



Compartment Review Presentation

Baraga Forest Management Unit

Compartment 13

Entry Year 2016

Acreage: 2,137

County Baraga

Management Area: Peshekee Highlands

Revision Date: 04/09/2014

Stand Examiner: Jason Mittlestat

Legal Description:

BARAGA COUNTY, BARAGA, COVINGTON and L'ANSE TOWNSHIPS

T48N, R32W, Sections 6, 8

T48N, R33W, Sections 2, 3

T49N, R32W, Section 31

T49N, R33W, Sections 27, 34, 35, 36

Identified Planning Goals:

The Peshekee Highlands management area is on a bedrock controlled ground moraine in east-central Baraga and northwestern Marquette County. The state forest covers 20,670 acres and is in widely scattered parcels. The major ownership in this vicinity is forest industry and non-industrial private. The management area is dominated by the northern hardwood, lowland conifer and upland spruce/fir cover types. Other attributes that played a role in the definition of this management area include:

- Dominated by two natural communities: mesic northern forest, poor conifer swamp, and boreal forest;
- Mid-range in site quality;
- This area has very rugged terrain and limited access;
- 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 benefit in a sustainable manner while minimizing user conflicts. Habitat management for moose has also been identified as a priority in this area.

Soil and topography:

Soils are: Champion cobbly silt loam, Witbeck – Tacoosh complex (fine sandy loam and muck), Champion – Net complex (cobbly silt loam, gravelly silt loam), Witbeck – Tacoosh complex, Net – Witbeck complex (silt loam, fine sandy loam and muck), Champion – Michigamme cobbly silt loams, Carbondale and Tacoosh mucks. Topography is level to rolling, lots of rock on the surface.

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

The compartment is surrounded by private land. Much of the private land is owned by forest industry and is managed for timber.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Sturgeon River is under consideration as a National Wild and Scenic River.

Watershed and Fisheries Considerations:

The Sturgeon River, Tioga River along with Pelkie and Hickey creeks are trout streams.

Wildlife Habitat Considerations:

Moose are found in the area to south and also to the east of this compartment.

Winter logging is preferred (but not mandatory) because of the provision of downed tops for moose browse. This is not a deer yarding area. Proximity to the M-28/US-41 highway corridor allows for relatively easy hunter/trapper access.

Mineral Resource and Development Concerns and/or Restrictions

Compartment 13: Sections 6-8, T48N-R32W, Sections 2 & 3, T48N-R33W, Sections 31&32, T49N-R32W & Sections 27 & 34-36, T49N-R33W, Baraga Co

Surface sediments consist of coarse-textured glacial till thinning to the north. There is insufficient data to determine the

glacial drift thickness. The Precambrian Michigamme Formation subcrops below the glacial drift. There is not a current economic use for these rocks. Gravel pits are located in Section 4 and potential appears to be good. Abandoned iron mines are located three miles to the north. Part of this Compartment was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

A good infrastructure of winter roads exists in this compartment. Summer access is primarily limited to Old US -41.

Survey Needs:

Survey work is in progress.

Recreational Facilities and Opportunities:

One snowmobile trail crosses the compartment. There are no other developed recreational facilities or opportunities.

Fire Protection:

This area historically does not support large fire growth, but is vulnerable to Lightening source fires, especially in the higher terrain.

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**

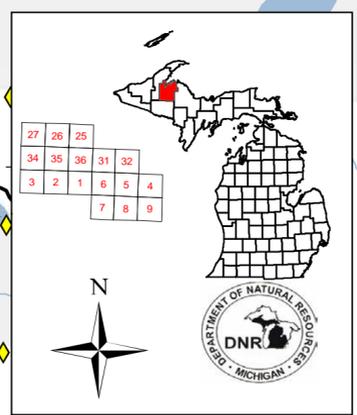
The following information is displayed, where pertinent, on the attached compartment maps:

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

Compartment: 13
 T48N R32W Sec. 6,8,31,32
 T48N R33W Sec. 2,3
 T49N R32W Sec. 31,32
 T49N R33W Sec. 27,34,35
 County: Baraga
 Unit: Baraga
 YO: 2016
 Acres: 2,137 GIS Calculated
 Examiner: Jason Mittlestat
 Map Revised: 05/20/2014
 Map Phase: Pre-Review

Cover Type & Treatment Map

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



Legend

- ✦ Remonumented Section Corners
- ◇ PLSS Corner
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Hiking Trails
- Snowmobile Trails
- Hiking Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Pipeline
- Powerline

Treatments

- Other Harvest - See Comments
- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)

Forest Stands

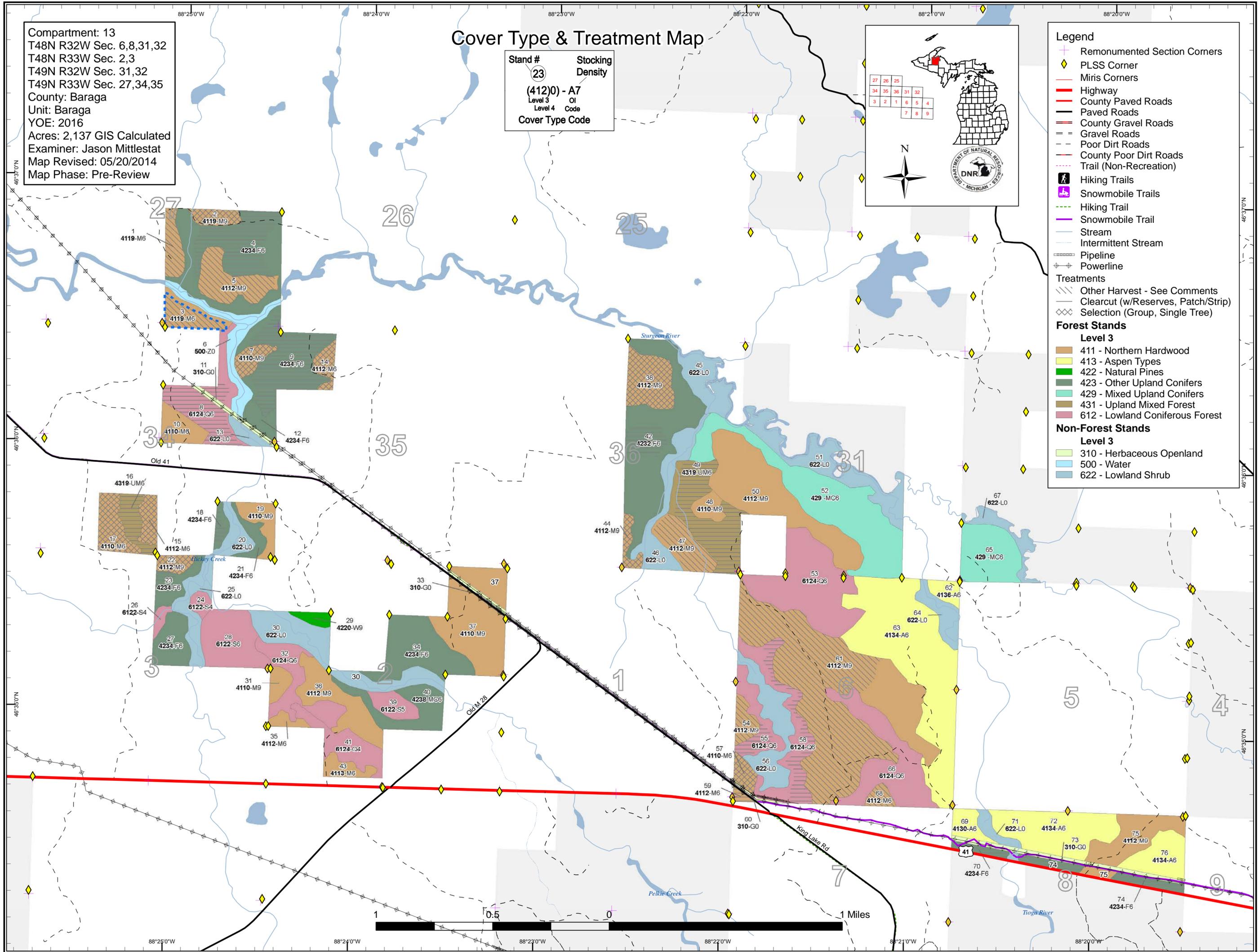
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

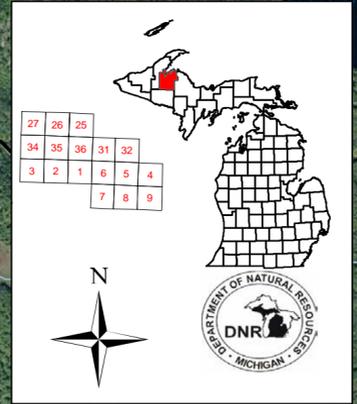
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub



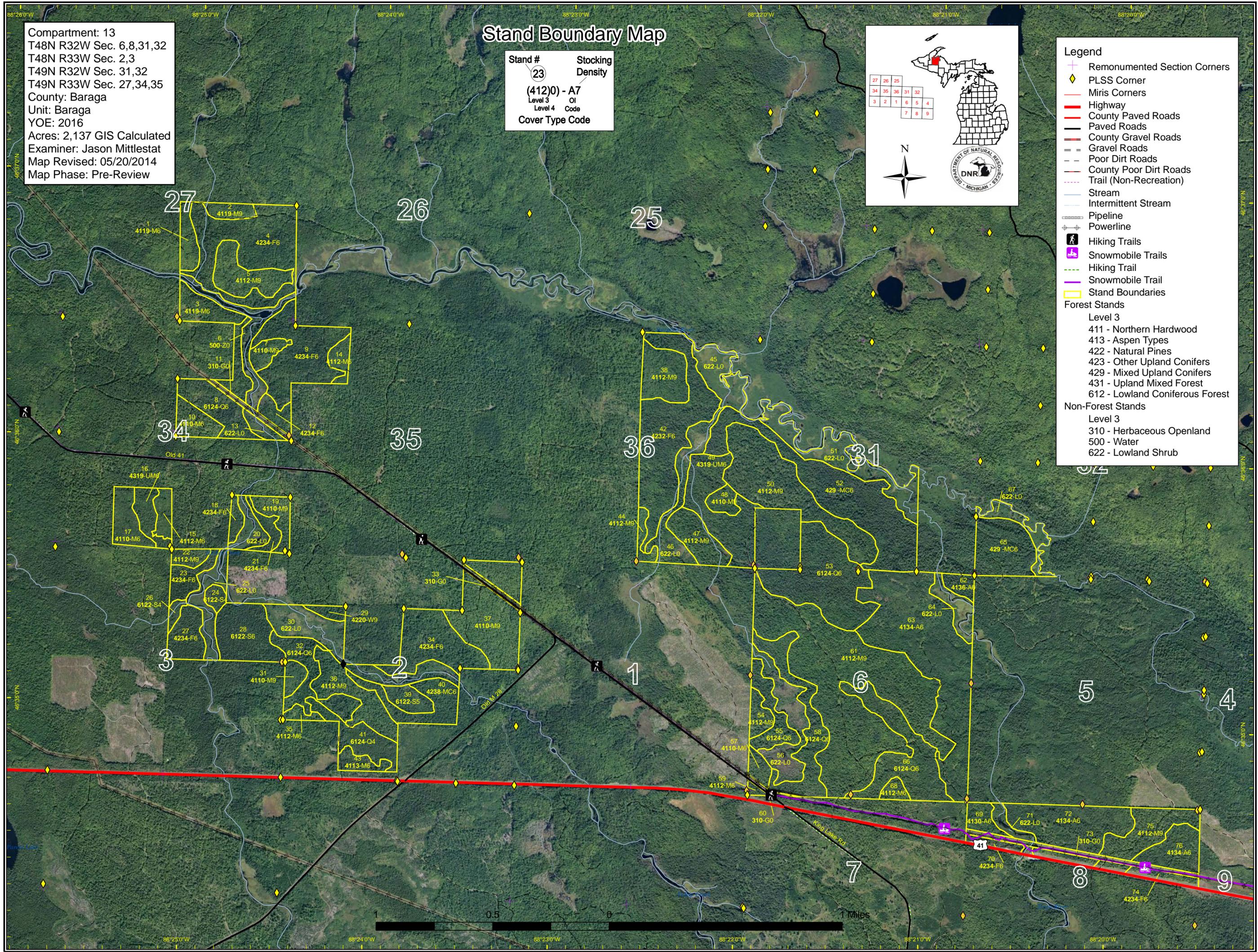
Compartment: 13
 T48N R32W Sec. 6,8,31,32
 T48N R33W Sec. 2,3
 T49N R32W Sec. 31,32
 T49N R33W Sec. 27,34,35
 County: Baraga
 Unit: Baraga
 YOE: 2016
 Acres: 2,137 GIS Calculated
 Examiner: Jason Mittlestat
 Map Revised: 05/20/2014
 Map Phase: Pre-Review

Stand Boundary Map

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



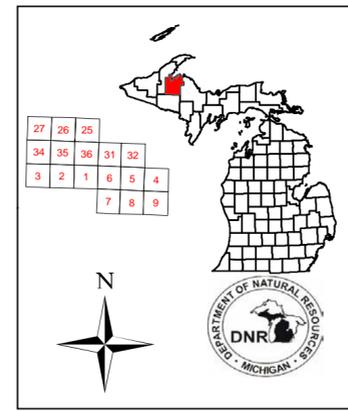
- Legend**
- ✦ Remonumented Section Corners
 - ◆ PLSS Corner
 - Miris Corners
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Stream
 - Intermittent Stream
 - Pipeline
 - Powerline
 - Hiking Trails
 - Snowmobile Trails
 - Hiking Trail
 - Snowmobile Trail
 - Stand Boundaries
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub



Special Conservation Areas & Site Conditions Map

Compartment: 13
 T48N R32W Sec. 6,8,31,32
 T48N R33W Sec. 2,3
 T49N R32W Sec. 31,32
 T49N R33W Sec. 27,34,35
 County: Baraga
 Unit: Baraga
 YOE: 2016
 Acres: 2,137 GIS Calculated
 Examiner: Jason Mittlestat
 Map Revised: 05/20/2014
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Stand Boundaries
- ▭ Dedicated Special Conservation Areas
- Cold Water Lakes
- Cold Water Streams
- ▨ Available w/ Constraints (Factor - Number)
- ▩ Unavailable (Factor - Number)

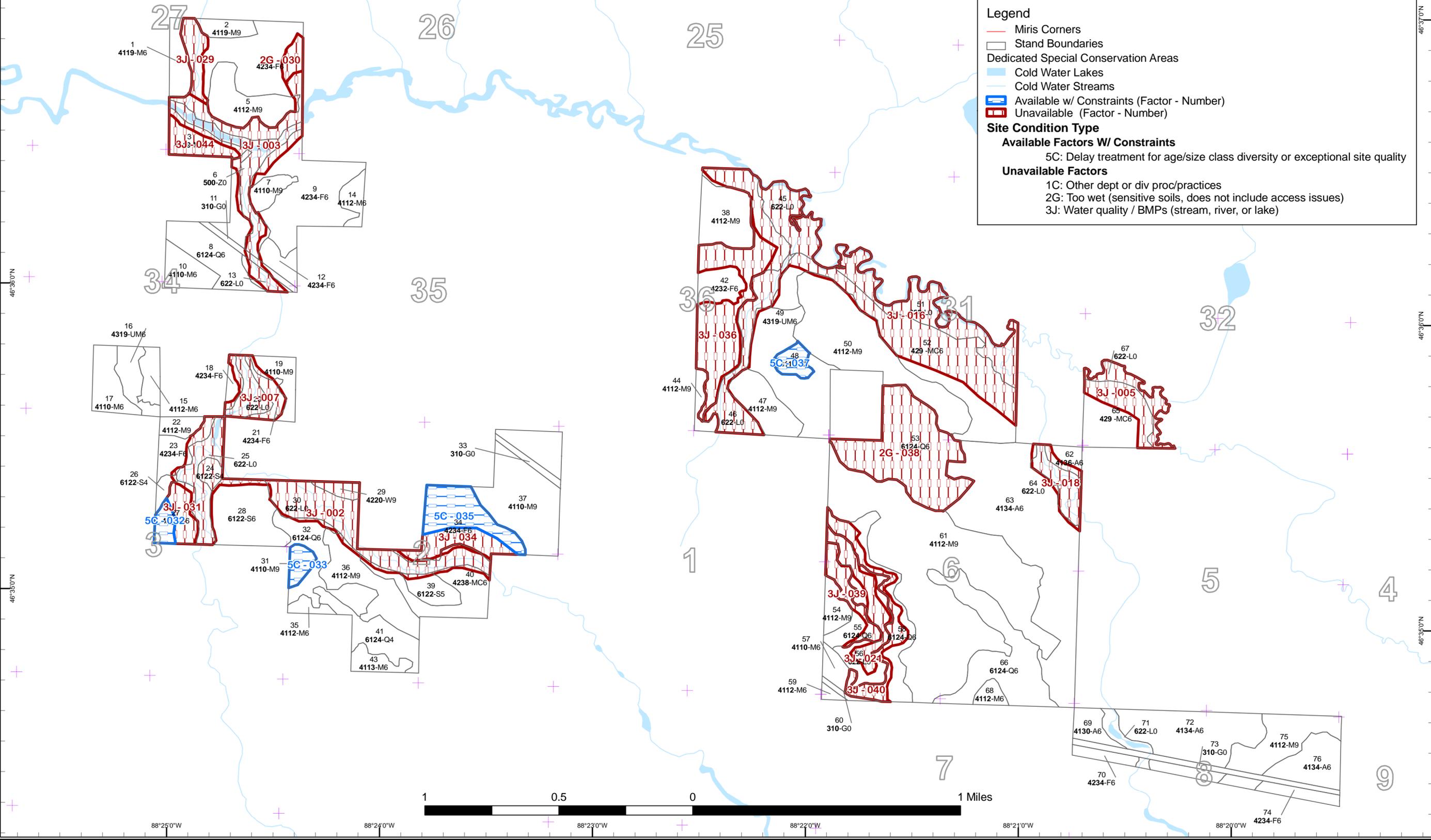
Site Condition Type

Available Factors W/ Constraints

- 5C: Delay treatment for age/size class diversity or exceptional site quality

Unavailable Factors

- 1C: Other dept or div proc/practices
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)



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	0	0	0	234	0	0	0	0	0	0	0	0	0	0	234
Herbaceous Openland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Lowland Conifers	0	0	0	55	0	0	30	63	140	0	0	0	0	0	288
Lowland Shrub	253	0	0	0	0	0	0	0	0	0	0	0	0	0	253
Lowland Spruce/Fir	0	0	0	0	0	0	49	9	0	0	0	0	0	0	58
Northern Hardwood	0	0	0	0	30	10	14	0	9	34	0	0	0	578	675
Upland Conifers	0	0	0	38	28	0	0	0	95	0	0	0	0	0	160
Upland Mixed Forest	0	0	0	0	0	0	0	13	0	0	0	51	0	0	64
Upland Spruce/Fir	0	0	0	0	0	30	67	250	0	0	0	0	0	0	347
Water	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
White Pine	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Total	305	0	0	327	57	41	160	335	250	34	0	51	0	578	2137



Report 2 – Proposed Treatment Summaries

Baraga Mgt. Unit
Year of Entry 2016

Compartment 013
Total Compartment Acres: 2,137

Acres by Treatment Type

Commercial Harvest - 608 Tree Planting - 0 Other - 0
 Habitat Cut - 0 Opening Maintenance - 0

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Lowland Coniferous Forest	56	0	0	0	0	0	56
Northern Hardwood	2	102	0	0	0	251	356
Other Upland Conifers	136	0	0	0	0	0	136
Upland Mixed Forest	60	0	0	0	0	0	60
Total	254	102	0	0	0	251	608



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	11013001-Cut	12.3	4119 - Mixed Northern Hardwoods	High Density Pole	45	51-80	Harvest	Other - Specify in Comments	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all trees greater than 6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 12" dbh is to be left. Leave tree mark seed producing elm at 1-3 an acre where present. Retention for this stand may be less than 3% and will consist of reserve tree species.</p> <p><u>Specs:</u></p> <p><u>Other</u> Salvage harvest due to dieback.</p> <p><u>Comments:</u> 100' Buffer along river. Retention for marten and pileated woodpecker will be in the stream buffer. Reference snowmobile trail spec for contracts.</p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
2	11013002-Cut	8.7	4119 - Mixed Northern Hardwoods	High Density Log	99	81-110	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<p><u>Prescription</u> Selectively thin hardwoods to 50-70 sqft of BA. Favor oak, hemlock, white pine, cedar, and black cherry where present. Follow all guidelines set forth in "The Complete Marker" IF further dieback occurs a salvage harvest may be needed.</p> <p><u>Specs:</u></p> <p><u>Other</u> Reference snowmobile trail spec for contracts.</p> <p><u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
4	11013004-Cut	42.5	42340 - Upland Spruce/Fir	High Density Pole	76	51-80	Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 12" dbh is to be left. Cut all other trees greater than 4.6" at DBH that meets product standards. Leave tree mark black cherry at 1-3 an acre where present. Retention for this stand will consist of reserve tree species.</p> <p><u>Specs:</u></p> <p><u>Other</u> Acreage may vary due to wet ground.</p> <p><u>Comments:</u> Reference snowmobile trail spec for contracts.</p> <p><u>Next</u> <u>Steps:</u> Regeneration survey needed after harvest as per work instructions.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
5	11013005-Cut	27.8	4112 - Maple, Beech, Cherry Association	High Density Log	91	81-110	Harvest	Other - Specify in Comments	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all trees greater than 6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, elm, and oak if present. Leave tree mark black cherry at 1 to 3 an acre. Yellow birch over 12" dbh is to be left. Retention for this stand will consist of reserve tree species.</p> <p><u>Specs:</u></p> <p><u>Other</u> Salvage harvest due to dieback.</p> <p><u>Comments:</u> 100' buffer along the river. Reference snowmobile trail spec for contracts.</p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	11013007-Cut	9.0	4110 - Sugar Maple Association	High Density Log	99	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> Selectively thin hardwoods to 70-90 sqft of BA. Favor oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to <u>Specs:</u> an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker". <u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
8	11013008-Cut	29.6	6124 - Lowland Spruce-Fir	High Density Pole	70		Harvest	Clearcut with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<u>Prescription</u> Reserve: elm, white pine, cedar, hemlock, oak if present. Yellow birch over 12" dbh is to be left. Leave tree mark black cherry at 1-3 an acre. <u>Specs:</u> Cut all other trees greater than 4.6" at DBH that meets product standards. Retention for this stand will be greater than 3% and will consist of reserve tree species. <u>Other</u> 200' buffer along stream. <u>Comments:</u> Wld: Buffer along creek will favor moose. Reference snowmobile trail spec for contracts. <u>Next</u> Regeneration survey needed after harvest as per work instructions. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
9	11013009-Cut	51.7	42340 - Upland Spruce/Fir	High Density Pole	68		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Reserve: white pine, cedar, hemlock, yellow birch and oak if present. Leave tree mark black cherry at 1 to 3 an acre. Cut all other trees greater <u>Specs:</u> than 4.6" at DBH that meets product standards. Retention for this stand will be greater than 3% and will consist of reserve tree species. <u>Other</u> 200' buffer along stream. <u>Comments:</u> Wld: White spruce retention is in the buffer along the creek. Reference snowmobile trail spec for contracts. <u>Next</u> Regeneration survey needed after harvest as per work instructions. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
14	11013014-Cut	8.2	4112 - Maple, Beech, Cherry Association	High Density Pole	50	81-110	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Selectively thin hardwoods to 70-90 sqft of BA. Favor oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to <u>Specs:</u> an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker". <u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
15	11013015-Cut	9.4	4112 - Maple, Beech, Cherry Association	High Density Pole	68	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Selectively thin hardwoods to 70-90 sqft of BA. Do not mark aspen. Favor oak, black cherry, hemlock, white pine and cedar where present.</p> <p><u>Specs:</u> Oak should be released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker".</p> <p><u>Other</u> Wld: Do not cut aspen.</p> <p><u>Comments:</u> Reference snowmobile trail spec for contracts.</p> <p><u>Next</u></p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
16	11013016-Cut	13.3	4319 - Mixed Upland Forest	High Density Pole	78	81-110	Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Cut all other trees greater than 4.6" at DBH that meets product standards. Two patches of white spruce of aprx 15 trees a piece should be left for Wld. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Other</u> Reference snowmobile trail spec for contracts.</p> <p><u>Comments:</u></p> <p><u>Next</u> Regeneration survey needed after harvest as per work instructions.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
17	11013017-Cut	18.2	4110 - Sugar Maple Association	High Density Pole	99	141-170	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Selectively thin hardwoods to 70-90 sqft of BA. Favor black cherry, oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker".</p> <p><u>Other</u> Reference snowmobile trail spec for contracts.</p> <p><u>Comments:</u></p> <p><u>Next</u></p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
18	11013018-Cut	3.0	42340 - Upland Spruce/Fir	High Density Pole	71		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Cut all other trees greater than 4.6" at DBH that meets product standards. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Other</u> 200' buffer along stream.</p> <p><u>Comments:</u> Reference snowmobile trail spec for contracts.</p> <p><u>Next</u> Regeneration survey needed after harvest as per work instructions.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	11013022-Cut	7.1	4112 - Maple, Beech, Cherry Association	High Density Log	99	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Selectively thin hardwoods to 70-90 sqft of BA. Favor black cherry, oak, hemlock, white pine and cedar where present. Oak should be released <u>Specs:</u> on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker".</p> <p><u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
23	11013023-Cut	3.8	42340 - Upland Spruce/Fir	High Density Pole	71		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Cut all other trees greater than 4.6" at DBH that <u>Specs:</u> meets product standards. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Other</u> 200' buffer along stream. <u>Comments:</u></p> <p><u>Next</u> Regeneration survey needed after harvest as per work instructions. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
38	11013038-Cut	27.9	4112 - Maple, Beech, Cherry Association	High Density Log	99	141-170	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Selectively thin hardwoods to 70-90 sqft of BA. Favor to leave black cherry, oak, hemlock, white pine and cedar where present. Oak should be <u>Specs:</u> released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker".</p> <p><u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
42	11013042-Cut	13.4	42320 - Upland Spruce	High Density Pole	78		Harvest	Clearcut with Reserves	42320 - Upland Spruce	Cmpt. Review Proposal
<p><u>Prescription</u> Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Cut all other trees greater than 4.6" at DBH that <u>Specs:</u> meets product standards. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Other</u> Treatment shape might vary due to overly wet ground. <u>Comments:</u> 200' buffer along stream. Reference snowmobile trail spec for contracts.</p> <p><u>Next</u> Regeneration survey needed after harvest as per work instructions. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
44	11013044-Cut	6.6	4112 - Maple, Beech, Cherry Association	High Density Log	99	81-110	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Mark for 50-70 sq ft. for a 30 year rotation. Favor oak, hemlock, white pine and cedar where present. Follow all guidelines set forth in "The <u>Specs:</u> Complete Marker". <u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
47	11013047-Cut	21.4	4112 - Maple, Beech, Cherry Association	High Density Log	99	81-110	Harvest	Other - Specify in Comments	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees greater than 6" at DBH. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. <u>Specs:</u> <u>Other</u> Stand is exhibiting a high degree of dieback. Diameter Cut <u>Comments:</u> 100' buffer along stream. Reference snowmobile trail spec for contracts. <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
49	11013049-Cut	47.1	4319 - Mixed Upland Forest	High Density Pole	118	81-110	Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal
<u>Prescription</u> Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Leave tree mark black cherry at 1 to 3 an acre. Cut <u>Specs:</u> all other trees greater than 4.6" at DBH that meets product standards. Retention for this stand will be greater than 3% and will consist of reserve tree species. <u>Other</u> 200' buffer along stream. <u>Comments:</u> Reference snowmobile trail spec for contracts. <u>Next</u> Regeneration survey needed after harvest as per work instructions. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
54	11013054-Cut	9.5	4112 - Maple, Beech, Cherry Association	High Density Log	99	81-110	Harvest	Other - Specify in Comments	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees greater than 6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 16" <u>Specs:</u> dbh is to be left. Leave tree mark black cherry at 1 to 3 an acre. Retention for this stand will be greater than 3% and will consist of reserve tree species. <u>Other</u> Stand is exhibiting a high degree of dieback. Diameter Cut <u>Comments:</u> Reference snowmobile trail spec for contracts. <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
55	11013055-Cut	6.9	6124 - Lowland Spruce-Fir	High Density Pole	84		Harvest	Clearcut with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all other trees greater than 4.6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch <u>Specs:</u> over 18" dbh is to be left. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Other</u> Acreage may vary due to wet ground. <u>Comments:</u> Reference snowmobile trail spec for contracts.</p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
57	11013057-Cut	7.3	4110 - Sugar Maple Association	High Density Pole	99	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Stand is showing some small areas of top dieback. Mark for now 50-70 sq ft. Favor healthy yellow birch and black cherry. The Rx might have to <u>Specs:</u> be changed to salvage if its health deteriorates by the time sale prep work begins. Follow all guidelines set forth in "The Complete Marker".</p> <p><u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
58	11013058-Cut	19.4	6124 - Lowland Spruce-Fir	High Density Pole	84		Harvest	Clearcut with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all other trees greater than 4.6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch <u>Specs:</u> over 16" dbh is to be left. Retention for this stand will be greater than 3% and will consist of reserve tree species.</p> <p><u>Other</u> Acreage may vary due to wet ground. <u>Comments:</u> Reference snowmobile trail spec for contracts.</p> <p>Wld: loafing areas will be addressed by the buffer along the creek.</p> <p><u>Next</u> Regeneration survey needed after harvest as per work instructions. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
59	11013059-Cut	2.1	4112 - Maple, Beech, Cherry Association	High Density Pole	54	51-80	Harvest	Clearcut with Reserves	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all trees greater than 4.6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" <u>Specs:</u> dbh is to be left. Retention for this stand will be greater less than 3% and will consist of reserve tree species.</p> <p><u>Other</u> Reference snowmobile trail spec for contracts. <u>Comments:</u></p> <p><u>Next</u> Check for adequate regeneration within 5 years of harvest completion. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61	11013061-Cut	161.4	4112 - Maple, Beech, Cherry Association	High Density Log	99	81-110	Harvest	Other - Specify in Comments	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees greater than 6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left.										
<u>Specs:</u>										
<u>Other</u> Stand is exhibiting a high degree of dieback. Diameter Cut										
<u>Comments:</u> South part of the eastern lobe of the stand was removed from the treatment shape due to better timber conditions.										
Reference snowmobile trail spec for contracts.										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
68	11013068-Cut	5.6	4112 - Maple, Beech, Cherry Association	High Density Pole	99	81-110	Harvest	Other - Specify in Comments	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees greater than 6" at DBH that meets product standards. Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 16" dbh is to be left.										
<u>Specs:</u>										
<u>Other</u> Stand is exhibiting a high degree of dieback. Diameter Cut										
<u>Comments:</u> Reference snowmobile trail spec for contracts.										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
70	11013070-Cut	6.1	42340 - Upland Spruce/Fir	High Density Pole	54		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Reserve: yellow birch, white pine, cedar, hemlock, oak if present. Cut all other trees greater than 2" at DBH that meets product standards.										
<u>Specs:</u>										
<u>Other</u> Sight path widening.										
<u>Comments:</u> Reference snowmobile trail spec for contracts.										
<u>Next</u> Regeneration survey needed after harvest as per work instructions.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
74	11013074-Cut	15.2	42340 - Upland Spruce/Fir	High Density Pole	54		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Reserve: tamarack, white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Cut all other trees greater than 2" at DBH that meets product standards.										
<u>Specs:</u>										
<u>Other</u> Sight path widening.										
<u>Comments:</u> Reference snowmobile trail spec for contracts.										
<u>Next</u> Regeneration survey needed after harvest as per work instructions.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										

**Total Treatment
Acreage Proposed: 594.5**



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3 11013003-Cut	13.2	4119 - Mixed Northern Hardwoods	High Density Pole	42	51-80	Harvest	Other - Specify in Comments	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Reserve: white pine, cedar, hemlock, oak if present. Yellow birch over 18" dbh is to be left. Cut all other trees greater than 2" at DBH. There is no retention percentage prescribed for this stand.

Other Comment: Salvage harvest due to dieback.

150' buffer along river.

Reference snowmobile trail spec for contracts.

Next Steps:

Proposed Start Date: 10/01/2015

Limiting Factor 3J: Water quality / BMPs (stream, river, or lake)

Total Treatment Acreage Proposed: 13.2

Report 5 – Site Conditions

Baraga Mgt. Unit
Jason Mittlestat : Examiner

Compartment 013
Year of Entry 2016



Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5C	3J	2G
	Available	Not Available					
234	230	4	Aspen	230		4	
288	170	117	Lowland Conifers	170		40	77
58	49	9	Lowland Spruce/Fir	49		9	
674	653	21	Northern Hardwood	638	15	21	
160	78	82	Upland Conifers	78		82	
64	63	1	Upland Mixed Forest	63		1	
346	188	158	Upland Spruce/Fir	153	35	152	6
5		5	White Pine			5	
1,830	1,432	398	Total Forested Acres	1,382	50	314	83
	78%	22%	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
002	Not Available	3J: Water quality / BMPs (stream, river, or lake)	93				
Comments: Sturgeon River Riparian Corridor							
003	Not Available	3J: Water quality / BMPs (stream, river, or lake)	61				
Comments: Sturgeon River Riparian Corridor							
005	Not Available	3J: Water quality / BMPs (stream, river, or lake)	30				
Comments: Sturgeon River Riparian Corridor							

Report 5 – Site Conditions

Baraga Mgt. Unit
Jason Mittlestat : Examiner

Compartment 013
Year of Entry 2016



007	Not Available	3J: Water quality / BMPs (stream, river, or lake)	24	
Comments: Sturgeon River Riparian Corridor				
016	Not Available	3J: Water quality / BMPs (stream, river, or lake)	182	
Comments: Sturgeon River Riparian Corridor				
018	Not Available	3J: Water quality / BMPs (stream, river, or lake)	19	
Comments: Sturgeon River Riparian Corridor				
021	Not Available	3J: Water quality / BMPs (stream, river, or lake)	20	
Comments: Sturgeon River Riparian Corridor				
029	Not Available	3J: Water quality / BMPs (stream, river, or lake)	12	2G: Too wet (sensitive soils, does not include access issues)
Comments: buffer along creek				
030	Not Available	2G: Too wet (sensitive soils, does not include access issues)	6	
Comments:				

Report 5 – Site Conditions

Baraga Mgt. Unit
Jason Mittlestat : Examiner

Compartment 013
Year of Entry 2016



031	Not Available	3J: Water quality / BMPs (stream, river, or lake)	11	2G: Too wet (sensitive soils, does not include access issues)
Comments: buffer along creek				
032	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	
Comments: hold to maybe treat in 2026				
033	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	
Comments: hold to treat in 2026 with adjacent stands				
034	Not Available	3J: Water quality / BMPs (stream, river, or lake)	17	
Comments: buffer along creek				
035	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	
Comments: hold to treat in 2026 with adjacent stand				
036	Not Available	3J: Water quality / BMPs (stream, river, or lake)	52	2G: Too wet (sensitive soils, does not include access issues)
Comments: wet ground and buffer along creek				

Report 5 – Site Conditions

Baraga Mgt. Unit
Jason Mittlestat : Examiner

Compartment 013
Year of Entry 2016



037	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8
Comments: hold to treat in 2026 with adjacent stand			
038	Not Available	2G: Too wet (sensitive soils, does not include access issues)	77
Comments: very wet ground, sparce stocking in places, lots of tagalder and small diameters. edges will be treated with adjacent stands.			
039	Not Available	3J: Water quality / BMPs (stream, river, or lake)	13
Comments: buffer along creek			
040	Not Available	3J: Water quality / BMPs (stream, river, or lake)	23
Comments: buffer along creek			
044	Not Available	3J: Water quality / BMPs (stream, river, or lake)	13
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
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
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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.

S
t
a
n
d

Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 013
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4119 - Mixed Northern Hardwoods	High Density Pole	12.3	45	51-80	Stand is exhibiting a high degree of dieback
4119 - Mixed Northern Hardwoods	High Density Log	8.7	Uneven Age	81-110	
4119 - Mixed Northern Hardwoods	High Density Pole	17.2	42	51-80	Stand is exhibiting a high degree of dieback.
42340 - Upland Spruce/Fir	High Density Pole	78.6	76	51-80	
4112 - Maple, Beech, Cherry Association	High Density Log	28.4	91	81-110	Stand is exhibiting a high degree of dieback.
4110 - Sugar Maple Association	High Density Log	9.0	Uneven Age	81-110	
6124 - Lowland Spruce-Fir	High Density Pole	39.1	70		Tagalder understory.
42340 - Upland Spruce/Fir	High Density Pole	58.6	68		
4110 - Sugar Maple Association	High Density Pole	14.9	Uneven Age	51-80	
42340 - Upland Spruce/Fir	High Density Pole	9.1	50	51-80	
4112 - Maple, Beech, Cherry Association	High Density Pole	8.2	50	81-110	
4112 - Maple, Beech, Cherry Association	High Density Pole	9.4	68	111-140	
4319 - Mixed Upland Forest	High Density Pole	13.3	78	81-110	
4110 - Sugar Maple Association	High Density Pole	18.2	Uneven Age	141-170	
42340 - Upland Spruce/Fir	High Density Pole	5.7	71		
4110 - Sugar Maple Association	High Density Log	13.6	Uneven Age	51-80	
42340 - Upland Spruce/Fir	High Density Pole	8.0	61		
4112 - Maple, Beech, Cherry Association	High Density Log	7.1	Uneven Age	111-140	

S
t
a
n
d

Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 013
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42340 - Upland Spruce/Fir	High Density Pole	13.5	71		
6122 - Black Spruce	Low Density Pole	5.1	72		
6122 - Black Spruce	Low Density Pole	3.7	72		sparce black spruce
42340 - Upland Spruce/Fir	High Density Pole	19.5	71		
6122 - Black Spruce	High Density Pole	37.7	68		
42200 - Natural White Pine	High Density Log	5.1	88	111-140	
4110 - Sugar Maple Association	High Density Log	7.2	Uneven Age	111-140	
6124 - Lowland Spruce-Fir	High Density Pole	29.5	68	51-80	
42340 - Upland Spruce/Fir	High Density Pole	46.6	73	111-140	
4112 - Maple, Beech, Cherry Association	High Density Pole	4.6	64	81-110	
4112 - Maple, Beech, Cherry Association	High Density Log	33.7	Uneven Age	81-110	
4110 - Sugar Maple Association	High Density Log	66.7	Uneven Age	81-110	
4112 - Maple, Beech, Cherry Association	High Density Log	27.9	Uneven Age	141-170	
6122 - Black Spruce	Medium Density Pole	11.6	68		
42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	27.6	47	51-80	
6124 - Lowland Spruce-Fir	Low Density Pole	24.0	74		
42320 - Upland Spruce	High Density Pole	85.9	78		
4113 - R.Maple, Conifer	High Density Pole	9.2	88	81-110	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4112 - Maple, Beech, Cherry Association	High Density Log	6.6	Uneven Age	81-110	
47	4112 - Maple, Beech, Cherry Association	High Density Log	23.4	Uneven Age	81-110	Stand is exhibiting a high degree of dieback. Salvage harvest. Rx a diameter cut of 6"+ DBH. Leave yellow birch 18" + dbh, cedar and white pine.
48	4110 - Sugar Maple Association	High Density Log	8.2	Uneven Age	111-140	
49	4319 - Mixed Upland Forest	High Density Pole	50.7	118	81-110	
50	4112 - Maple, Beech, Cherry Association	High Density Log	79.1	Uneven Age	51-80	
52	429 - Mixed Upland Conifers	High Density Pole	95.0	85	81-110	
53	6124 - Lowland Spruce- Fir	High Density Pole	77.4	84	51-80	
54	4112 - Maple, Beech, Cherry Association	High Density Log	9.5	Uneven Age	81-110	Extreme tree dieback and mortality along with poor quality. Rx a diameter cut of 6"+ DBH.
55	6124 - Lowland Spruce- Fir	High Density Pole	20.2	84		
57	4110 - Sugar Maple Association	High Density Pole	7.3	Uneven Age	81-110	Stand is showing some small areas of top dieback.
58	6124 - Lowland Spruce- Fir	High Density Pole	42.7	84		
59	4112 - Maple, Beech, Cherry Association	High Density Pole	2.1	54	51-80	
61	4112 - Maple, Beech, Cherry Association	High Density Log	202.1	Uneven Age	81-110	Stand is exhibiting a high degree of dieback.
62	4136 - Aspen, Mixed Conifer	High Density Pole	7.5	37		
63	4134 - Aspen, Spruce/Fir	High Density Pole	138.5	34		
65	429 - Mixed Upland Conifers	High Density Pole	37.8	38	81-110	
66	6124 - Lowland Spruce- Fir	High Density Pole	55.3	36		
68	4112 - Maple, Beech, Cherry Association	High Density Pole	5.6	99	81-110	Stand is exhibiting a high degree of dieback (40-50%).

S
t
a
n
d

Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 013
Year of Entry: 2016



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
69	4130 - Aspen	High Density Pole	10.1	36		
70	42340 - Upland Spruce/Fir	High Density Pole	6.1	54		Sight path widening.
72	4134 - Aspen, Spruce/Fir	High Density Pole	53.9	35		
74	42340 - Upland Spruce/Fir	High Density Pole	15.2	54		Sight path widening.
75	4112 - Maple, Beech, Cherry Association	High Density Log	34.8	Uneven Age	81-110	
76	4134 - Aspen, Spruce/Fir	High Density Pole	24.3	36		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
6	50 - Water	26.0	No	Unspecified	
11	3102 - Grass	5.8	No	Unspecified	
13	6220 - Alder/willow	6.2	No	Unspecified	
20	6220 - Alder/willow	12.0	No	Unspecified	
25	6220 - Alder/willow	20.7	No	Unspecified	
30	6220 - Alder/willow	47.4	No	Unspecified	
33	3102 - Grass	4.4	No	Unspecified	
45	6220 - Alder/willow	24.1	No	Unspecified	
46	6220 - Alder/willow	29.9	No	Unspecified	
51	6220 - Alder/willow	43.3	No	Unspecified	
56	6220 - Alder/willow	34.4	No	Unspecified	flooded timber
60	3102 - Grass	2.2	No	Unspecified	
64	6220 - Alder/willow	14.5	No	Unspecified	
67	6220 - Alder/willow	12.8	No	Unspecified	
71	6220 - Alder/willow	8.2	No	Unspecified	
73	3102 - Grass	13.4	No	Unspecified	