

Revision Date: July 18, 2011

Stand Examiner: Joe Durbin, Forester FMD; Bill Rollo, Wildlife Division

Legal Description: T34N, R29W, Sections 11, 12, 13 and 14

Management Goals: This compartment is part of the Menominee End Moraine Management Area and is located about 14 miles southwest of Stephenson, Michigan. It is a mix of upland and lowland types. Upland types are about 68% of the compartment and include northern hardwoods, mixed oak/aspen, aspen, white pine timber types and a red pine plantation. Lowland types are about 32% of the compartment and include swales of low-density conifer, cedar and lowland hardwood types. The water type is the Menominee River.

Approximately 206 acres comprising 8 stands are proposed for treatment. Of the proposed treatments, approximately 110 acres (4 stands) are clearcut with reserves, 88 acres (3 stands) are thinning and 8 acres (1 stand) are currently on contract for a shelterwood with reserves harvest.

Soil and Topography: Topography is gently rolling to level. The soils are primarily well-drained sands, loams and mucks/peats. The major soil series are Grayling, Moquah, Pemene, Tawas and Lupton.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The ownership is a contiguous block with state-ownership to the northwest, private to the northeast east and west and Wisconsin private to the south. There are no private in-holdings but access to several private landowners traverses this compartment. Private ownership has summer residential/recreational cabins that are in-use much of the year. Land use in the area is mainly recreational hunting, fishing, trapping and weekend camping. Northeast Wisconsin residents also frequent this area and some are landowners.

Unique, Natural Features: Menominee River and Bear Point.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: The floodplain forest along the Menominee River contains tree species (silver maple, hackberry, hickory, witch hazel, pricklyash, etc.) that typically are found more southerly. Maintenance of this diversity is desired.

Watershed and Fisheries Considerations: The Menominee River is the southern boundary of the compartment with about 1.4 miles of frontage along Bear Point. The river can be accessed at boat launches 1.7 miles northwest and 1.5 miles east. A .5 acre vernal pool lies in the NENE of section 14 with an intermittent stream flowing east from it through private property. Another small unnamed stream flows southeast from the northwest portion of the compartment joining with the intermittent stream on private land. No major streams or lakes lie within the compartment.

Wildlife Habitat Considerations: This compartment is within the Menominee End Moraine Management Area and contains forest types that are adapted to sandy outwash plain conditions. Most of the unit's oak resource is located here, and perpetuation of this cover type is of high priority. The presence of oak wilt

disease increases the urgency to find management solutions to oak regeneration challenges. Forest treatments mainly focus on timber harvests within pine-oak-aspen types. Mature oak will be maintained in various retention amounts to ensure mast is provided for wildlife. The southern portion of this compartment lies adjacent the Menominee River. A diverse hardwood peninsula between a bend in the river is designated a special conservation area where natural processes will be allowed to operate. The peninsula contains forest species that are characteristic of more southern areas (silver maple, hickory, butternut). The development of large-diameter trees, snags, and dead woody debris will be valuable to cavity nesting and insectivorous birds, small mammals, and many other species.

Mineral Resource and Development Concerns and/or Restrictions: Sections 11 - 14, T34N-R29W, Menominee County Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 10 and 50 feet. The Cambrian Munising Formation underlies the glacial drift. There is not an economic use for the Munising, but it overlaps Precambrian aged rocks, which may have metallic and nonmetallic mineral potential. State land leased for metallic mineral exploration is located three miles to the north. A gravel pit is located less than one-half mile to the east of the compartment, and there may be potential in the compartment. No economic oil and gas production has been found in the UP.

Vehicle Access: This compartment is well roaded with the Sturgeon Landing Road, a county gravel/dirt road, accessing most of the compartment from the east and a good dirt forest road accessing the northern portion of the compartment through compartment 28.

Survey Needs: Thirteen survey corners will need to be set for the proposed treatments.

Recreational Facilities and Opportunities: There are no developed recreational facilities within this compartment. Boat launching facilities on the Menominee River are available 1.5 miles east and northwest of this compartment.

Fire Protection: This compartment is well roaded with good county gravel/dirt road and good dirt forest roads. The Menominee River is the southern boundary. There is a wide and wet slough through the north half of the compartment. The stands north of the slough are accessed through state land from the north via good dirt forest roads.

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

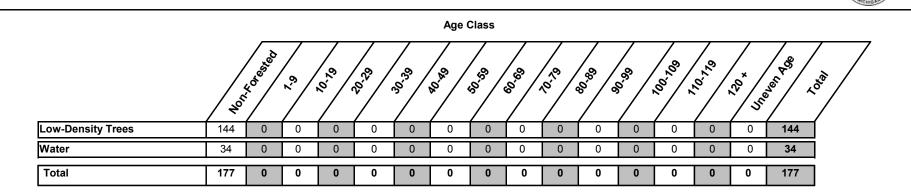
Table 1 – Total Acres by Cover Type and Age Class





: Examiner

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Table 2 – Proposed Treatment Summaries

Escanaba Mgt. Unit Year of Entry 2013										Compartment Total Compartment Acres:	
			Acr	es by 1	Freatm	ent Ty	pe				
Commercial Harvest - 206	6 Site Prep	0 - 0		Tree P	lanting	- 0		Preso	ribed Burn - 0	Other - 0	
Habitat Cut - 0	Opening	Maintenance	- 0	Tree S	eeding	- 0		Pesti	cide - 0		
			Co	ver Ty	pe by l	Harves	st Meth	nod			
		/	Clean Clark	io lection	2000 1500 1500 1500 1500 1500 1500 1500	out of the second secon	Cristin of Street		N. S.		
			0	0	0	0	0	14			
Mixed	Upland Decidu	ous 87	0	0	0	0	0	87			
Natura	al Mixed Pines	0	0	0	8	0	0	8			
Northe	ern Hardwood	9	0	0	0	0	0	9			
Red Pi	ine	0	0	0	0	39	0	39			
White	Pine	0	0	0	0	49	0	49			
		Total 110) 0	0	8	88	0	206			
	Year of Entry 2013 Commercial Harvest - 206 Habitat Cut - 0 Aspen Mixed Natura Northe Red P	Year of Entry 2013 Commercial Harvest - 206 Site Prep Habitat Cut - 0 Opening	Year of Entry 2013 Commercial Harvest - 206 Site Prep - 0 Habitat Cut - 0 Opening Maintenance Aspen 14 Mixed Upland Deciduous 87 Natural Mixed Pines 0 Northern Hardwood 9 Red Pine 0 White Pine 0	Year of Entry 2013 Acres Commercial Harvest - 206 Site Prep - 0 Habitat Cut - 0 Opening Maintenance - 0 Co Co Image: Commercial Harvest - 206 Site Prep - 0 Habitat Cut - 0 Opening Maintenance - 0 Co Co Image: Commercial Harvest - 206 Site Prep - 0 Habitat Cut - 0 Opening Maintenance - 0 Co Co Image: Commercial Harvest - 206 Site Prep - 0 Image: Commercial Harvest - 206 Opening Maintenance - 0 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commercial Harvest - 206 Image: Commerc	Year of Entry 2013 Acres by T Commercial Harvest - 206 Site Prep - 0 Tree P Habitat Cut - 0 Opening Maintenance - 0 Tree S Cover Ty Cover Ty Image: Commercial Mixed Upland Deciduous 87 0 Northern Hardwood 9 0 0 Image: Commercial Mixed Pines 0 0 0	Year of Entry 2013 Acres by Treatment Commercial Harvest - 206 Site Prep - 0 Tree Planting Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover Type by Image: Cover T	Year of Entry 2013 Acres by Treatment Ty Commercial Harvest - 206 Site Prep - 0 Tree Planting - 0 Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Cover Type by Harvest Aspen 14 0 0 0 Mixed Upland Deciduous 87 0 0 0 Northern Hardwood 9 0 0 0 White Pine 0 0 0 0 0	Year of Entry 2013 Acres by Treatment Type Commercial Harvest - 206 Site Prep - 0 Tree Planting - 0 Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Cover Type by Harvest Meth Code Aspen 14 0 0 0 0 Mixed Upland Deciduous 87 0 0 0 0 0 Northern Hardwood 9 0 0 0 0 0 0 White Pine 0 0 0 0 0 0 0 0	Year of Entry 2013 Acres by Treatment Type Commercial Harvest - 206 Site Prep - 0 Tree Planting - 0 Presc Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Presc Cower Type by Harvest Method Opening Maintenance - 0 Tree Seeding - 0 Presc Aspen 14 0 0 0 14 Mixed Upland Deciduous 87 0 0 0 8 Natural Mixed Pines 0 0 0 0 9 0 0 0 9 White Pine 0 0 0 0 0 0 9 0 0 0 9	Year of Entry 2013 Acres by Treatment Type Commercial Harvest - 206 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Pesticide - 0 Cover Type by Harvest Method Aspen 14 0 0 0 14 Mixed Upland Deciduous 87 0 0 0 8 0 8 Northern Hardwood 9 0 0 0 39 39 39 White Pine 0 0 0 0 0 0 149 149	Office Supervised Burn 2013 Total Compartment Acres: Commercial Harvest - 206 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0 Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Prescribed Burn - 0 Other - 0 Cover Type by Harvest Method Cover Type by Harvest Method Aspen 14 0 0 0 14 Mixed Upland Deciduous 87 0 0 0 0 8 0 8 Northern Hardwood 9 0 0 0 0 9 39 39 White Pine 0 0 0 0 48 0 48 0 48

Compartment: 031 Escanaba Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2013 s t а Treatment Acres Stage1 Size Stand Treatment Treatment Cover Type n Approval CoverType Method Objective Name Density Status Age Туре d 2 33031002 CC 4.8 4130 - Aspen Medium Density 20 Harvest Clearcut with 4113 - R.Maple, Cmpt. Review Saplin Reserves w/R Conifer Proposal Prescription Clearcut w/ reserves--On the high ground which is a red maple/birch/aspen pole stand, cut all trees except hemlock and mark oak and pine to leave. East of the red maple stand is an ash swale. In this area, leave all hemlock and mark seed trees of various species to leave favoring Specs: green/white ash and bur oak. Other Due to swale, this stand should be cut during dry weather or winter. If this stand is not included in the treatment of the other stands in this compartment, it could be cut if the adjacent private owner to the west treats their stand. Comments: Next OI entry, check for a mixed stand of regeneration. Acceptable regeration will be a mixture of maple, oak and birch seedlings or stump Next sprouts with aspen, fir and pine. Both the high and low ground should regenerate about the same, if deer browse is minimal. Steps: 3 33031003-8.8 4119 - Mixed High Density Log 76 Harvest Clearcut with 4139 - Aspen, Mixed Cmpt. Review CCw/R Northern Hardwoods Reserves Deciduous Proposal Prescription Clearcut with Reserves. Cut all trees except beech and hemlock and mark oak and pine and scattered seed trees to leave. Specs: Many of the white pine are large wolfy trees. Other Comments: Next OI entry, check for maple, birch, oak and other hardwood stump sprouts and seedlings and aspen, fir and pine seedlings. <u>Next</u> Steps: 4 33031004-11.2 42210 - Natural Medium Density 88 **Crown Thinning** 42210 - Natural Red Cmpt. Review Harvest Thin Red Pine Pole Pine Proposal Prescription Thin to residual basal area of 80-90. Mark trees to cut. Specs: Stand density is variable. Residual BA in more open areas may be less than 80. Treat oak wilt if found. Other Comments: <u>Next</u> Steps: 33031006-Medium Density 42290 - Natural 6 49.0 42200 - Natural 71 Harvest Crown Thinning Cmpt. Review Mixed Pine White Pine Proposal Thin Log Prescription Thin to residual BA of 80-90. Mark red and white pine to harvest. Cut all A, ash, M, Fs, Fb and jack pine. Retain hemlock, oak and beech, if present. Specs: Other Stand density is variable. ranging from less than 70 to 150+ Comments: Next Steps: 33031007-7 87.3 4199 - Other Mixed Medium Density 88 Harvest Clearcut with 4121 - Oak, Aspen Cmpt. Review CCw/R Upland Deciduous Reserves Proposal Log Prescription Harvest all aspen, paper birch, hardwood, jack pine, spruce, balsam and tamarack. Mark scattered seed trees of red/pin/white oak and red & white pine. Leave all hemlock and cedar. Also, retain (red line) several one acre patches of mature mixed oak and pine leaving maximum (10%) Specs: retention <u>Other</u> Treat oak wilt pockets if found and salvage dead/dying trees. Comments: Next Monitor for occurance oak wilt. Next OI entry, check for aspen, pine and fir seedlings and hardwood, birch and oak stump sprouts and seedlings. Steps:

S t		Esca	naba Mgt. Unit			atments Pre .imiting Fac		Compartment: 031 Year of Entry 2013	AT INATURE CHARACTER
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9	33031009_Sh wd	8.0	42290 - Natural Mixed Pine	Low Density Log	100	Harvest	Shelter Wood with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal
Presci Specs		n contract	Red Oak Thinning S	Sale330290901.					
<u>Other</u> Comm	-	pockets	were also treated.						
<u>Next</u> Steps:		for reoccu	irance of oak wilt. N	ext OI entry, check f	for oak, p	bine and hardwo	ood regeneration.		
11	33031011- CCw/R	8.8	4133 - Aspen, Mixed Pine	High Density Pole	52	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal
Presci Specs			ple, birch, spruce, fir d red and white pine		ain heml	ock and beech,	if present, and marked c	oak (retain mainly some	of the larger
<u>Other</u> Comm		k wilt if pi	esent.						
<u>Next</u> Steps:		entry, che	eck regeneration for a	aspen, fir and pine s	eedlings	and hardwood	and oak stump sprouts a	and seedlings.	
15	33031015- Thin	27.7	42110 - Planted Red Pine	Medium Density Pole	28	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Presci Specs</u>		esidual B present.	A of 70-80. Mark tre	es to cut. Cut all as	pen, ma	ple, paper birch	, balsam fir, spruce and	jack pine. Retain all he	mlock and
<u>Other</u> Comm		k wilt as f	ound. Restrict opera	ating season to exclu	ude Feb	1 through July 1	15 for eagle fledging sea	son and loose bark sea	son.
<u>Next</u> <u>Steps:</u>		for reoccu	irance of oak wilt						
	Total Treatmen	nt							

Total Treatment Acreage Proposed: 205.6

S t a		Escan	aba Mgt. Unit	Table 4		ents Prescrib ng Factor	ed with	Compartment: 031 Year of Entry 2013	DIR ATURE
n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presc Specs	ription S:								
<u>Other</u> Comn									
<u>Next</u> <u>Steps</u>	<u>:</u>								
	ng Factor and No ment Reason	<u>)</u>							
Ac	Total Treatmen reage Propose		0						

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2013

DRR DRR M

Treatment	Acres	Stage1	Size	Stand	Treatment	Treatment	Cover Type	Approval
Name		CoverType	Density	Age	Type	Method	Objective	Status
33002_OutOfY OE-Cut	0.7				Harvest	Clearcut with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

Prescription Final harvest this stand, leaving some seed trees. Harvest this stand with stand 13 in comp 1.

Specs:

Other Decent quality tamarack and spruce stand.

0.7

Comments:

Next Manage this stand for a mix of tamarack and spruce primarily, but a mix with other lowland species is acceptable.

Steps:

Total Treatment Acreage Proposed:

S t	Escanal		5 – Fo	prested Stands	Compartment: 031 Year of Entry: 2013	DNR DNR	
a n d	Level 4 Cover Type		Acres	Stand res Age	BA Range	General Comments:	. MICHIGAN

Escanaba Mgt. Unit

6 – Nonforested Stands

Compartment: 031 Year of Entry: 2013



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
10	3302 - Low Density Conifer Trees	114.4	No	Lowland Mixed Forest	SCA Removal
13	3302 - Low Density Conifer Trees	29.1	Natural Regen	Lowland Conifers	SCA Removal. Stand cut in 2006lots of tag alder 3-5 feet tall with scattered cedar, tamarack and black spruce seed trees. Some regen is showing the snow but not much; check in 5 years for more regen.
18	50 - Water	33.8	No	Low (NonForested)	Menominee River



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.

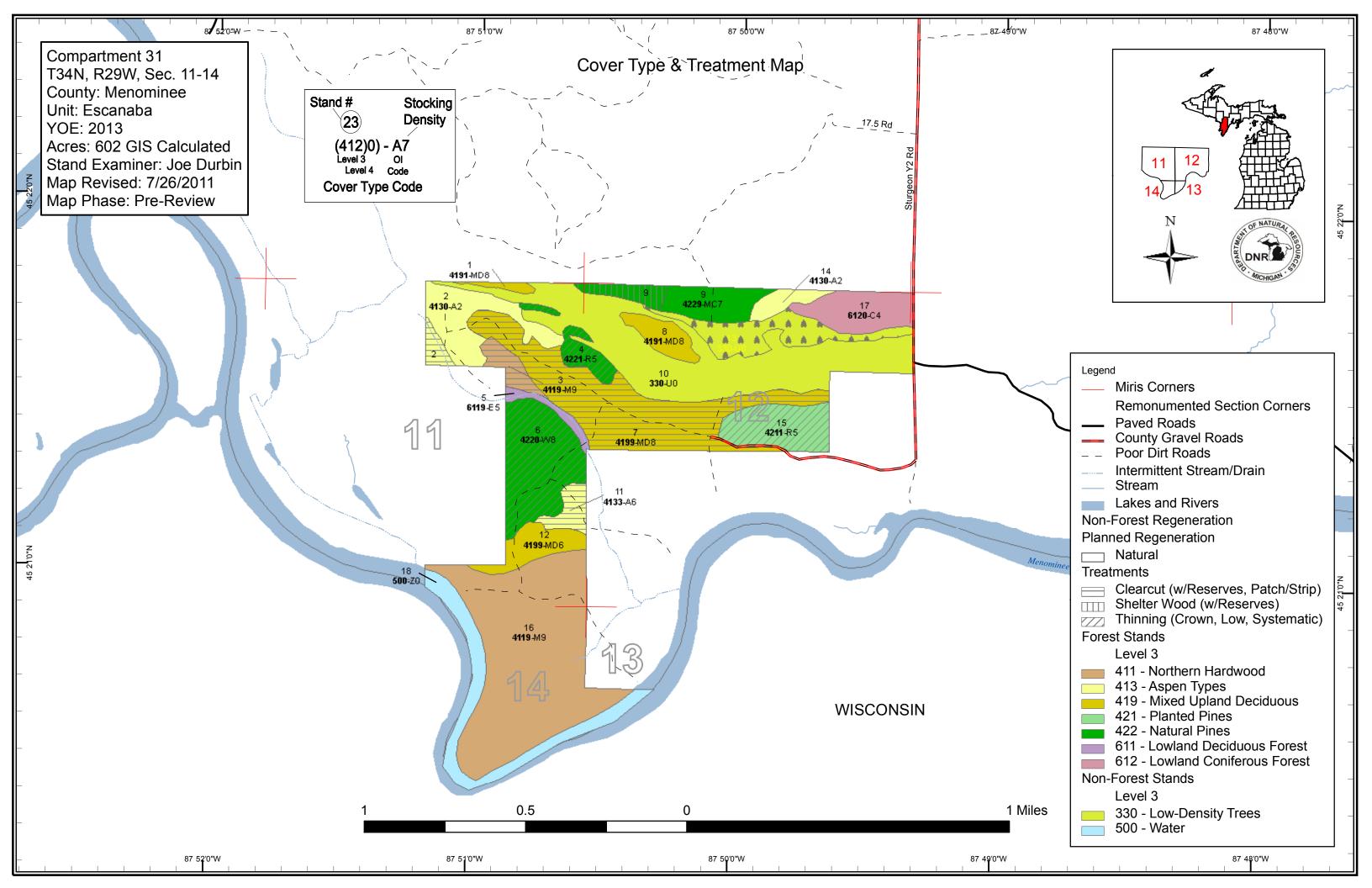
Stand	SCA Туре	SCA Name	Acres	Comments
1	SCA Removal	33031001	2.9	SCA RemovalSite not unique.
8	SCA Removal	33031008	11.6	SCA RemovalSite not unique.
12	Unique Site - SCA	33031012	16.0	SCAMenominee River riparian corridor and unique species components: butternut, bitternut hickory, silver maple, etc. Vernal pools and wetland swales.
16	Unique Site - SCA	33031016	140.9	SCAMenominee River riparian corridor and unique species components: butternut, bitternut hickory, silver maple, etc. Vernal pools and wetland swales.
10	SCA Removal	NF_33031010	114.4	SCA RemovalSite not unique.
13	SCA Removal	NF_33031013	29.1	SCA RemovalSite not unique.

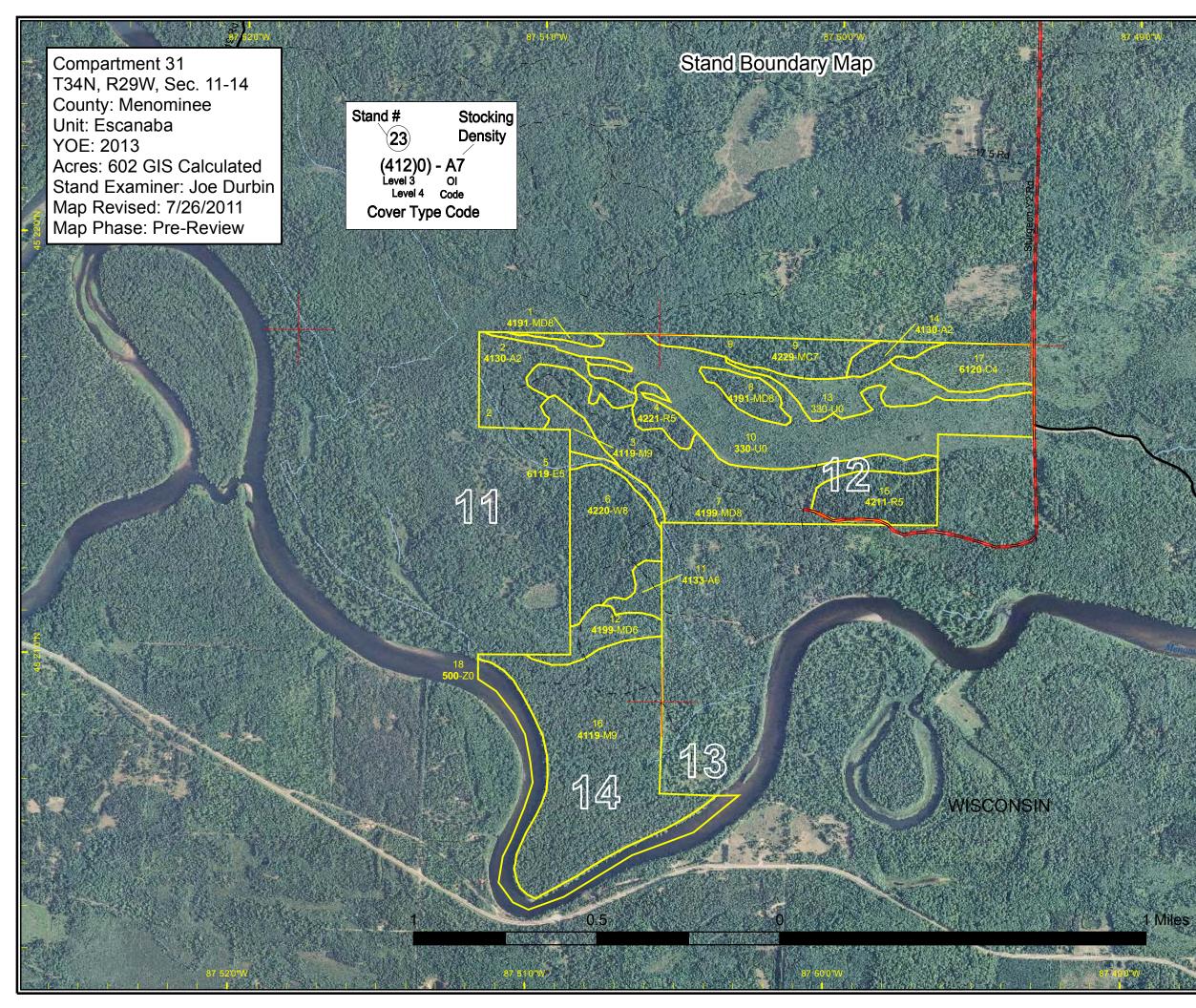


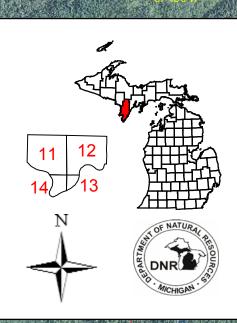
8 – DEDICATED CONSERVATION AREA DETAILS

* 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.

Conservation Type Description				ERA = Ecological Reference Area
SCA - Special Conservation Area	Conservation	Tvpe	Description	HCVA = High Conservation Value Area
	Area			SCA = Special Conservation Area







Legend

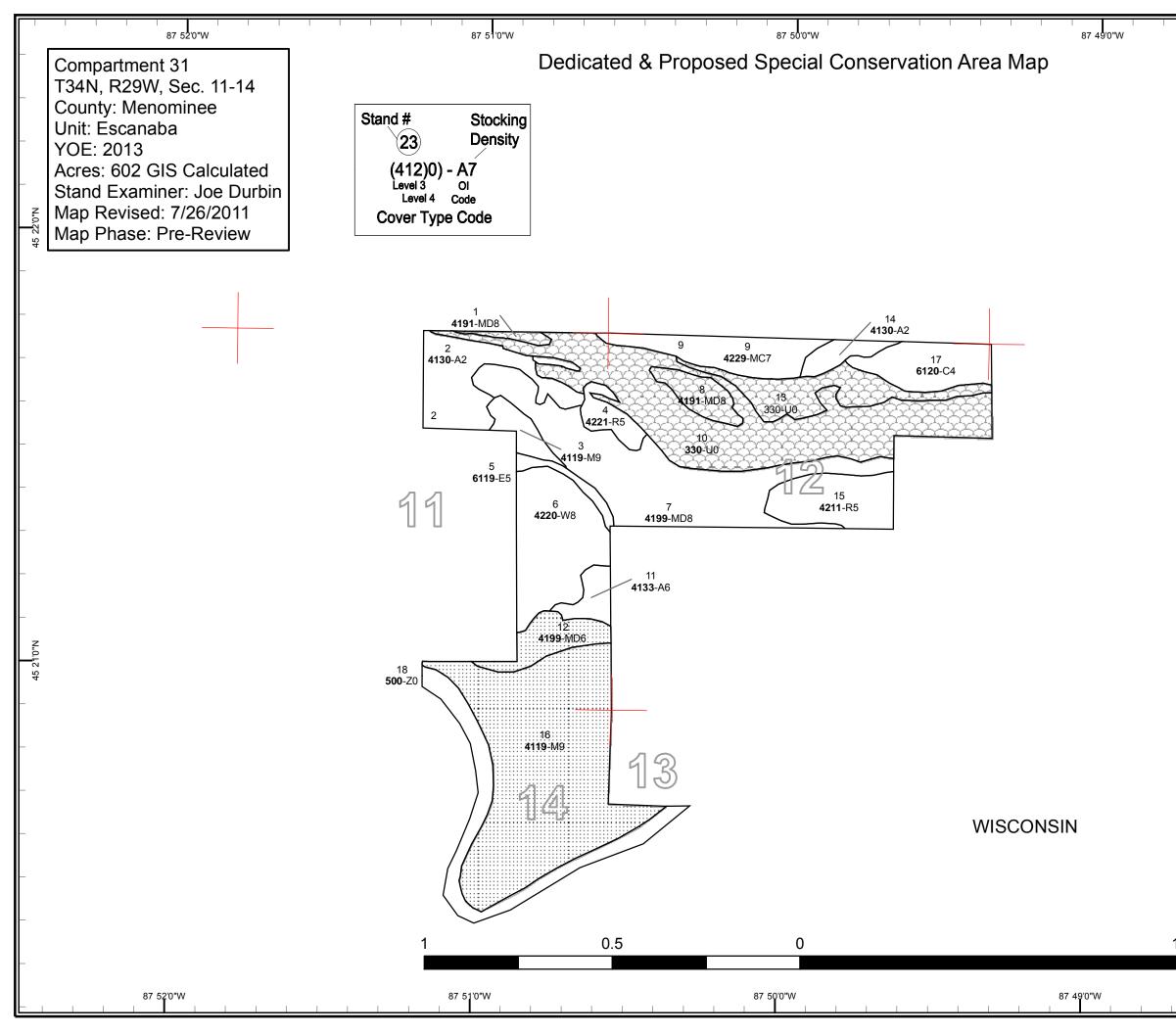
- Miris Corners
- Remonumented Section Corners
- Paved Roads
- ____ County Gravel Roads
- – Poor Ďirt Roads
- Intermittent Stream/Drain
- ____ Stream
- Stand Boundaries

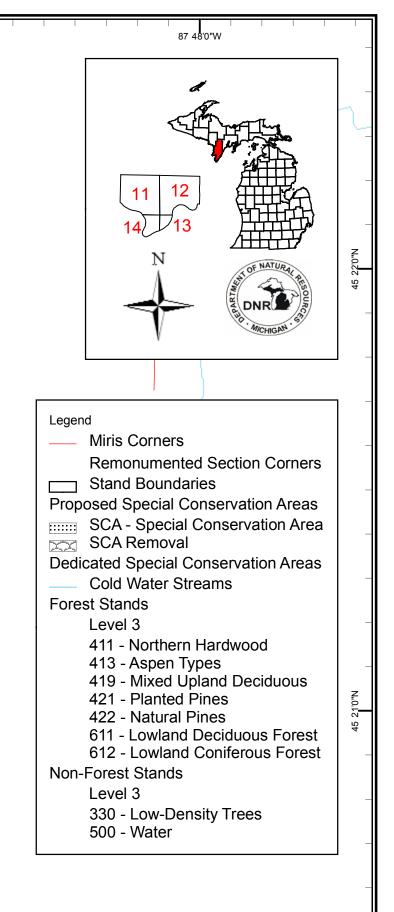
Forest Stands

- Level 3
- 411 Northern Hardwood
- 413 Aspen Types
- 419 Mixed Upland Deciduous
- 421 Planted Pines
- 422 Natural Pines
- 611 Lowland Deciduous Forest
- 612 Lowland Coniferous Forest

Non-Forest Stands

- Level 3
- 330 Low-Density Trees
- 500 Water





1 Miles