



Compartment Review Presentation

Baraga Forest Management Unit

Compartment 72

Entry Year 2016

Acreage: 967

County Ontonagon

Management Area: Norwich Plain

Revision Date: 04/09/2014

Stand Examiner: Brad Carlson

Legal Description:

ONTONAGON COUNTY, ONTONAGON TOWNSHIP
T51N, R40W, Sections 12, 13, 14, 23, and 24.

Identified Planning Goals:

Introduction

The Norwich Plains management area is on a dissected till plain in north Ontonagon County. The state forest covers about 4,600 acres and is in a contiguous block. The major ownership in this vicinity is non-industrial private. The management area is dominated by the aspen and northern hardwood cover types. Other attributes that played a role in the definition of this management area include:

- Dominated by the mesic northern forest natural community;
- Mid-range in site quality;
- Provides multiple benefits including forest products and dispersed recreational activities; and
- Provides a variety of fish and wildlife habitats.

The management priority in this area is to continue to provide these multiple benefits while minimizing user conflicts.

Soil and topography:

Lands on the West side of the compartment near Norwich Road are level to rolling, but drop off steeply the the South and East and flatten out as you approach Mill Creek and the Ontonagon River. Soils are Watton-Iron River-Baraga Association (clay loam) on the uplands. Bottom lands consist of Carbondale and Kerston mucks.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

State ownership is mostly contiguous, bordered by State land on the south and east. The rest of the compartment is surrounded by small private ownerships managed for timber and recreation (hunting camps).

Unique Natural Features:

The Ontonagon River and Mill Creek are adjacent to the east.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

The former Ontonagon dump is in section 14. This dump has not been capped.

Watershed and Fisheries Considerations:

The Ontonagon River is a trout stream. Mill Creek and it's tributaries within this compartment are not listed trout streams.

Wildlife Habitat Considerations:

This compartment has a substantial aspen component that should be managed for aspen. Prevention of conversion to other types and age class diversification of aspen is desirable.

Mineral Resource and Development Concerns and/or Restrictions

Compartment 72: Sections 12-14, 23 & 24, T51N-R40W, Ontonagon Co.

Surface sediments consist of lacustrine (lake) clay and silt. The glacial drift thickness varies from 10 to 50 feet. The Precambrian Freda Sandstone subcrops below the glacial drift. The Freda does not have a current economic use. Abandoned copper mines are located twelve miles to the east. This area has not been leased for metallic exploration. Gravel pits are not likely to be found in this area. There is no economic oil and gas production in the UP.

Vehicle Access:

All vehicle access is from the Norwich road. Access to stands in section 13 is severely limited by steep terrain.

Survey Needs:

Survey work is in progress.

Recreational Facilities and Opportunities:

There are no developed recreational facilities in this compartment, nor is there the potential to develop facilities. The area gets moderate recreational use, mostly for hunting.

Fire Protection:

There is very little known fire activity in this compartment.

Additional Compartment Information:

The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class
- Cover Type by Harvest Method
- Proposed Treatments – No Limiting Factors
- Proposed Treatments – With Limiting Factors
- Stand Details (Forested and Nonforested)
- Dedicated and Proposed Special Conservation Areas
- Site Condition Details

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

- Base feature information, stand boundaries, cover types, and numbers
- Proposed treatments
- Site condition boundaries
- Details on the road access system

Cover Type & Treatment Map

Compartment: 72
 T51N R40W 12, 13, 14, 23, 24
 County: Ontonagon
 Unit: Baraga
 YOE: 2016
 Acres: 967 GIS Calculated
 Examiner: Brad Carlson
 Map Revised: 5/20/2014
 Map Phase: Pre-Review

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



Legend

- ◆ Survey Grade
- ◇ Non-Survey Grade
- Miris Corners
- Paved Roads
- - - Poor Dirt Roads
- Snowmobile Trail
- ◆ Snowmobile Trails
- Stream
- - - Intermittent Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

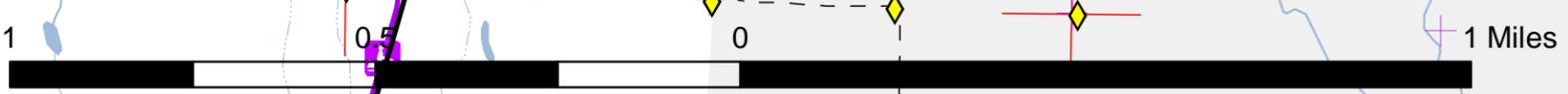
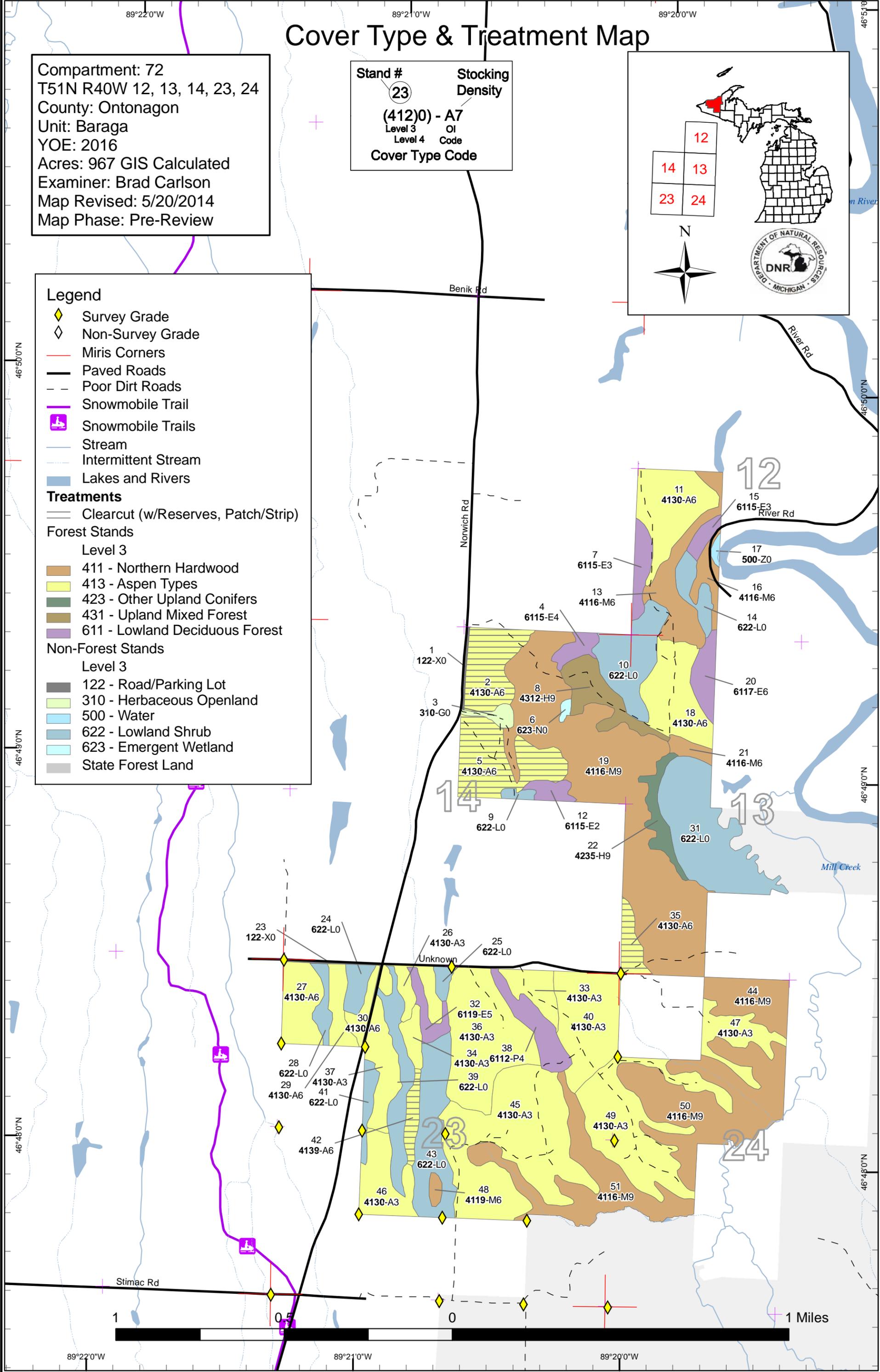
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest

Non-Forest Stands

Level 3

- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- State Forest Land



Stand Boundary Map

Compartment: 72
 T51N R40W 12, 13, 14, 23, 24
 County: Ontonagon
 Unit: Baraga
 YOE: 2016
 Acres: 967 GIS Calculated
 Examiner: Brad Carlson
 Map Revised: 5/20/2014
 Map Phase: Pre-Review

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



Legend

- ◆ Survey Grade
- ◇ Non-Survey Grade
- Miris Corners
- Paved Roads
- - Poor Dirt Roads
- Snowmobile Trail
- ◆ Snowmobile Trails
- Stream
- - Intermittent Stream
- ▭ Stand Boundaries

Forest Stands

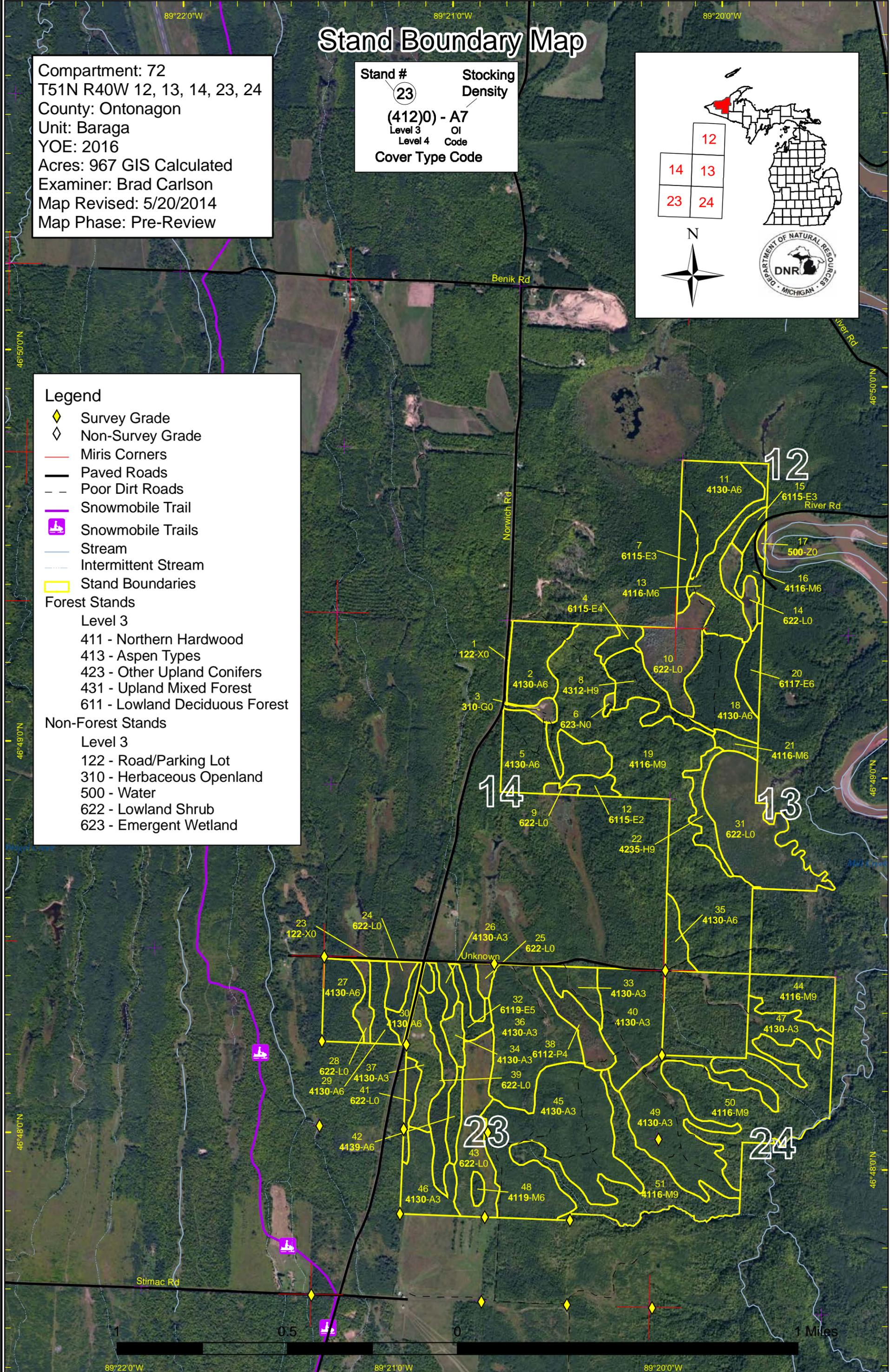
Level 3

- 411 - Northern Hardwood
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- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest

Non-Forest Stands

Level 3

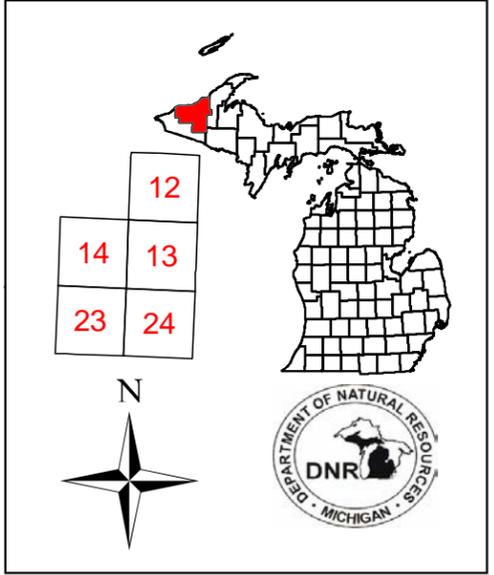
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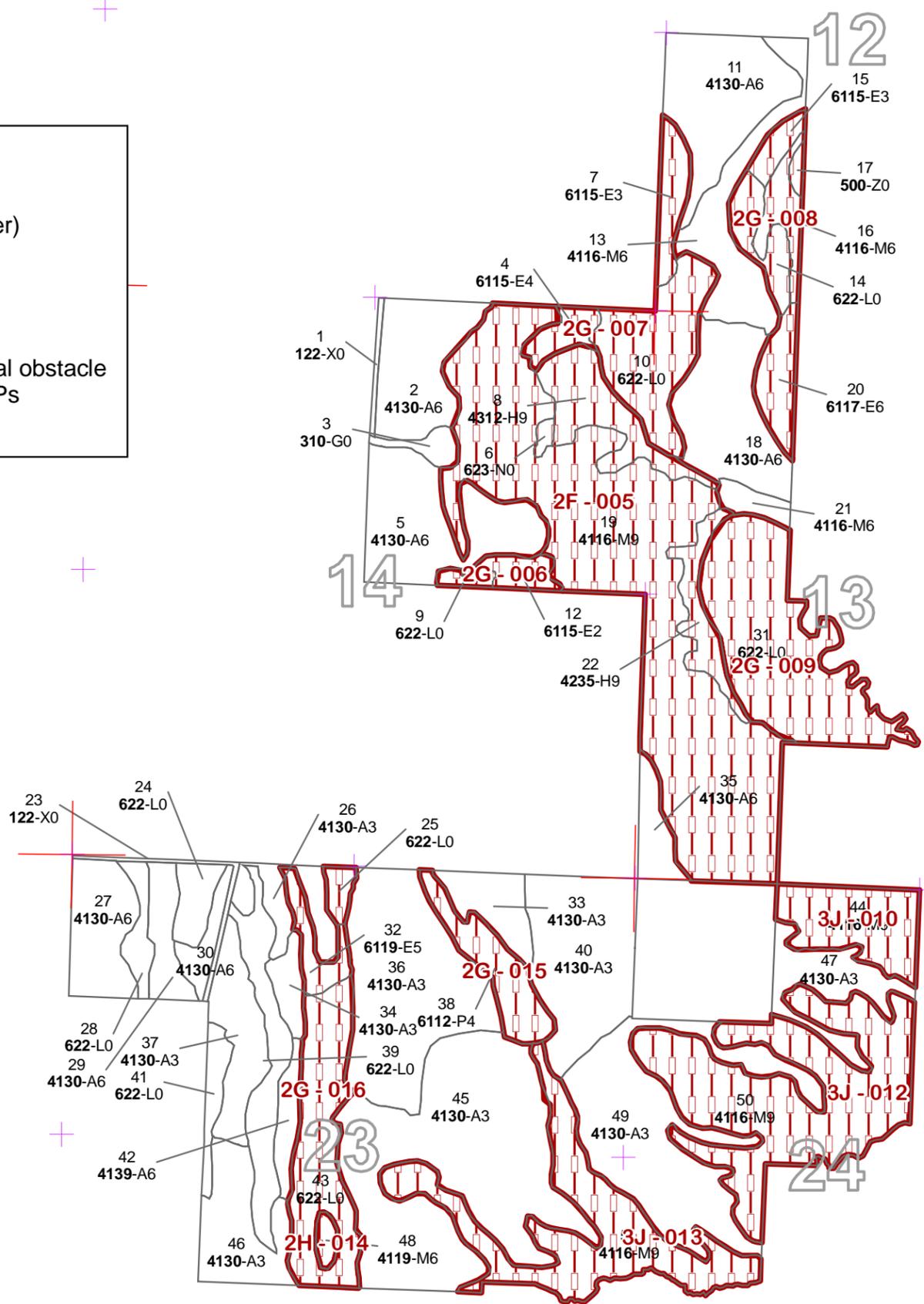
Special Conservation Areas & Site Conditions Map

Compartment: 72
 T51N R40W 12, 13, 14, 23, 24
 County: Ontonagon
 Unit: Baraga
 YOE: 2016
 Acres: 967 GIS Calculated
 Examiner: Brad Carlson
 Map Revised: 5/20/2014
 Map Phase: Pre-Review

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



Legend
 — Miris Corners
 Unavailable (Factor - Number)
Site Condition Type
 Unavailable Factors
 2F: Too steep
 2G: Too wet
 2H: Blocked by physical obstacle
 3J: Water quality / BMPs
 Stand Boundaries



1 0.5 0 1 Miles

89°22'0"W 89°21'0"W 89°20'0"W

46°50'0"N

46°50'0"N

46°49'0"N

46°49'0"N

46°48'0"N

46°48'0"N

Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	0-9	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	20	124	150	56	25	67	0	0	0	0	0	0	0	0	442
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25
Herbaceous Openland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Aspen/Balsam Poplar	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
Lowland Deciduous	0	0	0	0	21	6	9	0	0	0	0	0	0	0	36
Lowland Shrub	149	0	0	0	0	0	0	0	0	0	0	0	0	0	149
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Northern Hardwood	0	0	0	0	0	0	25	7	67	0	0	0	0	194	292
Urban	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	178	124	150	69	46	73	34	7	67	0	0	0	0	219	967



Report 2 – Proposed Treatment Summaries

Baraga Mgt. Unit
Year of Entry 2016

Compartment 072
Total Compartment Acres: 967

Acres by Treatment Type

Commercial Harvest - 67	Tree Planting - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types		67	0	0	0	0	0	67
	Total	67	0	0	0	0	0	67



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	11072002-Cut	22.3	4130 - Aspen	High Density Pole	52		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest all species down to 2 inches DBH except red oak, hemlock and White Pine. Also, retain cedar if present. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Acreage may decrease if small drainage in the north part of stand is determined too wet/steep to operate.</p> <p><u>Next Steps:</u> Regeneration survey as per work instructions.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
5	11072005-Cut	31.5	4130 - Aspen	High Density Pole	52		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest all species down to 2 inches DBH except red oak, hemlock and White Pine. Also, retain cedar if present. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Acreage may decrease if small drainage in the southern part of stand is determined to be too steep/ set to operate.</p> <p><u>Next Steps:</u> Regeneration survey as per work instructions.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
35	11072035-Cut	7.2	4130 - Aspen	High Density Pole	51		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest all species down to 2 inches DBH except red oak. Also, retain hemlock, White Pine and cedar if present. Retention for this stand will be greater than 3% and will consist of reserve tree species and species of the dominant cover type that will be excluded from the sale area. Retain a few large white ash on or near red line.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Regeneration survey as per work instructions.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
42	11072042-Cut	5.6	4139 - Aspen, Mixed Deciduous	High Density Pole	52		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest all species down to 2 inches DBH except red oak, hemlock, white pine and cedar if present. Retention for this stand will be greater than 3% and will consist of tree species of the dominant cover type that are buffering the adjacent lowland. Retain a few large white ash on or near red line.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> May need to factor Limit as "Small Acreage/Low Volume" and reassess during snowfree conditions to determine if commercial management is desirable.</p> <p><u>Next Steps:</u> Regeneration survey as per work instructions.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
Total Treatment Acreage Proposed:		66.6								



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Type! #Type!

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

Total Treatment
Acreage Proposed: 0.0

Report 5 – Site Conditions

Baraga Mgt. Unit
Brad Carlson : Examiner

Compartment 072
Year of Entry 2016



Availability for Management

Availability for Management			Dominant Site Conditions					
Total Acres	Acres Available	Acres Not Available	No	3J	2H	2G	2F	
441	441		Aspen	441				
25		25	Hemlock					25
13		13	Lowland Aspen/Balsam Poplar				13	
35		35	Lowland Deciduous				35	
291	25	266	Northern Hardwood	25	129	2	7	128
805	466	340	Total Forested Acres	466	129	2	55	154
	58%	42%	Relative Percent					

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
005	Not Available	2F: Too steep	156	3J: Water quality / BMPs (stream, river, or lake)			
Comments:							
006	Not Available	2G: Too wet (sensitive soils, does not include access issues)	6				
Comments:							
007	Not Available	2G: Too wet (sensitive soils, does not include access issues)	38				
Comments:							

Report 5 – Site Conditions

Baraga Mgt. Unit
Brad Carlson : Examiner

Compartment 072
Year of Entry 2016



008	Not Available	2G: Too wet (sensitive soils, does not include access issues)	28	3J: Water quality / BMPs (stream, river, or lake)	
Comments:					
009	Not Available	2G: Too wet (sensitive soils, does not include access issues)	48		
Comments:					
010	Not Available	3J: Water quality / BMPs (stream, river, or lake)	20	2F: Too steep	
Comments:					
012	Not Available	3J: Water quality / BMPs (stream, river, or lake)	67	2F: Too steep	
Comments:					
013	Not Available	3J: Water quality / BMPs (stream, river, or lake)	44	2F: Too steep	
Comments:					
014	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2		
Comments:					



015	Not Available	2G: Too wet (sensitive soils, does not include access issues)	13
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Comments:

016	Not Available	2G: Too wet (sensitive soils, does not include access issues)	39
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Comments:



Report 6 – 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	High Density Pole	22.3	52		Stand was previously harvested in 1962, Norwich Plains MA calls for Aspen to be harvested when it is 50 yrs old. Stand is adjacent to the old Ontonagon Dump.
4	6115 - Lowland Ash	Low Density Pole	5.1	47	1-50	Ash is dying.
5	4130 - Aspen	High Density Pole	31.5	52		Stand was previously harvested in 1962, Norwich Plains MA calls for Aspen to be harvested when it is 50 yrs old. Stand is adjacent to the old Ontonagon Dump.
7	6115 - Lowland Ash	High Density Sapling	7.5	47	1-50	
8	4312 - Hemlock, Mixed Deciduous	High Density Log	16.3	Uneven Age		
11	4130 - Aspen	High Density Pole	28.1	35		Stand was entered from the north when it was harvested in 1979. Hardwoods Fringe to the east should be managed when this stand is treated in 2036.
12	6115 - Lowland Ash	Medium Density	4.5	41	1-50	Area was previously flooded by beaver.
13	4116 - Mixed N. Hardwood - Aspen	High Density Pole	20.9	68	81-110	Stand is even aged. Even aged management should be considered in 20 yrs when adjacent Aspen stands will be ready for harvest.
15	6115 - Lowland Ash	High Density Sapling	3.7	47	1-50	
16	4116 - Mixed N. Hardwood - Aspen	High Density Pole	6.6	74	81-110	Stand is a riparian cooridor to the Ontonagon River. Commercial Management is not a priority for this stand.
18	4130 - Aspen	High Density Pole	27.6	32		Stand was previously harvested in 1982. Harvest again in 20 yrs. .
19	4116 - Mixed N. Hardwood - Aspen	High Density Log	128.7	Uneven Age	111-140	Stand is "Too Steep". This stand is the trsition from the Norwich Plains to the Ontonagon River Valley.
20	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	8.6	61	51-80	
21	4116 - Mixed N. Hardwood - Aspen	High Density Pole	4.0	68	81-110	Riparian Cooridor, Ontonagon River Buffer.
22	42350 - Upland Hemlock	High Density Log	9.2	Uneven Age	81-110	Stand is situated on very steep hillside.

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Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 072
Year of Entry: 2016

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	4130 - Aspen	High Density Sapling	10.4	24		Harvested in 1990 as part of "Norwich Road Aspen" (11-003-86-01).
27	4130 - Aspen	High Density Pole	16.7	42		Stand will ready for harvest in 2026.
29	4130 - Aspen	High Density Pole	8.4	42		Stand will ready for harvest in 2026.
30	4130 - Aspen	High Density Pole	4.9	24		Utility line runs through the stand parallel to the norwich road. Stand may have been harvested in 1990 with "Norwich Road Aspen" which was across the road.
32	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	6.3	52	1-50	Stand is wet and has some beaver issues.
33	4130 - Aspen	High Density Sapling	10.1	17		Stand was harvested in 1997 with "Frogless Aspen" (11-003-96-01).
34	4130 - Aspen	High Density Sapling	5.1	5		Stand was harvested in 2009 with "2-day Aspen" (11-011-06-01)
35	4130 - Aspen	High Density Pole	7.2	51		
36	4130 - Aspen	High Density Sapling	48.5	17		Stand was harvested in 1997 with "Frogless Aspen" (11-003-96-01).
37	4130 - Aspen	High Density Sapling	15.3	5		Stand was harvested in 2009 with "2-day Aspen" (11-011-06-01)
38	6112 - Lowland Aspen	Low Density Pole	13.2	39		Stand is wet. Some areas are solid tag alder. Possible beaver issues.
40	4130 - Aspen	High Density Sapling	34.4	22		Stand was harvested in 1992 with "Norwich Road Aspen" (11-003-86-01).
42	4139 - Aspen, Mixed Deciduous	High Density Pole	5.6	52		Stand should have been cut with "2-day Aspen" last rotation.
44	4116 - Mixed N. Hardwood - Aspen	High Density Log	19.5	Uneven Age	111-140	Stand is "Too Steep". This stand is the transition from the Norwich Plains to the Ontonagon River Valley. This stand is also a riparian corridor to Mill Creek.
45	4130 - Aspen	High Density Sapling	82.1	22		Stand was harvested in 1992 with "Norwich Road Aspen" (11-003-86-01).
46	4130 - Aspen	High Density Sapling	18.4	24		Stand was harvested in 1990 with "Norwich Road Aspen" (11-003-86-01).

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Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 072
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	4130 - Aspen	High Density Sapling	15.4	17		Stand was harvested in 1997 with "Frogless Aspen" 11-003-96-01.
48	4119 - Mixed Northern Hardwoods	High Density Pole	2.0	Uneven Age	51-80	Island stand in the middle of a tag alder low area.
49	4130 - Aspen	High Density Sapling	50.4	17		Stand was harvested in 1997 with "Frogless Aspen" (11-003-96-01).
50	4116 - Mixed N. Hardwood - Aspen	High Density Log	67.1	87	111-140	Stand is "Too Steep". This stand is the transition from the Norwich Plains to the Ontonagon River Valley. This stand is also a riparian corridor to Mill Creek.
51	4116 - Mixed N. Hardwood - Aspen	High Density Log	43.5	Uneven Age	111-140	Stand is "Too Steep". This stand is the transition from the Norwich Plains to the Ontonagon River Valley. This stand is also a riparian corridor to Mill Creek.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	122 - Road/Parking Lot	1.4	No	Unspecified	
3	3102 - Grass	3.4	No	Unspecified	
6	6230 - Cattail	1.1	No	Unspecified	
9	6220 - Alder/willow	1.9	No	Unspecified	
10	6220 - Alder/willow	25.1	No	Unspecified	
14	6220 - Alder/willow	8.0	No	Unspecified	
17	50 - Water	1.2	No	Unspecified	
23	122 - Road/Parking Lot	2.3	No	Unspecified	
24	6220 - Alder/willow	5.9	No	Unspecified	
25	6220 - Alder/willow	2.7	No	Unspecified	
28	6220 - Alder/willow	5.0	No	Unspecified	
31	6220 - Alder/willow	48.0	No	Unspecified	
39	6220 - Alder/willow	17.3	No	Unspecified	
41	6220 - Alder/willow	5.1	No	Unspecified	
43	6220 - Alder/willow	29.6	No	Unspecified	