



**Baraga Forest Management Unit
Compartment Review Presentation**
Compartment #58 Entry Year: 2013
Compartment Acreage: 751 County: Houghton

Revision Date: 7/13/2011

Stand Examiner: Brad S. Carlson

Legal Description: T53N, R33W, Sections 1, 2 and 12.
T55N, R32W, Sections 19, 20, 29 and 31.
T55N, R33W, Sections 8, 11, 12 and 13.

Identified Planning Goals ('Management Area' or 'RMU' # if applicable): Central Keweenaw

Management Goals: This compartment is a loose collection of small state owned parcels. The majority of this land is managed for recreational purposes and water protection.

Soil and Topography: The terrain is level around lakes to very steep slopes and deep gullies around Hungarian Falls. Soils are Trimountain-Paavola-Waiska, Munising-Abbaye-Kalkaska complex, Dawson and Loxley peats, Tawas-Roscommon muck, Gay muck, AuGres-Roscommon complex and Skanee-Gay complex.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The majority of the adjacent lands are owned by small private individuals. There are many year-round homes adjacent to state land.

Unique, Natural Features: Hungarian Falls is in this compartment.

Archeological, Historical, and Cultural Features: Remnants of an old farmstead around Hungarian falls can still be seen. The Torch Lake Shipping Canal and the Portage Lake Shipping Canal were developed to ship copper out of the Keweenaw both border this compartment.

Special Management Designations or Considerations: Boston Pond is a designated water access site. Fish Division maintains the dam. The Hungarian Water Falls is a heavily used area by hikers and other recreationalists and is used throughout the year.

Watershed and Fisheries Considerations: Boston Pond Dam is maintained by Fish Division.

Wildlife Habitat Considerations: Deer migrating to and from traditional deeryards on the eastern side of the Keweenaw to the spine of the Keweenaw use this compartment as a travel corridor.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of coarse-textured glacial till, thinning to the northwest. The glacial drift thickness varies between 10 and 50 feet. The Precambrian Jacobsville Sandstone and the Portage Lake Volcanics subcrop below the glacial drift. The Jacobsville was previously used as a building stone and the Volcanics may have copper potential. The closest gravel pit is located six miles to the north, but potential should be good in areas of drift. Abandoned copper mines, containing some silver, are located to the north and to the southwest. Section 8 was previously leased for copper exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Vehicle access to the Boston Pond and Hungarian Falls parcel are good. Access the rest of the compartment is poor.

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

Recreational Facilities and Opportunities: The Hancock to Calumet Rail-Trail crosses the Boston Pond parcel. The former Copper Range Railroad grade crosses the Hungarian Falls parcel and is also used as a snowmobile trail. There are canoe campsites on the Torch Lake cuts in Section 19 and on the Portage River in Section 12.

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 +		Unretn Age
Bog	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	44
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
Lowland Shrub	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	38
Marsh	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Mixed Upland Deciduous	0	0	0	0	0	14	0	18	48	0	0	0	0	0	58	138
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	37
Sand, Soil	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Tamarack	0	0	0	0	0	0	0	0	0	0	0	0	69	0	0	69
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	28
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14
Water	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Total	324	0	0	0	0	14	0	18	48	0	0	38	69	0	247	759



Table 2 – Proposed Treatment Summaries

Baraga Mgt. Unit
Year of Entry 2013

Compartment 058
Total Compartment Acres: 759.3

Acres by Treatment Type

Commercial Harvest - 18	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
Mixed Upland Deciduous	8	10	0	0	0	0	0	18
Total	8	10	0	0	0	0	0	18

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1 11058001-Cut	7.9	4199 - Other Mixed Upland Deciduous	High Density Pole	65	Harvest	Clearcut with Reserves	4123 - Red Oak	Cmpt. Review Proposal - Incomplete

Prescription Harvest all deciduous trees except Red Oak. All Conifers shall be retained in the stand (Only a few small White Pine and White Spruce were seen). In areas of high BA of Red Oak the Red Oak should be marked down to 50 sqft to encourage regeneration.

Other Comments: Harvest area should only be to the north of the snowmobile trail. This will leave a buffer between the access road and the snowmobile trail that will discourage more illegal ORV trail from showing up.

Next Steps: check for adequate regeneration within 4 years of harvest completion.

11 11058011-Cut	10.1	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	83	Harvest	Single Tree Selection	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal - Incomplete
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Prescription Mark stand to 50 sqft in areas were it is prodominantly hardwoods.. No White Pine, Hemlock, Cedar or Red Oak should be marked. Higher residual BA's are acceptable where this species are abundant. 30 ft crown openings should be marked around the red oaks. See OFS during sale prep.

Other Comments: All access is across private. The Red Maple in this stand is of poor quality and should be managed on a 30 yr rotation. The lower residual BA will also incourage better regeneration of White Pine, Hemlock and Red Oak.

Next Steps:

**Total Treatment
Acreage Proposed: 18.0**

Table 4 -- Treatments Prescribed with a Limiting Factor



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

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: 0

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
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

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Baraga Mgt. Unit

5 – Forested Stands

Compartment: 058
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4199 - Other Mixed Upland Deciduous	High Density Pole	17.8	65	81-110	
6	4199 - Other Mixed Upland Deciduous	High Density Pole	14.4	41	51-80	Old Farmstead on this property. Locals said that an old hermit lived here into the 1970's. Old feild is getting grown in with brush and apple trees.
7	4319 - Mixed Upland Forest	High Density Pole	13.6	Uneven Age	111-140	This stand contains the Hungarian Falls. This area has heavy recreational traffic throughout the year.
8	4199 - Other Mixed Upland Deciduous	High Density Pole	47.5	73	81-110	This stand buffers the Hungarian Falls and has heavy recreational use throughout the year.
9	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	26.0	Uneven Age	81-110	This stand is adjacent to the Hungarian Falls and has heavy recreational use throughout the year.
10	4199 - Other Mixed Upland Deciduous	High Density Pole	14.6	Uneven Age	51-80	Old fence line on east side of stand is posted.
11	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	11.0	Uneven Age	81-110	
12	6120 - Lowland Cedar	High Density Pole	44.2	Uneven Age	81-110	Was clearcut a long time ago.
13	42390 - Mixed Non-Pine Upland Conifers	High Density Pole	18.8	Uneven Age	111-140	
14	6132 - Mixed Lowland Forest with Cedar	High Density Pole	17.3	Uneven Age	51-80	
17	6129 - Mixed Coniferous Lowland Forest	High Density Pole	49.7	Uneven Age	51-80	Trail leading from private on the north through the stand and out to the canal is well used.
20	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	6.2	Uneven Age	51-80	
21	6122 - Black Spruce	Medium Density Pole	38.5	105	1-50	
22	6121 - Tamarack	Low Density Sapling	29.5	113	1-50	
24	6121 - Tamarack	Low Density Sapling	40.0	113	1-50	
25	4119 - Mixed Northern Hardwoods	High Density Log	9.1	Uneven Age	81-110	
26	4112 - Maple, Beech, Cherry Association	High Density Log	27.7	Uneven Age	81-110	

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Baraga Mgt. Unit

5 – Forested Stands

Compartment: 058
Year of Entry: 2013



S t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	429 - Mixed Upland Conifers	High Density Log	9.1	Uneven Age	81-110	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	50 - Water	55.6	N/A	Unspecified	
3	710 - Sand, Soil	3.7	N/A	Unspecified	
4	622 - Lowland Shrub	1.6	N/A	Unspecified	
5	623 - Emergent Wetland	4.9	N/A	Unspecified	
15	622 - Lowland Shrub	39.3	N/A	Unspecified	
16	622 - Lowland Shrub	0.9	N/A	Unspecified	
18	622 - Lowland Shrub	0.9	N/A	Unspecified	
19	622 - Lowland Shrub	86.7	N/A	Unspecified	
23	6225 - Bog	91.8	N/A	Unspecified	
28	50 - Water	11.2	N/A	Unspecified	
29	623 - Emergent Wetland	27.9	N/A	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
21	Unique Site - SCA	11058021	38.5	Stand is an ERA, it was previously coded as stand condition 8.
22	Unique Site - SCA	11058022	29.5	Stand is an ERA, it was previously coded as stand condition 8.
24	Unique Site - SCA	11058024	40.0	Stand was previously coded as stand condition 8. ERA designation could also be applied to this stand.
23	Unique Site - SCA	NF_11058023	91.8	Stand is an ERA, it was previously coded as stand condition 8.
28	Unique Site - SCA	NF_11058028	11.2	Stand was previously coded as stand condition 8.
29	Unique Site - SCA	NF_11058029	27.9	Stand was previously coded as stand condition 8.



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.

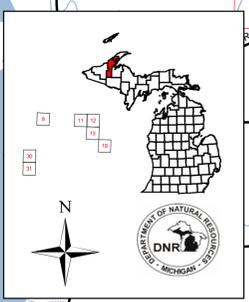
ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

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	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.
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.

Cover Type & Treatment Map

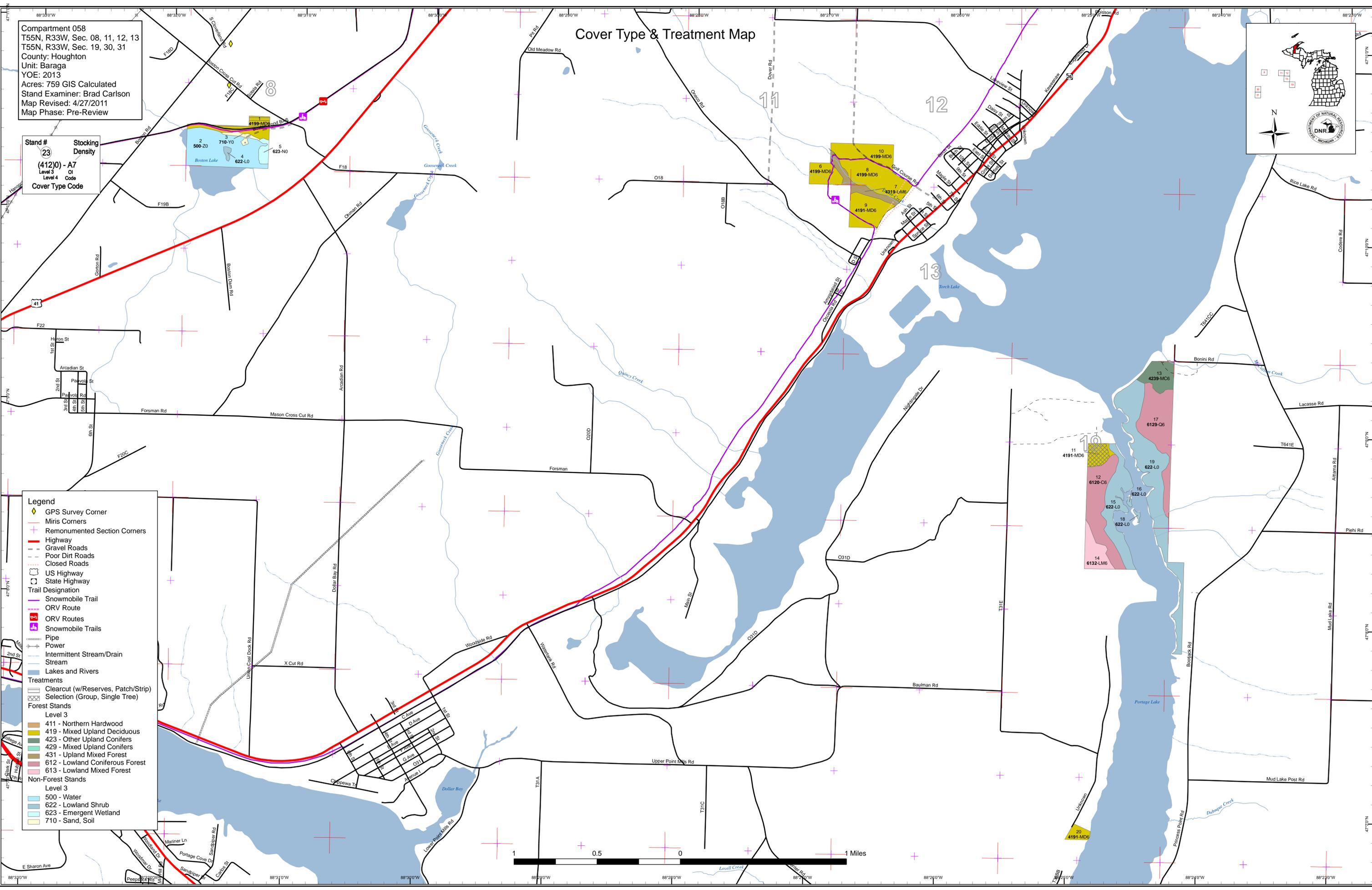
Compartment 058
 T55N, R33W, Sec. 08, 11, 12, 13
 T55N, R33W, Sec. 19, 30, 31
 County: Houghton
 Unit: Baraga
 YOE: 2013
 Acres: 759 GIS Calculated
 Stand Examiner: Brad Carlson
 Map Revised: 4/27/2011
 Map Phase: Pre-Review

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

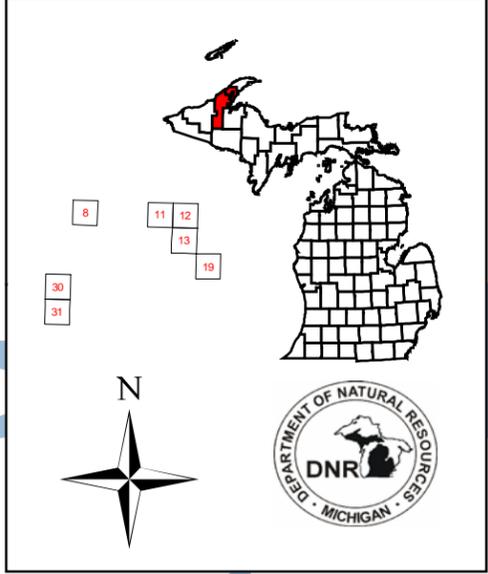


Legend

- GPS Survey Corner
- Miris Corners
- Remounted Section Corners
- Highway
- Gravel Roads
- Poor Dirt Roads
- Closed Roads
- US Highway
- State Highway
- Trail Designation
- Snowmobile Trail
- ORV Route
- ORV Routes
- Snowmobile Trails
- Pipe
- Power
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- Treatments
- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)
- Forest Stands
- Level 3
- 411 - Northern Hardwood
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- Non-Forest Stands
- Level 3
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 710 - Sand, Soil



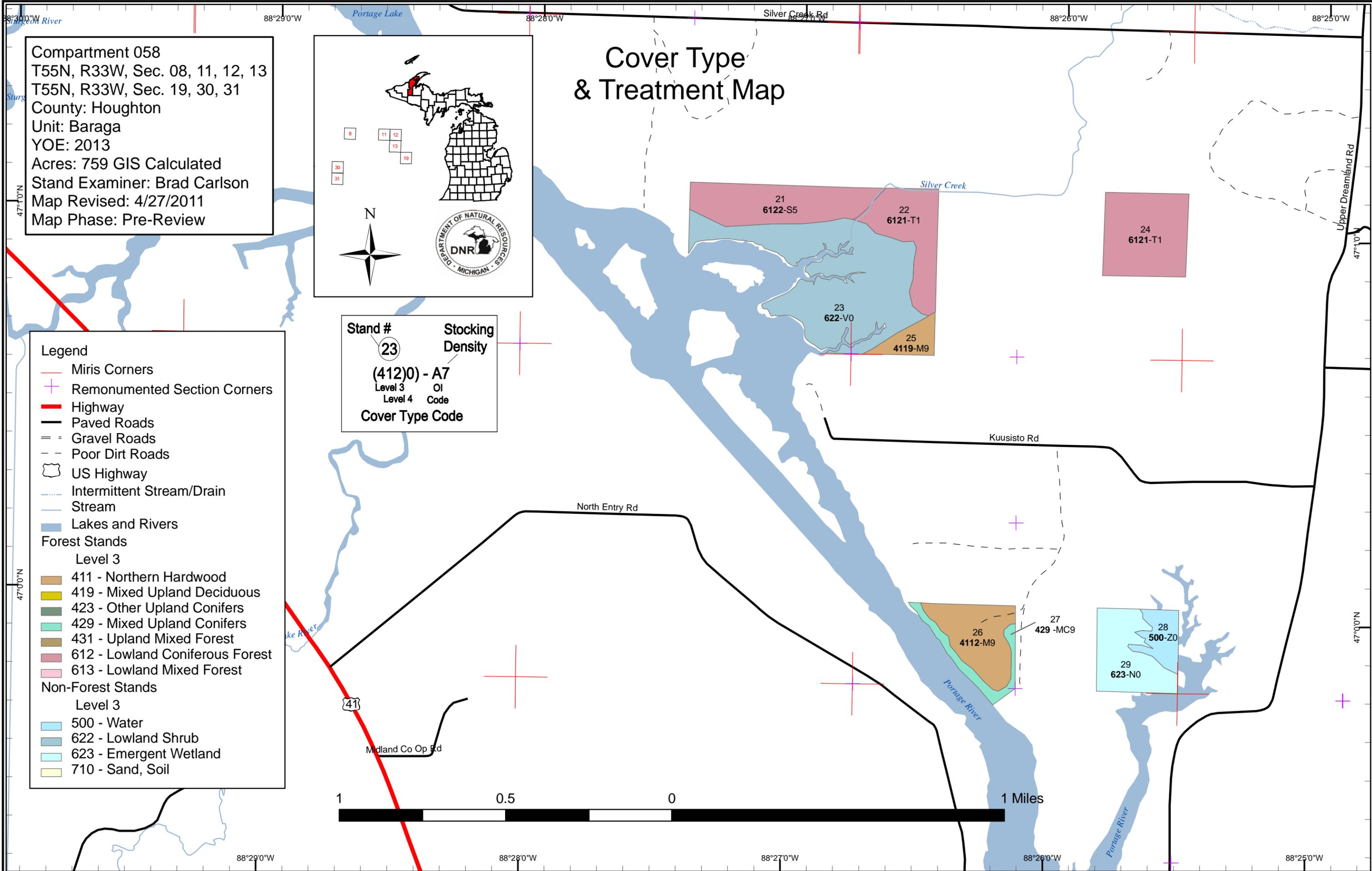
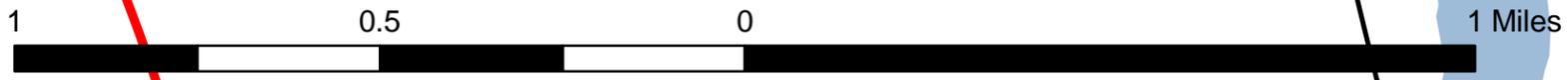
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 County: Houghton
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Cover Type & Treatment Map

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

- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Highway
 - Paved Roads
 - Gravel Roads
 - Poor Dirt Roads
 - US Highway
 - Intermittent Stream/Drain
 - Stream
 - Lakes and Rivers
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
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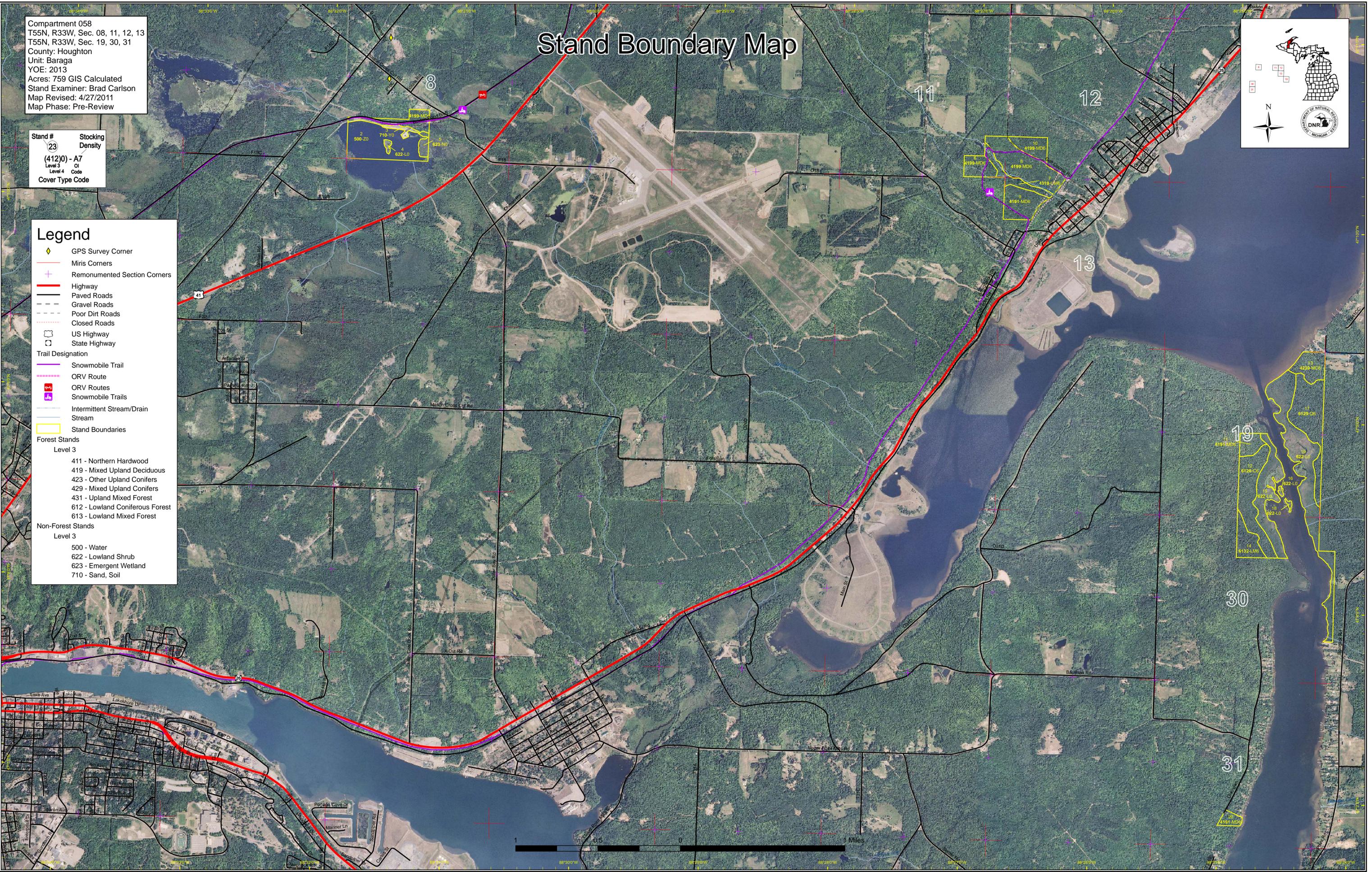


Stand Boundary Map

Compartment 058
 T55N, R33W, Sec. 08, 11, 12, 13
 T55N, R33W, Sec. 19, 30, 31
 County: Houghton
 Unit: Baraga
 YOE: 2013
 Acres: 759 GIS Calculated
 Stand Examiner: Brad Carlson
 Map Revised: 4/27/2011
 Map Phase: Pre-Review

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

- ### Legend
- GPS Survey Corner
 - Miris Corners
 - Re monumented Section Corners
 - Highway
 - Paved Roads
 - Gravel Roads
 - Poor Dirt Roads
 - Closed Roads
 - US Highway
 - State Highway
 - Trail Designation**
 - Snowmobile Trail
 - ORV Route
 - ORV Routes
 - Snowmobile Trails
 - Intermittent Stream/Drain
 - Stream
 - Stand Boundaries
 - Forest Stands**
 - Level 3**
 - 411 - Northern Hardwood
 - 419 - Mixed Upland Deciduous
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Stand Boundary Map

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

Legend

- Miris Corners
- + Remonumented Section Corners
- Highway
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- Gravel Roads
- Poor Dirt Roads
- US Highway
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

Forest Stands

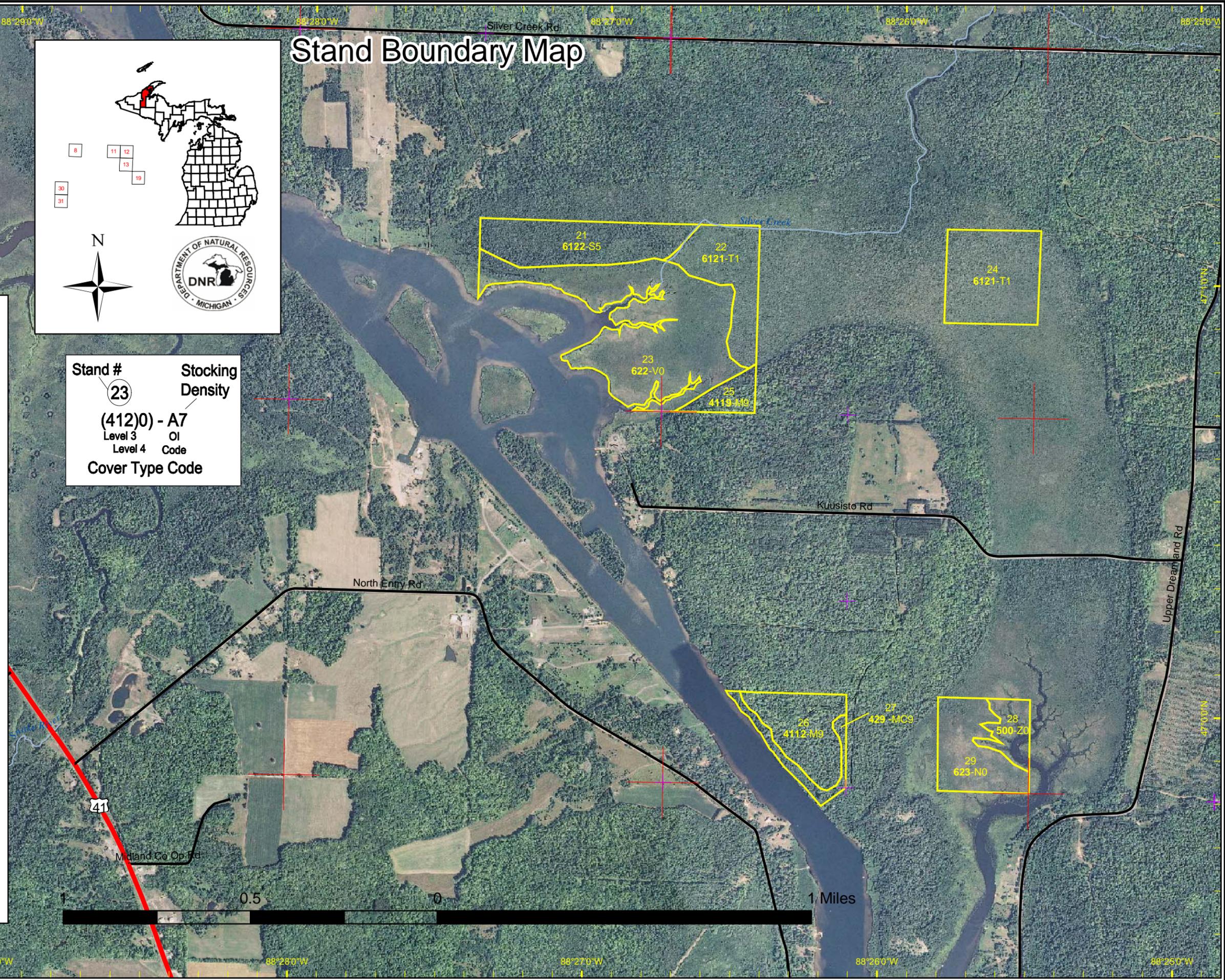
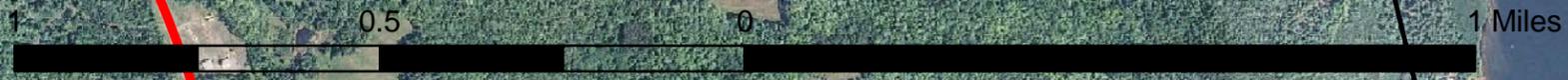
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 500 - Water
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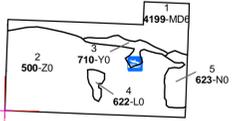


Dedicated & Proposed Special Conservation Area Map

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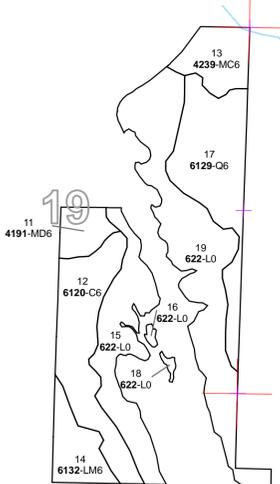
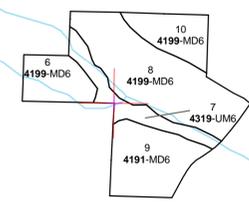


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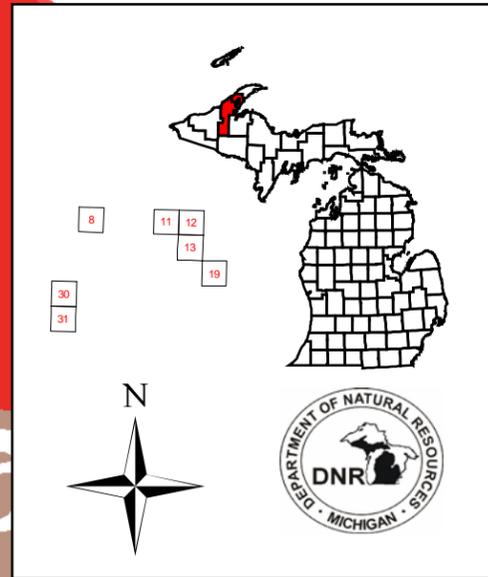
Legend

- GPS Survey Corner
- Miris Corners
- Remonumented Section Corners
- Stand Boundaries
- Proposed Special Conservation Areas
 - SCA - Special Conservation Area
 - SCA Removal
- Dedicated Special Conservation Areas
 - Cold Water Streams
 - Boat Access Sites
- Forest Stands
 - Level 3
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Dedicated & Proposed Special Conservation Area Map

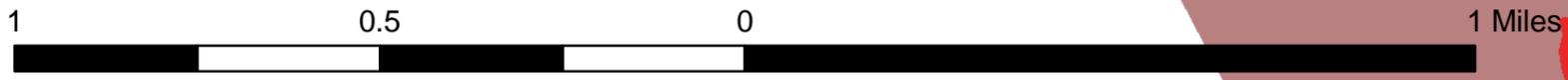
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Legend

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41

