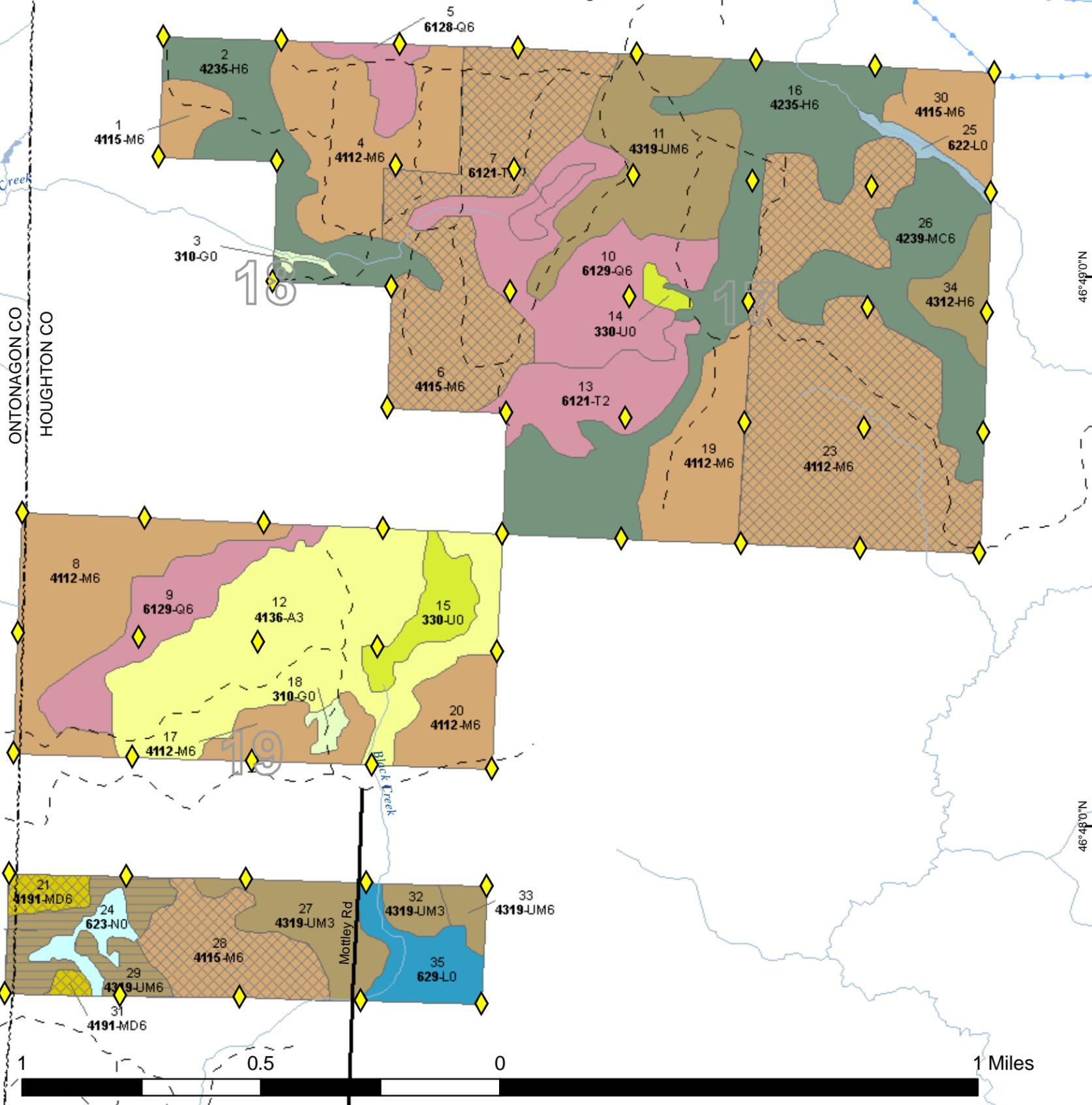
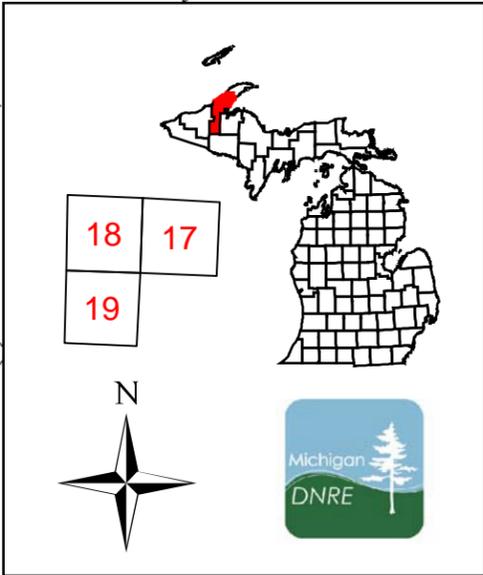
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - ◆ **Cover Type by Age Class**
  - ◆ **Cover Type by Management Objective**
  - ◆ **Compartment Volume Summary**
  - ◆ **Proposed Treatments – No Limiting Factors**
  - ◆ **Proposed Treatments – With Limiting Factors**
  
- **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**
  - ◆ **Suggested potential old growth**

# Cover Type & Treatment Map

Compartment 50  
 T51N, R36W, Sec. 17,18,19  
 County: Houghton  
 Unit: Baraga  
 YOE: 2012  
 Acres: 1,180 GIS Calculated  
 Stand Examiner: Fred Hansen  
 Map Revised: 4/09/2010  
 Map Phase: Pre-Review

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

- Legend**
- ◆ GMM Survey Corners
  - Paved Roads
  - - - Poor Dirt Roads
  - Power
  - Intermittent Stream/Drain
  - Stream
  - Lakes and Rivers
- Treatments**
- ▨ Clearcut (w/Reserves, Patch/Strip)
  - ▩ Selection (Group, Single Tree)
- Forest Stands**
- 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 423 - Other Upland Conifers
  - 431 - Upland Mixed Forest
  - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- 310 - Herbaceous Openland
  - 330 - Low-Density Trees
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
  - 629 - Mixed non-forested wetland



88°56'0"W 88°55'0"W 88°54'0"W

46°50'0"N

46°49'0"N

46°48'0"N

46°50'0"N

46°49'0"N

46°48'0"N

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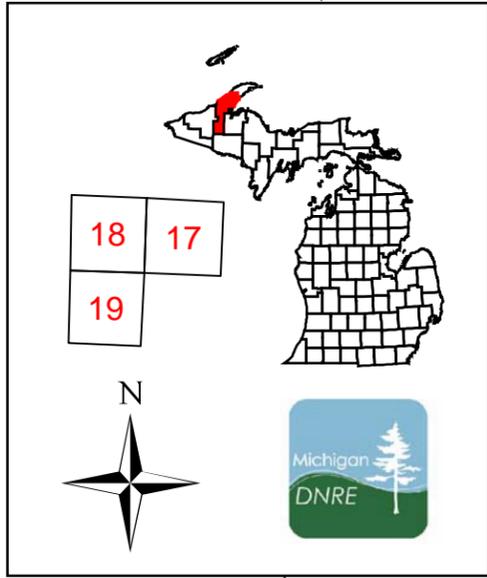
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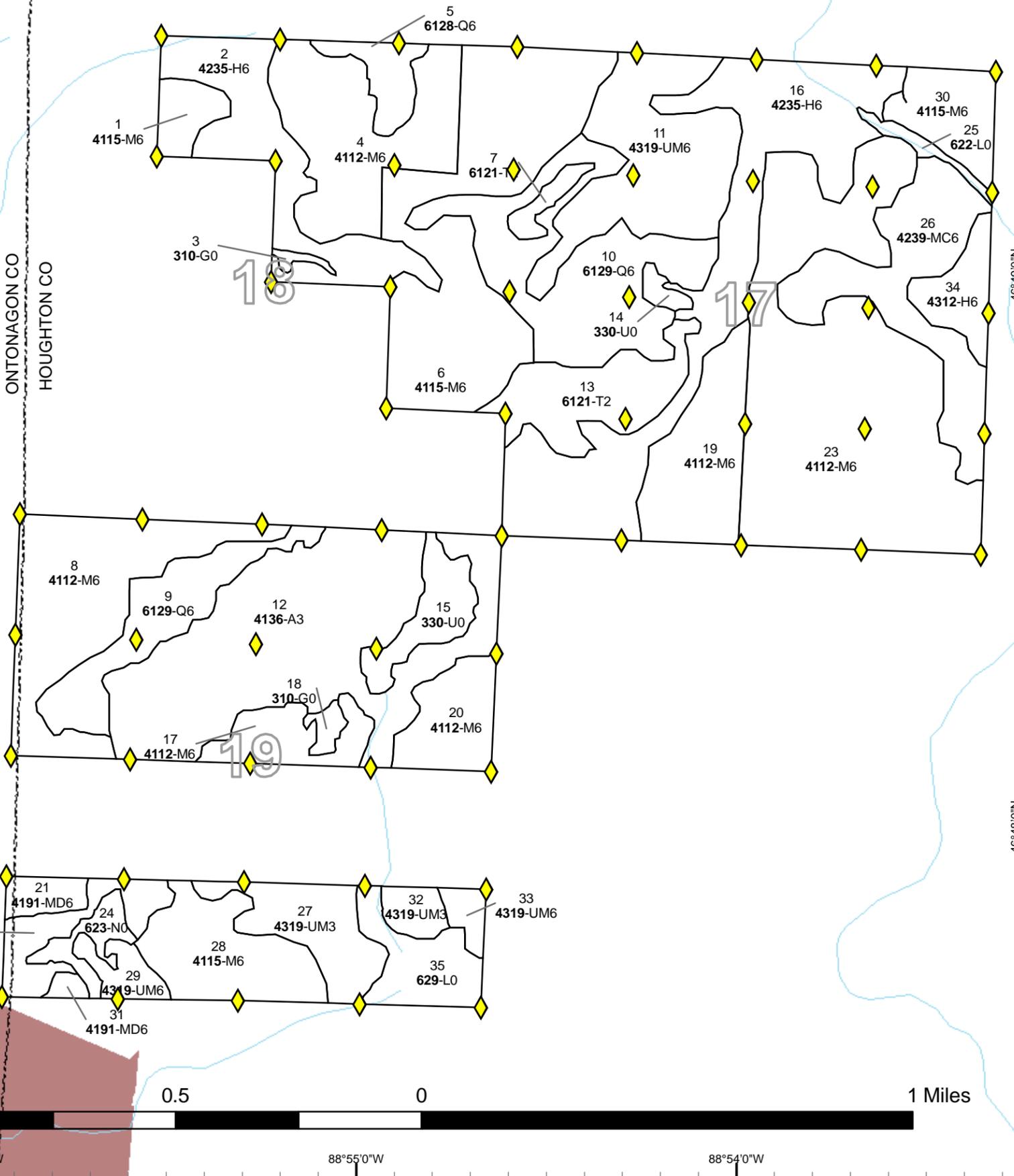
Compartment 50  
 T51N, R36W, Sec. 17,18,19  
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# Dedicated & Proposed Special Conservation Area Map

**Stand #**  
 23  
**Stocking Density**  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**



**Legend**  
 ♦ GMM Survey Corners  
 Dedicated Special Conservation Areas  
 — Cold Water Streams  
 ■ Deer Wintering Areas  
 □ Stand Boundaries



**Table 1 – Total Acres by Cover Type and Age Class**  
(Level 3 Cover Type)



	Age Class														Total	
	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
Aspen Types	0	0	142	0	0	0	0	0	0	0	0	0	0	0	0	142
Emergent Wetland	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Low-Density Trees	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Lowland Coniferous Forest	0	0	0	0	0	0	38	0	0	0	0	43	0	88	169	
Lowland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Mixed non-forested wetland	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	
Northern Hardwood	0	0	0	0	0	0	0	0	0	105	0	0	0	487	592	
Other Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	228	228	
Upland Mixed Forest	0	38	0	0	0	0	0	0	0	0	10	0	0	112	159	
<b>Total</b>	<b>67</b>	<b>38</b>	<b>142</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>105</b>	<b>10</b>	<b>43</b>	<b>0</b>	<b>925</b>	<b>1368</b>	



## Table 2 – Proposed Treatment Summaries

**Baraga Mgt. Unit**  
**Year of Entry 2012**

**Compartment 050**  
**Total Compartment Acres: 1368**

### Acres by Treatment Type

Commercial Harvest - 372	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
<b>Mixed Upland Deciduous</b>	0	11	0	0	0	0		11
<b>Northern Hardwood</b>	0	331	0	0	0	0		331
<b>Upland Mixed Forest</b>	30	0	0	0	0	0		30
<b>Total</b>	<b>30</b>	<b>342</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>372</b>

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
<b>6 11050006-Cut</b>	112.7	4115 - Y.Birch, Hemlock NH	High Density Pole	99	Harvest	Single Tree Selection	Y.Birch, Hemlock NH
<u>Prescription</u> Thin hardwood to 85 BA. Favor oak, white pine and hemlock. Oak should be released on 3 sides to an average BA of 60. Where 30 BA or more of Hemlock occurs, thin to no less than 100 BA. Retain all snags that do not pose a safety hazard. For further assistance refer to The Complete Marker. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> underplant after harvest completion with Hemlock or/and Pine.							
<b>21 11050021-Cut</b>	8.3	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	99	Harvest	Single Tree Selection	Mixed Upland Deciduous with Conifer
<u>Prescription</u> Thin hardwood to 85 BA. Favor oak, white pine and hemlock. Oak should be released on 3 sides to an average BA of 60. Where 30 BA or more of hemlock occurs, thin to no less than 100 BA. Retain all snags that do not pose a safety hazard. For further assistance refer to The Complete Marker. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>							
<b>22 11050022-Cut</b>	20.2	4319 - Mixed Upland Forest	High Density Pole	100	Harvest	Clearcut with Reserves	Mixed Upland Forest
<u>Prescription</u> Reserve Pine Hemlock and Cedar <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>							
<b>23 11050023-Cut</b>	178.2	4112 - Maple, Beech, Cherry Association	High Density Pole	99	Harvest	Single Tree Selection	Maple, Beech, Cherry Association
<u>Prescription</u> Thin hardwood to 85 BA. Favor oak, white pine and hemlock. Oak should be released on 3 sides to an average BA of 60. Where 30 BA or more of hemlock occurs, thin to no less than 100 BA. Retain all snags that do not pose a safety hazard. For further assistance refer to The Complete Marker. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> underplant after harvest completion with Hemlock or/and Pine.							
<b>28 11050028-Cut</b>	40.4	4115 - Y.Birch, Hemlock NH	High Density Pole	99	Harvest	Single Tree Selection	Y.Birch, Hemlock NH
<u>Prescription</u> Thin hardwood to 85 BA. Favor oak, white pine and hemlock. Oak should be released on 3 sides to an average BA of 60. Where 30 BA or more of hemlock occurs, thin to no less than 100 BA. Retain all snags that do not pose a safety hazard. For further assistance refer to The Complete Marker. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>							

**Table 3 -- Treatments Prescribed  
with No Limiting Factor**

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
29 11050029-Cut	9.7	4319 - Mixed Upland Forest	High Density Pole	100	Harvest	Clearcut with Reserves	Mixed Upland Forest

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Prescription Reserve Pine Hemlock and Cedar

Specs:

Other

Comments:

Next

Steps:

31 11050031-Cut	2.5	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	99	Harvest	Single Tree Selection	Mixed Upland Deciduous with Conifer
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Prescription Thin hardwood to 85 BA. Favor white pine and hemlock. Where 30 BA or more of hemlock occurs, thin to no less than 100 BA. Retain all

Specs: snags that do not pose a safety hazard. For further assistance refer to The Complete Marker.

Other

Comments:

Next

Steps:

**Total Treatment  
Acreage Proposed: 371.9**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
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Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

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**Total Treatment Acreage Proposed: 0**

Stand	Baraga Mgt. Unit		5 – Forested Stands			Compartment: 050
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
1	4115 - Y.Birch, Hemlock NH	High Density Pole	11.4	Uneven Age	81-110	Skeeter Hdwd cut in 2003
2	42350 - Upland Hemlock	High Density Pole	52.9	Uneven Age	81-110	OI 1887
4	4112 - Maple, Beech, Cherry Association	High Density Pole	64.9	99	51-80	Skeeter Hdwd, cut 2003
5	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	13.2	Uneven Age		OI 1887
6	4115 - Y.Birch, Hemlock NH	High Density Pole	112.7	Uneven Age	111-140	
7	6121 - Tamarack	Medium Density	5.8	116	1-50	
8	4112 - Maple, Beech, Cherry Association	High Density Pole	72.1	Uneven Age	81-110	Motley Mix, cut 2004-ish
9	6129 - Mixed Coniferous Lowland Forest	High Density Pole	37.8	69	111-140	thick hemlock on south end. Cut in 2020 when Adj (A3) get taller. SI black Spruce 69 years
10	6129 - Mixed Coniferous Lowland Forest	High Density Pole	75.0	Uneven Age	171-200	Ridges w/ heavy hemlock. between ridges are wet lowland, b.spruce, cedar
11	4319 - Mixed Upland Forest	High Density Pole	68.6	Uneven Age	111-140	OI 1924, Pine Martin sale, cut in 2005 Unit 5.
12	4136 - Aspen, Mixed Conifer	High Density Sapling	142.2	12		Cut in 1998, Some dieback from beaver on south side..
13	6121 - Tamarack	Medium Density	37.5	116	1-50	
16	42350 - Upland Hemlock	High Density Pole	115.1	Uneven Age	200+	OI 1906
17	4112 - Maple, Beech, Cherry Association	High Density Pole	20.2	Uneven Age	81-110	cut in 1998-ish
19	4112 - Maple, Beech, Cherry Association	High Density Pole	43.7	Uneven Age	81-110	Pine Marten Hdwd, cut in 2006.
20	4112 - Maple, Beech, Cherry Association	High Density Pole	25.1	Uneven Age	81-110	cut in 1999-ish
21	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	8.3	Uneven Age	141-170	
22	4319 - Mixed Upland Forest	High Density Pole	20.2	Uneven Age	1-50	Reserve Pine Hemlock and Cedar



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## Baraga Mgt. Unit

## 5 – Forested Stands

Compartment: 050  
Year of Entry: 2012

Inventory Method: IFMAP

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4112 - Maple, Beech, Cherry Association	High Density Pole	178.2	Uneven Age	111-140	cut in 1997
26	42390 - Mixed Non- Pine Upland Conifers	High Density Pole	60.0	Uneven Age	171-200	OI 1906
27	4319 - Mixed Upland Forest	High Density Sapling	29.9	5		Cut 2005-ish
28	4115 - Y.Birch, Hemlock NH	High Density Pole	40.4	99	111-140	poor Quality
29	4319 - Mixed Upland Forest	High Density Pole	9.7	100	1-50	Reserve pine hemlock, and cedar
30	4115 - Y.Birch, Hemlock NH	High Density Pole	23.6	Uneven Age	81-110	Cut in Adjacent CMPT in 2001-ish
31	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	2.5	Uneven Age	141-170	
32	4319 - Mixed Upland Forest	High Density Sapling	8.1	5		Cut 2005-ish
33	4319 - Mixed Upland Forest	High Density Pole	5.9	Uneven Age	81-110	Motley hard fir cut 2005
34	4312 - Hemlock, Mixed Deciduous	High Density Pole	17.0	Uneven Age	111-140	Cut with CMPT 49 next time. Small acreage.



Stand	Cover Type	Acres	Gen Cmts:
3	3102 - Grass	1.8	Grass with white pine recruiting into stand, drainage
14	3302 - Low Density Conifer Trees	3.5	
15	3302 - Low Density Conifer Trees	19.1	
18	3102 - Grass	3.7	Starting to grow in with balsam, spruce and cherry.. May want to maintain opening??
24	6239 - Mixed Emergent Wetland	10.0	
25	6220 - Alder/willow	4.7	
35	629 - Mixed non-forested wetland	23.7	



**7 – 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 Type	SCA Name	Acres	Comments
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**8 – 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
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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.