



**Baraga Forest Management Unit
Compartment Review Presentation
Compartment #71 Entry Year: 2013
Compartment Acreage: 1,420 County: Ontonagon**

Revision Date: 7/13/2011

Stand Examiner: Brad S. Carlson

Legal Description: T51N, R40W, Sections 23, 24, 25, 26, 35 and 36.

Identified Planning Goals ('Management Area' or 'RMU' # if applicable): Norwich Plain

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

Soil and Topography: The terrain is level to rolling with drainages running through deep gullies. Soils are Iron River Loam and Watton Clay Loam

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment borders the Ottawa National Forest on the south, state forest land on the east and north. Lands to the west are mostly small private ownerships managed for both timber and recreational purposes.

Unique, Natural Features: None Identified.

Archeological, Historical, and Cultural Features: An abandoned railroad grade runs through this compartment.

Special Management Designations or Considerations: None Identified.

Watershed and Fisheries Considerations: This compartment is bounded on the east by Mill Creek.

Wildlife Habitat Considerations: This compartment is on the southern border of the Norwich escarpment and is dominated by clay loam soils and aspen forest conditions. Norwich Management Area emphasis is to promote sustainable aspen habitat conditions which favor and promote desirable game featured species such as white tailed deer, black bears, woodcock and grouse. Silvicultural treatments are intended to provide age class diversity for forest habitats and early successional species. Additionally treatments are recommended to remove unproductive non-native forest species such as European larch and Scotch pine while restoring these sites to forest opening matrixes conditions which would benefit species such as woodcock by providing breeding and brooding habitat.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) clay and silt. The glacial drift thickness varies between 10 and 50 feet. The Precambrian

Freda Sandstone subcrops below the glacial drift. There is not a current economic use for the Freda. The compartment lies between abandoned copper mines, twelve miles to the west (White Pine) and ten miles to the east (Caledonia). These mines produced from the Nonesuch Shale/ Copper Harbor Conglomerate and the Portage Lake Volcanics. This area has not been leased before. The nearest gravel pits are located four miles away and potential appears limited. There is no economic oil and gas production in the UP. Most of the compartment is surface only, as the mineral rights were retained at the time of acquisition.

Vehicle Access: Access to this compartment is across private lands from the Norwich Road. The state has an easement between Sections 27 and 34.

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

Recreational Facilities and Opportunities: This compartment provides some excellent opportunities for both small and large game hunting. These opportunities are under utilized due to limited public access.

Fire Protection: This is not a fire prone area.

Additional Compartment Information:

- **The following reports from the Inventory are attached:**
 - ◆ **Total Acres by Cover Type and Age Class**
 - ◆ **Proposed Treatment Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**
 - ◆ **Stand Details (Forested and Nonforested)**
 - ◆ **Dedicated and Proposed Special Conservation Areas**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand boundaries, cover types, and numbers**
 - ◆ **Proposed treatments**
 - ◆ **Details on the road access system**

Table 1 – Total Acres by Cover Type and Age Class



	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	0	205	218	270	45	0	3	51	122	0	0	0	0	0	0	914
Herbaceous Openland	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Shrub	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	197	197
Northern Hardwood	0	0	0	0	0	0	0	37	0	0	0	0	0	0	146	183
Tamarack	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Upland Conifers	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Upland Shrub	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Water	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	119	205	218	284	45	0	3	88	122	0	0	0	0	0	343	1428



Table 2 – Proposed Treatment Summaries

Baraga Mgt. Unit
Year of Entry 2013

Compartment 071
Total Compartment Acres: 1428

Acres by Treatment Type

Commercial Harvest - 230	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
Aspen	176	0	0	0	0	0	176
Herbaceous Openland	7	0	0	0	0	0	7
Tamarack	6	0	0	0	0	0	6
Upland Conifers	8	0	0	0	0	0	8
Upland Shrub	32	0	0	0	0	0	32
Total	230	0	0	0	0	0	230



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	11071002-Cut	3.3	4130 - Aspen	Low Density Pole	37	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal - Incomplete

Prescription Harvest all species down to 2 inches DBH except Oak and all conifer species.

Specs:

Other WLD Comment; Stand 2 A6 - Final harvest w/ reserves. Hold all cedar / hemlock / spruce & fir

Comments:

Next Check for adequate regeneration within 4 years of harvest completion.

Steps:

16	11071016-Cut	122.2	4130 - Aspen	High Density Pole	79	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal - Incomplete
----	--------------	-------	--------------	-------------------	----	---------	---------------------------	--------------	------------------------------------------

Prescription Harvest all species down to 2 inches DBH except Oak, Cherry and all conifer species.

Specs:

Other WLD Comment; Stand 16 A6 - Final harvest with reserves. Hold scattered conifers as escape cover for grouse. Hold any oak or cherry as hard
Comments: soft mast

Next Check for adequate regeneration within 4 years of harvest completion.

Steps:

22	11071022-Cut	50.9	4130 - Aspen	High Density Pole	68	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal - Incomplete
----	--------------	------	--------------	-------------------	----	---------	---------------------------	--------------	------------------------------------------

Prescription Harvest all species down to 2 inches DBH except Oak, Cherry and all conifer species.

Specs:

Other WLD Comment; Stand 22 A6 - Final harvest with reserves. Hold scattered conifers as escape cover for grouse. Hold any oak or cherry as hard
Comments: soft mast.

Next Check for adequate regeneration within 4 years of harvest completion.

Steps:

**Total Treatment
Acreage Proposed: 176.4**

S
t
a
n
d

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7 11071007-Cut	8.3	429 - Mixed Upland Conifers	Medium Density Saplin	20	Harvest	Clearcut with Reserves	3102 - Grass	Cmpt. Review Proposal - Incomplete

Prescription All species to be cut down to 1 inch DBH and chipped except any apple trees that may exist.

Specs:

Other Comment: WLD Comment; Stand 7 MC - Spruce - plantation white spruce with some larch and white pine to be final harvested. Recommend final harvest. Hold white pine if possible. Include with other adjacent sales to chip and possibly stump as well. FTP (FMD) to plant to White pine. WLD may pursue FTP to possibly mix in some native fruit bearing trees if available. Incorporate in to opening / mixed forested cover / soft mast complex with stands 5, 7, 9, 12, 15.

Treatment has too low volume to be commercially viable in 2011 markets. If the adjacent aspen stand is sold to a chipper operation in 2013 and the markets allow for this stand to be cut, it is strongly recommended by FMD staff that this stand be sold to that producer. Selling price to be negotiated.

Next Steps: Plant to White Pine. If any native fruit bearing trees are available at the time of planting WLD would like a component planted here as well.

Limiting Factor and No Treatment Reason 4A: No market for species/product

9 11071009-Cut	6.2	42300 - Planted Larch	Low Density Sapling	20	Harvest	Clearcut with Reserves	3102 - Grass	Cmpt. Review Proposal - Incomplete
----------------	-----	-----------------------	---------------------	----	---------	------------------------	--------------	------------------------------------

Prescription All species to be cut down to 1 inch DBH and chipped except any apple trees that may exist.

Specs:

Other Comment: WLD Comment; Stand 9 T1- Scotch pine - plantation white spruce with some larch and white pine to be final harvested. Recommend final harvest. Hold white pine if present. Include with other adjacent sales to chip and possibly stump as well. FTP (FMD) to plant to White pine. WLD may pursue FTP to possibly mix in some native fruit bearing trees if available. Incorporate in to opening / mixed forested cover / soft mast complex with stands 5, 7, 9, 12, 15.

Treatment has too low volume to be commercially viable in 2011 markets. If the adjacent aspen stand is sold to a chipper operation in 2013 and the markets allow for this stand to be cut, it is strongly recommended by FMD staff that this stand be sold to that producer. Selling price to be negotiated.

Next Steps: Plant to White Pine. If any native fruit bearing trees are available at the time of planting WLD would like a component planted here as well.

Limiting Factor and No Treatment Reason 4A: No market for species/product

5 NF_11071005-Cut	7.0	42300 - Planted Larch		0	Harvest	Clearcut with Reserves	3102 - Grass	Cmpt. Review Proposal - Incomplete
-------------------	-----	-----------------------	--	---	---------	------------------------	--------------	------------------------------------

Prescription All species to be cut down to 1 inch DBH and chipped except any apple trees that may exist.

Specs:

Other Comment: WLD Comment; Stand 5 Larch - Planted European larch in very poor condition and stocking. Recommend final harvest. Include with other adjacent sales to chip and possibly stump as well. FTP (FMD) to plant to White pine. WLD may pursue FTP to possibly mix in some native fruit bearing trees if available. Incorporate in to opening / mixed forested cover / soft mast complex with stands 5, 7, 9, 12, 15.

Treatment has too low volume to be commercially viable in 2011 markets. If the adjacent aspen stand is sold to a chipper operation in 2013 and the markets allow for this stand to be cut, it is strongly recommended by FMD staff that this stand be sold to that producer. Selling price to be negotiated.

Next Steps: Plant to White Pine. If any native fruit bearing trees are available at the time of planting WLD would like a component planted here as well.

Limiting Factor and No Treatment Reason 4A: No market for species/product



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12	NF_11071012-Cut	21.7	Non-Forested		0	Harvest	Clearcut with Reserves	3102 - Grass	Cmpt. Review Proposal - Incomplete

Prescription All species to be cut down to 1 inch DBH except apple trees.

Specs:

Other Comment: WLD Comment; Stand 12 L - Non-forested- scrub shrub tag alder with feral cherry and apples scattered through out. Possibly chip alder to regenerate high stem density for woodcock / grouse. Hold all conifers (WP) present as escape cover, and any soft mast species. WLD may pursue FTP to possibly mix in some native fruit bearing trees if available. Incorporate in to opening / mixed forested cover / soft mast complex with stands 5, 7, 9, 12, 15.

Treatment has too low volume to be commercially viable in 2011 markets. If the adjacent aspen stand is sold to a chipper operation in 2013 and the markets allow for this stand to be cut, it is strongly recommended by FMD staff that this stand be sold to that producer. Selling price to be negotiated.

Treatment is intended to increase stem density of the upland brush and make it more appealing to local wildlife.

Next Steps:

Limiting Factor and No Treatment Reason 4A: No market for species/product

15	NF_11071015-Cut	10.5	Non-Forested		0	Harvest	Clearcut with Reserves	3102 - Grass	Cmpt. Review Proposal - Incomplete
----	-----------------	------	--------------	--	---	---------	------------------------	--------------	------------------------------------

Prescription Cut all species down to 1 inch DBH except apple trees.

Specs:

Other Comment: WLD Comment; Stand 15 - L - Non-forested- scrub shrub tag alder with feral cherry and apples scattered through out. Possibly chip alder to regenerate high stem density for woodcock / grouse. Hold all conifers (WP) present as escape cover, and any soft mast species. WLD may pursue FTP to possibly mix in some native fruit bearing trees if available. Incorporate in to opening / mixed forested cover / soft mast complex with stands 5, 7, 9, 12, 15.

Treatment has too low volume to be commercially viable in 2011 markets. If the adjacent aspen stand is sold to a chipper operation in 2013 and the markets allow for this stand to be cut, it is strongly recommended by FMD staff that this stand be sold to that producer. Selling price to be negotiated.

Treatment is intended to increase stem density of the upland brush and make it more appealing to local wildlife.

Next Steps:

Limiting Factor and No Treatment Reason 4A: No market for species/product

**Total Treatment
Acreage Proposed: 53.8**

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	------------------	--------------	-----------	----------------	------------------	----------------------	-----------------

Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

Stand	Baraga Mgt. Unit		5 – Forested Stands			Compartment: 071	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
1	4130 - Aspen	High Density Sapling	58.7	15			"Beaver Bliss Aspen" 11-009-93-01
2	4130 - Aspen	Low Density Pole	3.3	37	1-50		Sparse stocking but worth while harvesting with the adjacent stand to get it on a rotation.
3	4130 - Aspen	Medium Density Pole	3.0	50	1-50		stand was left as a visual buffer from the private farm field for "You're In Aspen" 11-021-03-01
4	4116 - Mixed N. Hardwood - Aspen	High Density Pole	36.9	64	1-50		Cut as part of "Beaver Bliss Aspen" 11-009-93-01.
6	4130 - Aspen	High Density Sapling	49.1	17			Cut as part of "Beaver Bliss Aspen" 11-009-93-01.
7	429 - Mixed Upland Conifers	Medium Density	8.3	20			Machine planted Norway Spruce, planted in 1991. Trees are 15-25 feet tall.
8	4130 - Aspen	High Density Sapling	108.3	5			Cut in 2006 "You're in Aspen" 11-021-03-01.
9	42300 - Planted Larch	Low Density Sapling	6.2	20			Hand planted European Larch in 1991. There was not a great survival rate of the seedling and the stand is close to being non-forested.
13	4130 - Aspen	High Density Pole	41.6	37	1-50		
16	4130 - Aspen	High Density Pole	122.2	79	81-110		
17	4116 - Mixed N. Hardwood - Aspen	High Density Pole	45.0	Uneven Age	51-80		
19	4130 - Aspen	Low Density Sapling	31.5	1			Stand was cut in january and february 2011 as part of "U R N Aspen" 11-022-08-01.
20	4119 - Mixed Northern Hardwoods	High Density Pole	33.6	Uneven Age	51-80		
21	4116 - Mixed N. Hardwood - Aspen	High Density Pole	67.1	Uneven Age	81-110		
22	4130 - Aspen	High Density Pole	50.9	68	1-50		
23	4191 - Mixed Upland Deciduous with Conifer	High Density Log	197.4	Uneven Age	81-110		
24	4130 - Aspen	High Density Sapling	65.7	3			cut in 2008 "You're in Aspen" 11-021-03-01



Stand	Baraga Mgt. Unit		5 – Forested Stands			Compartment: 071	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
1	4130 - Aspen	High Density Sapling	58.7	15			"Beaver Bliss Aspen" 11-009-93-01
2	4130 - Aspen	Low Density Pole	3.3	37	1-50		Sparse stocking but worth while harvesting with the adjacent stand to get it on a rotation.
3	4130 - Aspen	Medium Density Pole	3.0	50	1-50		stand was left as a visual buffer from the private farm field for "You're In Aspen" 11-021-03-01
4	4116 - Mixed N. Hardwood - Aspen	High Density Pole	36.9	64	1-50		Cut as part of "Beaver Bliss Aspen" 11-009-93-01.
6	4130 - Aspen	High Density Sapling	49.1	17			Cut as part of "Beaver Bliss Aspen" 11-009-93-01.
7	429 - Mixed Upland Conifers	Medium Density	8.3	20			Machine planted Norway Spruce, planted in 1991. Trees are 15-25 feet tall.
8	4130 - Aspen	High Density Sapling	108.3	5			Cut in 2006 "You're in Aspen" 11-021-03-01.
9	42300 - Planted Larch	Low Density Sapling	6.2	20			Hand planted European Larch in 1991. There was not a great survival rate of the seedling and the stand is close to being non-forested.
13	4130 - Aspen	High Density Pole	41.6	37	1-50		
16	4130 - Aspen	High Density Pole	122.2	79	81-110		
17	4116 - Mixed N. Hardwood - Aspen	High Density Pole	45.0	Uneven Age	51-80		
19	4130 - Aspen	Low Density Sapling	31.5	1			Stand was cut in january and february 2011 as part of "U R N Aspen" 11-022-08-01.
20	4119 - Mixed Northern Hardwoods	High Density Pole	33.6	Uneven Age	51-80		
21	4116 - Mixed N. Hardwood - Aspen	High Density Pole	67.1	Uneven Age	81-110		
22	4130 - Aspen	High Density Pole	50.9	68	1-50		
23	4191 - Mixed Upland Deciduous with Conifer	High Density Log	197.4	Uneven Age	81-110		
24	4130 - Aspen	High Density Sapling	65.7	3			cut in 2008 "You're in Aspen" 11-021-03-01



S
t
a
n
d

Baraga Mgt. Unit

5 – Forested Stands

Compartment: 071
Year of Entry: 2013



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4130 - Aspen	High Density Sapling	110.6	15		cut in 1996 "Old Farm Aspen" 11-008-93-01
27	4130 - Aspen	High Density Sapling	77.8	23		cut in 1988.
28	4130 - Aspen	High Density Sapling	70.4	24		Cut in 1987.
30	4130 - Aspen	High Density Sapling	91.3	22		Cut in 1989.
32	4130 - Aspen	High Density Sapling	30.1	22		Cut in 1989.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	3102 - Grass	7.0	Planted	Oak	
10	6220 - Alder/willow	48.1	No	Unspecified	
11	6220 - Alder/willow	5.2	No	Unspecified	
12	3205 - Mixed Upland Shrub	21.7	No	Unspecified	Old farm field grown into willow brush mixed with scattered apple trees.
14	50 - Water	10.3	No	Unspecified	
15	3205 - Mixed Upland Shrub	10.5	No	Unspecified	
18	3102 - Grass	5.1	No	Unspecified	
26	6220 - Alder/willow	3.4	No	Unspecified	
29	50 - Water	5.6	No	Unspecified	
31	6220 - Alder/willow	1.9	No	Unspecified	



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.

Stand	SCA Type	SCA Name	Acres	Comments



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
-------------------	------	-------------

Cover Type & Treatment Map

Compartment 071
 T37N, R01W, Sec. 22, 27, 34
 County: Ontonagon
 Unit: Baraga
 YOE: 2013
 Acres: 1,428 GIS Calculated
 Stand Examiner: Brad Carlson
 Map Revised: 4/27/2011
 Map Phase: Pre-Review

Legend

- GPS Survey Corner
- Miris Corners
- Remonumented Section Corners
- Paved Roads
- Poor Dirt Roads
- Trail Designation
 - Snowmobile Trail
 - Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

Level 3

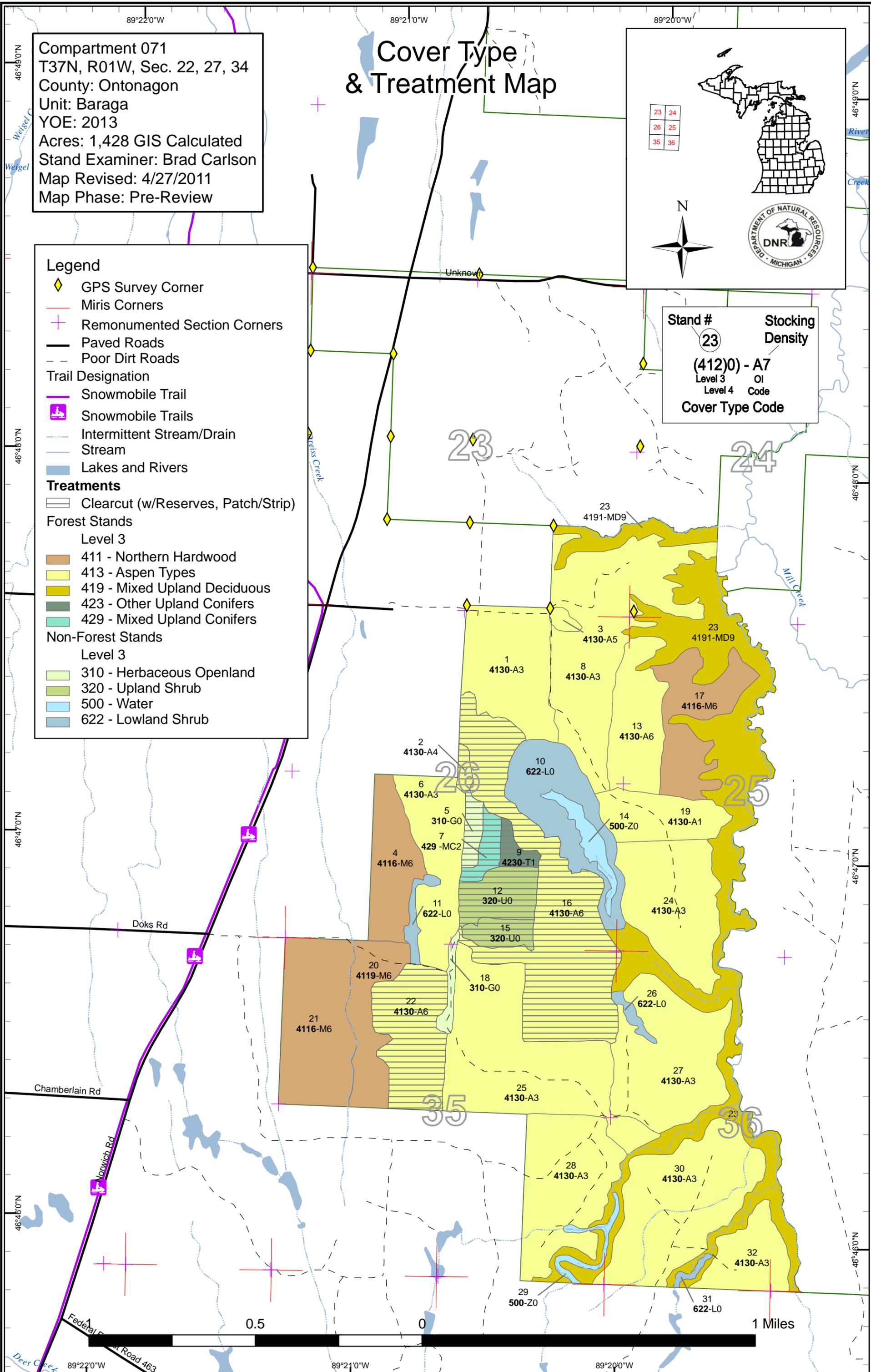
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers

Non-Forest Stands

Level 3

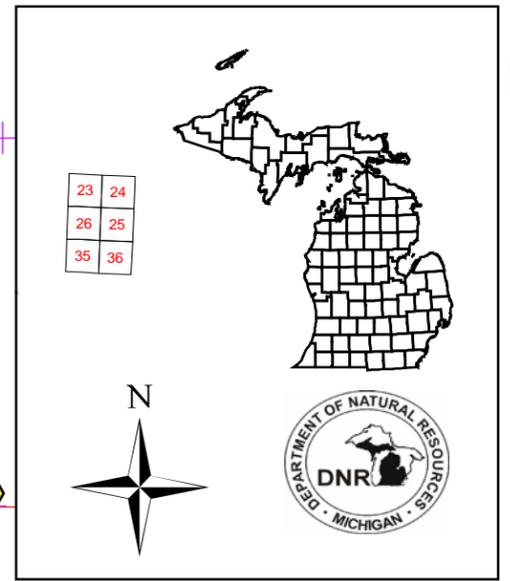
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 500 - Water
- 622 - Lowland Shrub

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



Compartment 071
 T37N, R01W, Sec. 22, 27, 34
 County: Ontonagon
 Unit: Baraga
 YOE: 2013
 Acres: 1,428 GIS Calculated
 Stand Examiner: Brad Carlson
 Map Revised: 4/27/2011
 Map Phase: Pre-Review

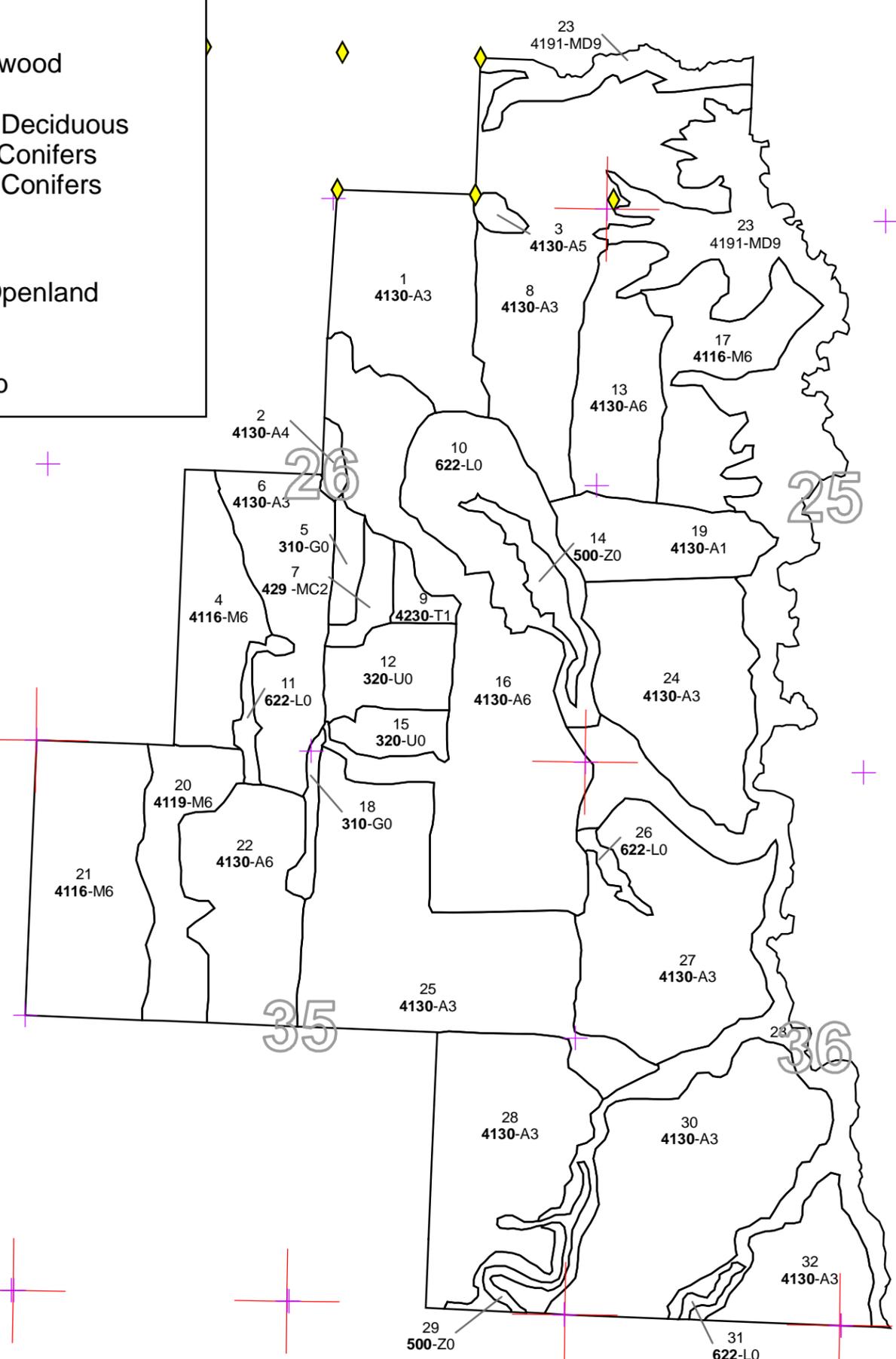
Dedicated & Proposed Special Conservation Area Map



Legend

- GPS Survey Corner
 - Miris Corners
 - Remonumented Section Corners
 - Stand Boundaries
- Proposed Special Conservation Areas**
- SCA - Special Conservation Area
 - SCA Removal
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
- Non-Forest Stands**
- Level 3**
- 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 500 - Water
 - 622 - Lowland Shrub

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



89°22'0"W 89°21'0"W 89°20'0"W 89°19'0"W