



# Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 33028

Entry Year 2019

Acreage: 735

County Menominee

Management Area: Menominee End Moraine

---

**Revision Date:** 2017-06-30

**Stand Examiner:** Dustin Salter

**Legal Description:**

T34N R29W Sections 1, 2, 11 and 12

**Identified Planning Goals:**

Oak and aspen are the primary cover types, with some white pine, red maple, and mixed lowland stands present. The oak is a mix of red and pin oak. The pin oak is mature and needs to be regenerated. In the past decade we have began harvesting some of the oak to regenerate it. More treatments will occur this decade to continue to regenerate it. The stands with a higher percentage of red oak will be delayed, so they continue to provide mast while the treated oak regenerates. There are a number of oak wilt epi-centers present and will need to be treated. The spruce budworm and eastern larch beetle are present and are causing mortality. The three lowland stands within the compartment are mature and need to be harvested, before mortality occurs.

**Soil and topography:**

The topography is gently rolling with some nearly level areas. Soils include well drained loamy fine sand over loamy sand, sand over sand, and black muck over sand. Prominent soil series include Pemene-Rubicon, Rubicon sand, and Lupton-Tawas.

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

This compartment is located on the southern edge of a block of state land that is about 20 miles long and 8 miles wide in the southwestern portion of Menominee County. There is no private ownership within the compartment boundaries. This compartment blocks up with other state land on the north and south sides. The western edge of this compartment is the western edge of state land in the county. There is a stretch of private land on the east side, with more state land east of that. There are numerous private camps around the perimeter of the compartment. The primary use of this compartment and the surrounding land is for recreational purposes.

**Unique Natural Features:**

None Known

**Archeological, Historical, and Cultural Features:**

None Known

**Special Management Designations or Considerations:**

None

**Watershed and Fisheries Considerations:**

There are no streams, creeks, rivers or lakes within the compartment.

**Wildlife Habitat Considerations:**

Ecological Context: This compartment is in a landscape of sandy outwash plains. Historically, the plains supported jack pine and pin oak barrens, and knobs and thin soil areas supported red pine, white pine, jack pine, aspen, and red oak. Knobs covered with sandy till grew northern hardwoods and white pine. Fires were a common natural disturbance regime. Aspen presently dominates many of the sites that were formerly red and white pine.

Recommendations: This small compartment is almost entirely comprised of upland oak and aspen forest. Several mature oak stands are proposed for final harvest and regeneration, and a mixed swamp conifer are proposed for treatments. A significant management dilemma in this compartment is how to manage the oak stands. Oak forest not only provides mast for wildlife, but also nest cavities, den sites, dead woody debris, and a relatively unique stand composition that often includes shrubs such as witch hazel and maple-leaved viburnum. Forest managers desire to begin regeneration efforts in oak stands that involve large patch cuts (group selection), cutting of thrifty trees for stump sprouting, or reducing the stand canopy closure to a low level to allow light penetration. Wildlife managers share the desire to regenerate oak, but are concerned about the impact to wildlife habitat if these stands do not regenerate as

planned. There is also ongoing debate among managers about how to proceed with oak cutting in light of the oak wilt disease mortality which is occurring in this area.

### **Mineral Resource and Development Concerns and/or Restrictions**

There may be metallic mineral potential in this area, but there has been no known exploration or leasing in the area to date. Sand/gravel pits are not located in the immediate area. An active pit is located over two miles to the southeast in Wisconsin. There appears to be some sand and gravel potential within the compartment on the uplands. No economic oil and gas production has been found in the UP.

### **Vehicle Access:**

The primary access into this compartment is on the Oak Hill Road, which runs north-south through the western 1/3rd of the compartment. There are a number of two-track roads that branch off of it.

### **Survey Needs:**

Two registered corners will need to be set.

### **Recreational Facilities and Opportunities:**

There are no developed recreational facilities within the compartment. Hunting, four wheeling, and snowmobiling are the primary recreational uses of the compartment.

### **Fire Protection:**

There is potential for some larger fires within this compartment, due to the amount of contiguous dry upland cover types. Many of the stands are open or regenerating, which assists in drying the fuels out quicker. There are no water sources within the compartment. The best water access point for this area is an old boat access site along the Menominee River. Which is 2 to 3 miles from the compartment.

### **Additional Compartment Information:**

There have been numerous oak wilt epi-centers treated within this compartment in the last decade. There are still a number of possible epi-centers that need to be treated.

### **The following reports from the Inventory are attached:**

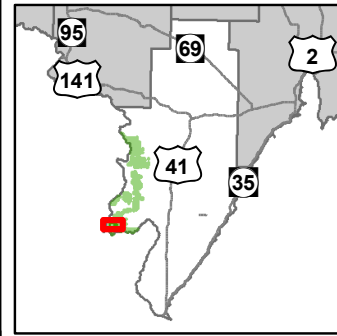
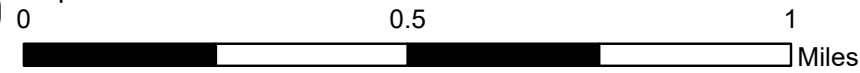
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

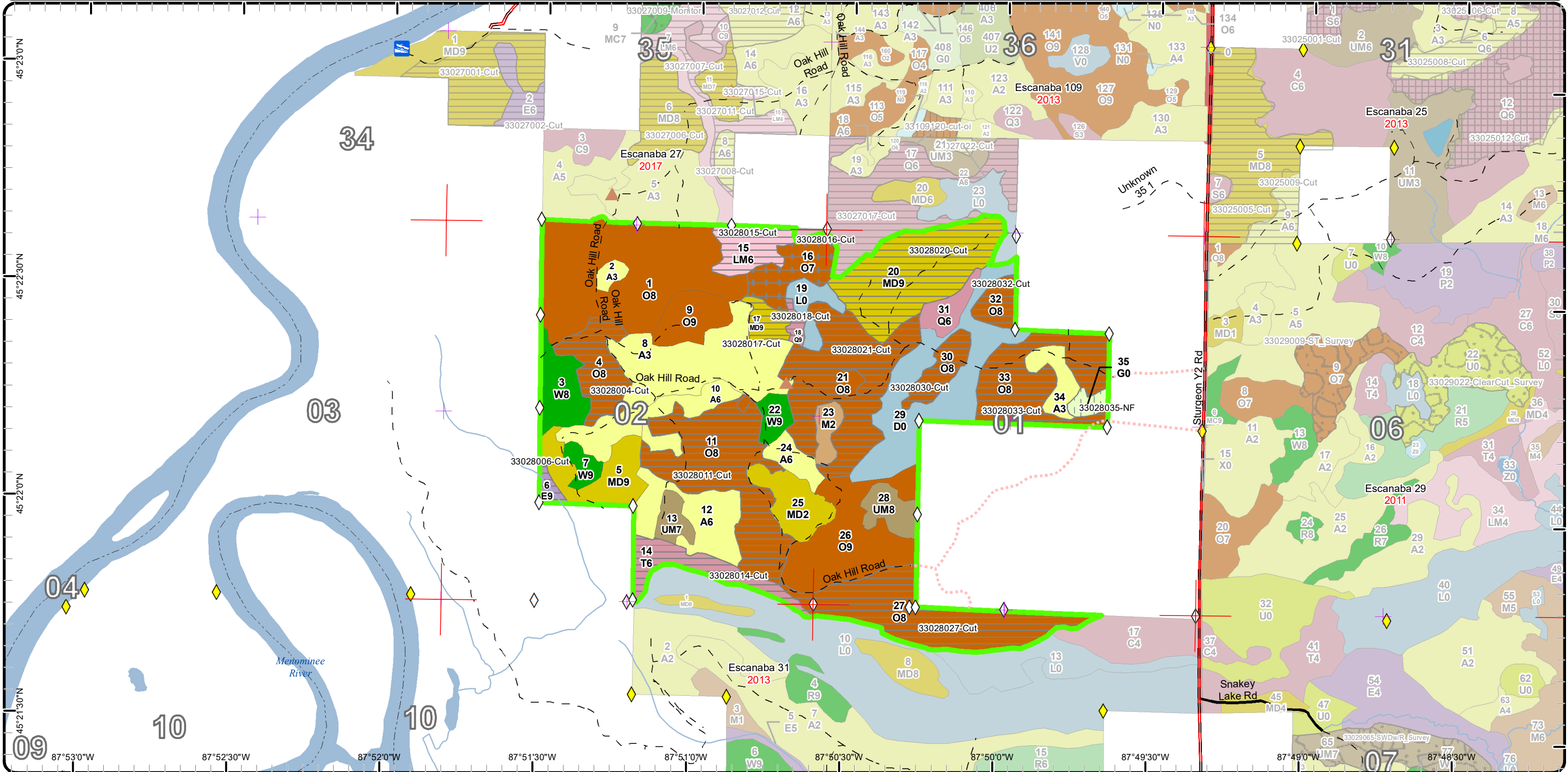
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 28  
 T34N R29W Sec. 1,2  
 County: Menominee  
 Unit: Escanaba  
 Mgmt Area: Menominee End  
 Moraine  
 YOE: 2019  
 Acres: 735 GIS Calculated  
 Examiner: Dustin Salter  
 Map Revised: 7/5/2017  
 Map Phase: Web-Post



- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Counties
- Berms
- Boating Access Site
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed
- Streams
- ▭ Lakes and Rivers All
- State Boundary
- Compartment Boundary
- Clearcut (w/Reserves)
- Opening Maintenance
- Harvest, Overstory Removal
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- Lakes



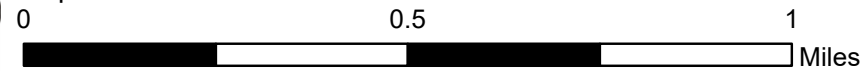
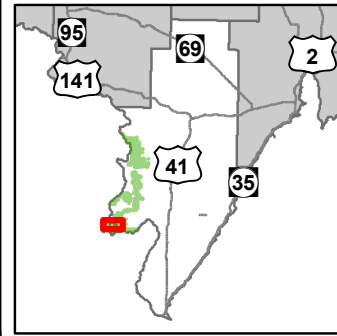




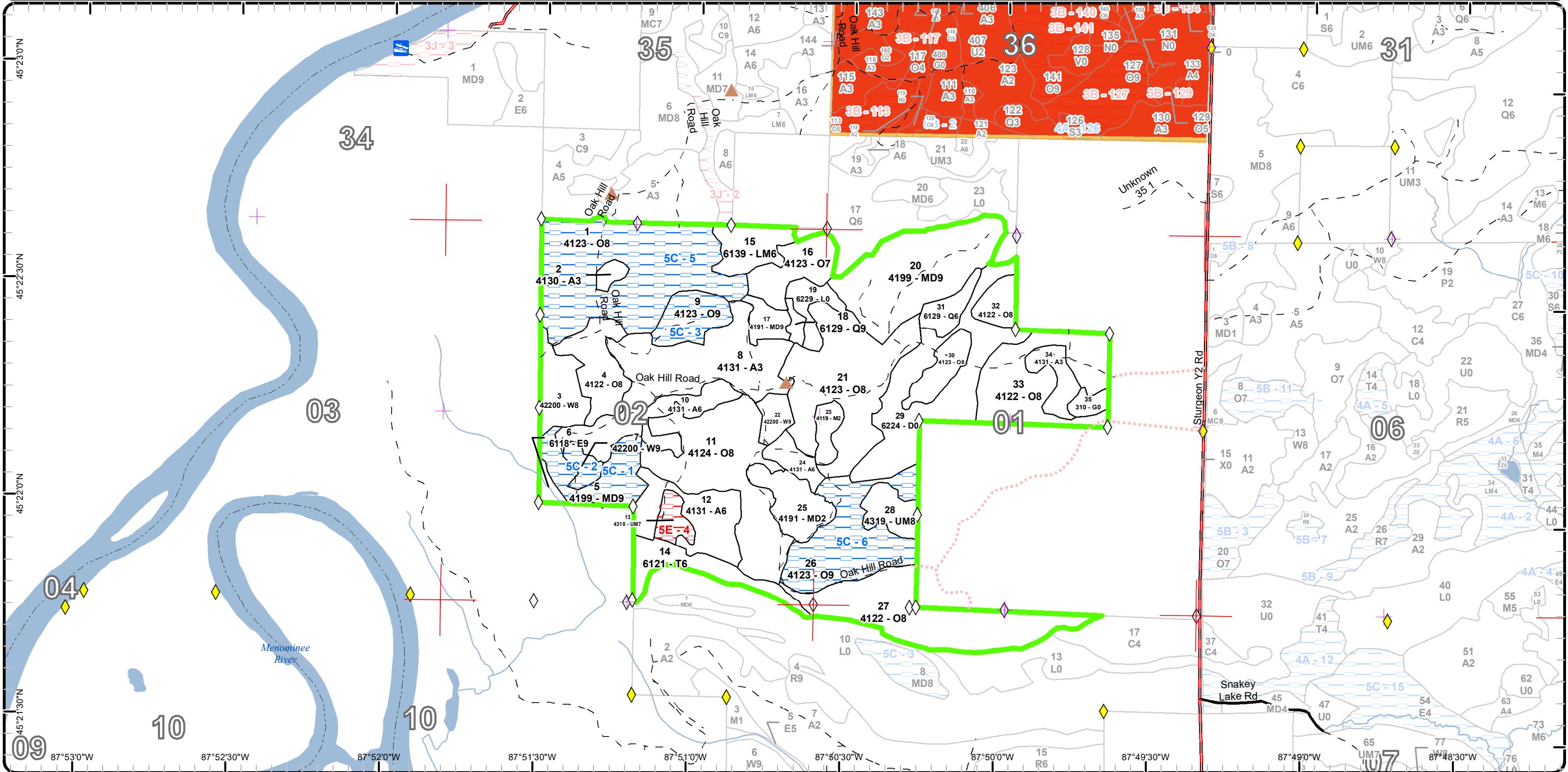


# Special Conservation Areas & Site Conditions Map

Compartment: 28  
 T34N R29W Sec. 1,2  
 County: Menominee  
 Unit: Escanaba  
 Mgmt Area: Menominee End  
 Moraine  
 YOE: 2019  
 Acres: 735 GIS Calculated  
 Examiner: Dustin Salter  
 Map Revised: 7/5/2017  
 Map Phase: Web-Post



- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Counties
- Berms
- Boating Access Site
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed
- Streams
- Lakes and Rivers All
- State Boundary
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Non-Dedicated Natural Areas and National Natural Landmarks



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	69	0	0	35	7	0	0	0	0	0	0	0	0	0	0	0	0	111
Herbaceous Openland	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Conifers	0	0	0	0	0	0	0	0	7	0	0	3	0	0	0	0	0	0	9
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14
Lowland Shrub	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Mixed Upland Deciduous	0	16	0	0	0	0	0	0	0	0	0	77	0	0	0	0	0	0	92
Northern Hardwood	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Oak	0	0	0	0	0	0	0	0	0	0	0	382	0	0	0	0	0	0	382
Tamarack	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17
Treed Bog	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	16
White Pine	0	0	0	0	0	0	15	6	0	0	0	5	0	0	0	0	0	0	26
<b>Total</b>	<b>59</b>	<b>85</b>	<b>0</b>	<b>6</b>	<b>35</b>	<b>7</b>	<b>0</b>	<b>15</b>	<b>13</b>	<b>14</b>	<b>0</b>	<b>483</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>735</b>



## Report 2 – Treatment Summary

Escanaba Mgt. Unit

Year of Entry: 2019

Acres of Harvest

Compartment 28

Total Compartment Acres: 735

Commercial Harvest - 342  
 Harvests with Site Condition - 0  
 Next Step Harvest - 0  
 Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Lowland Conifers	3	0	0	0	0	0	0	0	0	3
Lowland Deciduous	3	0	0	0	0	0	0	0	0	3
Lowland Mixed Forest	14	0	0	0	0	0	0	0	0	14
Mixed Upland Deciduous	57	0	0	0	0	0	0	0	0	57
Oak	233	0	0	0	0	16	0	0	0	249
Tamarack	17	0	0	0	0	0	0	0	0	17
<b>Total</b>	<b>326</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>342</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	342	0	0	0	0	0	0	4	0	346
Next Step	0	0	0	0	0	342	0	0	0	342
<b>Total</b>	<b>342</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>342</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>688</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
4	33028004-Cut	19.1	4122 - Oak, Pine	Sawtimber Medium	107	51-80	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches; except mark some pine to retain.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Oak, pine, aspen, and maple.											
<u>Regen:</u>											
<u>Other</u> No oak will be retained due to the high probability of wind damage that could lead to the introduction of oak wilt.											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
6	33028006-Cut	2.9	6118 - Lowland Deciduous with Cedar	Sawtimber Well	116	141- 170	Harvest	Clearcut	613 - Lowland Mixed Forest	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches. No retention will be left due to the small stand size and the threat of the emerald ash borer.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Lowland hardwood, spruce/fir, tamarack, cedar, and pine.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
11	33028011-Cut	54.0	4124 - Red with White Oak	Sawtimber Medium	107	51-80	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches; except mark some clumps/pockets of oak to retain along with some scattered pine.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Oak, pine, maple, aspen, and spruce/fir.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
14	33028014-Cut	16.6	6121 - Tamarack	Poletimber Well	112	81-110	Harvest	Clearcut	6121 - Tamarack	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches. No retention will be left due to forest health concerns.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Tamarack, spruce, pine, cedar, and lowland hardwoods.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 06/01/2017											





S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
15	33028015-Cut	13.7	6139 - Mixed Lowland Forest	Poletimber Well	87	51-80	Harvest	Clearcut	613 - Lowland Mixed Forest	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches. No retention will be left due to forest health concerns.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Aspen, balm, tamarack, spruce/fir, cedar, and lowland hardwoods.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 06/01/2017											
16	33028016-Cut	16.4	4123 - Red Oak	Sawtimber Poor	107	1-50	Harvest	Overstory Removal	4121 - Oak, Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 4" inches; except retain all pine. No oak will be retained due to the high probability of wind damage that could lead to the											
<u>Specs:</u> introduction of oak wilt.											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Oak, aspen, maple, and pine.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
17	33028017-Cut	6.5	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	107	81-110	Harvest	Clearcut with Retention	4121 - Oak, Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches; except mark some pine to retain. No oak will be retained due to the high probability of wind damage that could											
<u>Specs:</u> lead to the introduction of oak wilt.											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Oak, aspen, maple, and pine.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
18	33028018-Cut	2.5	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	103	51-80	Harvest	Clearcut	612 - Lowland Coniferous Forest	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees greater than 3" inches. No retention will be left due to the small stand size.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Spruce, tamarack, and pine.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	33028020-Cut	50.7	4199 - Other Mixed Upland Deciduous	Sawtimber Well	107	81-110	Harvest	Clearcut with Retention	4121 - Oak, Aspen	Even-Aged	Proposal

**Habitat Cut: No**                      **Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain some dense clumps of oak and some scattered pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak, aspen, maple, pine, and spruce/fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

21	33028021-Cut	53.9	4123 - Red Oak	Sawtimber Medium	107	51-80	Harvest	Clearcut with Retention	412 - Oak Types	Even-Aged	Proposal
----	--------------	------	----------------	------------------	-----	-------	---------	-------------------------	-----------------	-----------	----------

**Habitat Cut: No**                      **Site Condition:**

Prescription Cut all trees greater than 4" inches; except leave some dense clumps/pockets of oak along with some scattered pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak, aspen, maple, and pine.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

27	33028027-Cut	50.3	4122 - Oak, Pine	Sawtimber Medium	107	51-80	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Proposal
----	--------------	------	------------------	------------------	-----	-------	---------	-------------------------	------------------	-----------	----------

**Habitat Cut: No**                      **Site Condition:**

Prescription Cut all trees greater than 3" inches; except mark some pine for diversity and seed.

Specs:

Treat the oak wilt as necessary, as soon as possible.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak, aspen, maple, and pine.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

30	33028030-Cut	9.9	4123 - Red Oak	Sawtimber Medium	107	51-80	Harvest	Clearcut with Retention	4122 - Oak, Pine	Two-Aged	Proposal
----	--------------	-----	----------------	------------------	-----	-------	---------	-------------------------	------------------	----------	----------

**Habitat Cut: No**                      **Site Condition:**

Prescription Cut all trees greater than 3" inches; except mark some pine to retain for diversity and seed.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak, aspen, maple, pine, and spruce/fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018





S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
32	33028032-Cut	7.5	4122 - Oak, Pine	Sawtimber Medium	107	1-50	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Proposal

**Habitat Cut: No****Site Condition:**

Prescription Cut all trees greater than 3" inches; except mark to retain some pine for diversity and seed.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Oak, maple, pine, and spruce/fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

33	33028033-Cut	37.9	4122 - Oak, Pine	Sawtimber Medium	107	1-50	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Proposal
----	--------------	------	------------------	---------------------	-----	------	---------	----------------------------	------------------	-----------	----------

**Habitat Cut: No****Site Condition:**

Prescription Cut all trees greater than 3" inches; except mark some pine to retain for diversity and seed. Leave some of the pine in clumps and also some

Specs: scattered ones.

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Oak, aspen, maple, pine, and spruce/fir.

Regen:

Other

If oak wilt is identified, treat it as necessary as soon as possible.

Comment:

Proposed Start Date: 10/01/2018

35	33028035-NF	3.8	310 - Herbaceous Openland	Nonstocked	Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland			Proposal
----	-------------	-----	------------------------------	------------	-----------------	--------------	------------------------------------	---------------------------------	--	--	----------

**Habitat Cut: No****Site Condition:**

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

**Total Treatment  
Acreage Proposed: 345.7**

## Report 4 – Site Conditions

Escanaba Mgt. Unit  
Dustin Salter : Examiner

Compartment: 28  
Year of Entry: 2019

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5C	5E
		With Condition	Not Available			
111	111	0	0	Aspen	0	
4	4	0	0	Herbaceous Openland		
10	10	0	0	Lowland Conifers		
3	3	0	0	Lowland Deciduous		
14	14	0	0	Lowland Mixed Forest		
8	8	0	0	Lowland Shrub		
92	73	20	0	Mixed Upland Deciduous	20	
6	6	0	0	Northern Hardwood		
382	252	130	0	Oak	130	
17	17	0	0	Tamarack		
47	47	0	0	Treed Bog		
16	10	0	6	Upland Mixed Forest		6
26	21	5	0	White Pine	5	
735	574	155	6	Total Forested Acres	155	6
	78%	21%	1%	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
1	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	20	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand is mature and should be harvested, but it will be delayed for ten years to spread out the oak age classes.							
2	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Mature pine stand, but with all of the cutting prescribed in the compartment, this stand can be delayed.							



## Report 4 – Site Conditions

Escanaba Mgt. Unit  
Dustin Salter : Examiner

Compartment: 28  
Year of Entry: 2019

3	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	14	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand is mature and should be harvested, but it will be delayed for ten years to spread out the oak age classes.							
4	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	76	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Mature oak with young sub-merchantable aspen. In order to cut the oak, a high percentage of the advanced regeneration would have to be destroyed. Hold stand until aspen is merchantable.							
6	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	40	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand is being held for ten years to provide mast while the poorer quality oak stands are treated this entry.							



**Report 5 – 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
	Potential Old Growth		SCA Removal	4
<b>Comments</b> Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	31
<b>Comments</b> Does not meet SCA criteria.				





**Report 6 – 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	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4123 - Red Oak	Sawtimber Medium	76.2	107	1-50	Stand was cut between 1994 to 96 on contract 013-94-01. The oak and pine was retained. There have been a number of oak wilt epi-centers cut out of this stand since 2006. Most of the epi-centers have been less than 3 acres in size. There are some lowland pockets on the east side of the stand, they are regenerating with tamarack. There were some oak seedlings planted in the northeast portion of the stand in 2009. They had protectors placed around them. The oak should be harvested, but too much damage would be done to the advanced regeneration.
2	4130 - Aspen	Sapling Well	3.0	6	1-50	Stand was clearcut in 2011 on contract 021-09-01. Some mature pine and oak was retained. Fully stocked aspen stand with some residual mature oak and pine.
3	42200 - Natural White Pine	Sawtimber Medium	15.2	65	1-50	Stand was cut in 1992, the pine and oak was retained. The stand was cut again in 2007 on contract 023-07-01 to treat a number of oak wilt epi-centers. The pin/red oak, aspen and jack pine were cut. The stand was on FTP 33-636 to scarify, but it was never completed. The stand now has older pine, 25 year old regeneration and some 10 year old regeneration from the last harvest.
4	4122 - Oak, Pine	Sawtimber Medium	19.1	107	51-80	Stand was cut in 1995 on contract 013-94-01. The pine, oak, and beech were retained. A small amount of the pine and oak was marked to cut. Mature moderate quality red/pin oak stand, with some advanced maple regeneration. Some oak wilt epi-centers have been cut out of this stand in the last ten years. Some of the white oak has oak wilt now. The stand needs to be harvested while there is an opportunity to regenerate it.
5	4199 - Other Mixed Upland Deciduous	Sawtimber Well	19.7	107	111-140	Mature oak and red maple stand. The red oak is moderate quality and the red maple is low quality. This stand is mature and should be harvested, but it will be delayed for ten years to spread out the oak age classes.
6	6118 - Lowland Deciduous with Cedar	Sawtimber Well	2.9	116	141-170	Lowland hardwood stand with some conifers. There is a half acre highland knob in the SW corner of the stand. This stand should be harvested prior to the arrival of the emerald ash borer.
7	42200 - Natural White Pine	Sawtimber Well	4.8	106	51-80	Stand was thinned in 2011 on contract 021-09-01. Mature pine stand with some maple and aspen regeneration. The stand is too dense to get much regeneration.
8	4131 - Aspen, Oak	Sapling Well	56.8	6	1-50	Stand was clearcut in 2011 on contract 021-99-01; except some oak was pine was retained. A couple of oak wilt epi-centers were cut out of this stand, after the last harvest. Some of the white oak currently has oak wilt. Fully stocked aspen and red oak regeneration, with some residual mature oak and pine.
9	4123 - Red Oak	Sawtimber Well	13.9	107	51-80	Stand was cut in 1995 on contract 013-94-01. The majority of the oak and pine was retained. Good quality red oak stand with an understory of aspen and red maple. This stand is mature and should be harvested, but it will be delayed for ten years to spread out the oak age classes.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
10	4131 - Aspen, Oak	Poletimber Well	11.5	37	1-50	Fully stocked aspen and red oak stand, with some mature pine mixed in. Two small oak wilt epi-center were cut out of this stand in the past five years.
11	4124 - Red with White Oak	Sawtimber Medium	54.7	107	51-80	Stand was shelterwood cut in 2011 on contract 021-09-01. Since the harvest, we have cut a number of oak wilt epi-centers. Over mature oak stand that has been receiving significant damage from the winds, leading to re-introduction of oak wilt. The stand needs to be harvested while there is an opportunity to regenerate it.
12	4131 - Aspen, Oak	Poletimber Well	23.3	37	51-80	Fully stocked good quality aspen and red oak stand.
13	4310 - Pine, Oak Mix	Sawtimber Poor	6.1	107	1-50	Stand was clearcut in 2011 on contract 021-09-01; except some pine and oak was retained. The stand is regenerating with oak and red maple.
14	6121 - Tamarack	Poletimber Well	16.6	112	81-110	Mature lowland tamarack with some lowland hardwoods on the west end. About a third of the tamarack has already died or is dying from the eastern Larch Beetle. This stand should be cut as soon as possible.
15	6139 - Mixed Lowland Forest	Poletimber Well	13.7	87	51-80	Mature lowland conifer and hardwood stand. This stand is very variable in its species composition and density. This stand contains many different covertypes, but they are all too small to map out. The eastern larch beetle is causing tamarack mortality. The spruce budworm has caused some defoliation of the balsam fir and spruce. And the ash should be harvested prior to the arrival of the emerald ash borer.
16	4123 - Red Oak	Sawtimber Poor	16.4	107	1-50	Stand was cut in 1995 on contract 013-94-01. The majority of the oak and pine was retained. Currently the stand has about 40BA of mature oak and pine and a moderately stocked understory of aspen and red maple. The stand is open enough that if the oak is harvested now, there is still an opportunity to regenerate it. The stand does not have a dense understory, so most of it will not be affected.
17	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	6.5	107	81-110	Mature oak and pine stand with dense areas of younger aspen. A small oak wilt epi-center was cut out of this stand in the past 5 years.
18	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	2.5	103	51-80	Mature lowland conifer stand.
20	4199 - Other Mixed Upland Deciduous	Sawtimber Well	50.7	107	81-110	Mature oak and mixed deciduous stand. The stand needs to be harvested while there is an opportunity to regenerate it. An oak wilt epi-center was cut out of this stand in the last ten years.
21	4123 - Red Oak	Sawtimber Medium	56.2	107	51-80	Stand was cut in 1993 on contract 015-89-01. The majority of the oak and pine was retained. There have been a few oak wilt centers cut of this stand in the past ten years, including one in the spring of 2017. There is another possible epi-center on the north end. Overmature oak stand with pockets of advanced regeneration.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	42200 - Natural White Pine	Sawtimber Well	6.0	78	51-80	Stand was thinned in 2011 on contract 021-09-01. Good quality white pine stand with some hardwood regeneration in the understory.
23	4119 - Mixed Northern Hardwoods	Sapling Medium	5.9	24	1-50	Stand was thinned in 1993 on contract 015-89-01 and then again in 2009 on contract 032-09-01. Oak wilt was identified in this stand in 2015 and was clearcut on contract 022-16-01. Poorly stocked stand, which contains some maple and oak regeneration and some mature pine.
24	4131 - Aspen, Oak	Poletimber Well	7.0	45	51-80	Good quality aspen stand with oak and maple. Some of the oak is older/mature, but most of it stump sprouted when the aspen was last harvested.
25	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	15.5	6	1-50	Stand was thinned in 1990 on contract 015-89-01. In 2009 on contract 021-09-01 the stand was cut to treat an oak wilt epicenter. The white oak and pine were retained. In 2017, the white oak and some red/pin oak around the perimeter of the stand were infected with oak wilt, all oak was treated/cut. The stand now has oak and maple regeneration with some large mature pine. The stand should continue to fill in.
26	4123 - Red Oak	Sawtimber Well	40.3	107	51-80	Stand was thinned in 1990-91 on contract 015-89-01 and then again in 2012-13 on contract 032-09-01. There have also been a number of small 1 - 2 acre oak wilt epi-centers treated cut over the past 4 years. This stand is a mature oak stand and should be harvested, but it will be delayed for ten years to spread out the oak age classes.
27	4122 - Oak, Pine	Sawtimber Medium	50.3	107	51-80	Stand was cut in 1990 on contract 015-89-01. The western 3rd of the stand was also, thinned again in 2012-13 on contract 032-09-01. There was also a couple of oak wilt epi-centers treated/cut in the last 5 years. The stand is now mature oak and pine with younger aspen, maple, and oak regeneration. About half of the oak is low quality pin oak. The eastern 2/3rds of the stand has oak wilt spread throughout it. The stands basal area ranges from 10 to 100, but averages around 50. Oak wilt will be treated as necessary.
28	4319 - Mixed Upland Forest	Sawtimber Medium	9.5	107	51-80	Stand was thinned in 1990 on contract 015-89-01. In 2009, oak wilt was identified in this area. This stand was part of stand 26, prior. The oak wilt was treated/cut in 2009 on contract 032-09-01. The stand is now a mix of white pine, white oak, beech, and hemlock. There is a mix of age and size classes for each species. There is red maple and beech regeneration present.
30	4123 - Red Oak	Sawtimber Medium	9.9	107	51-80	Stand was cut in 1993 on contract 015-89-01. The majority of the oak and pine was retained. In 2009, on FTP 33-636 oak seedlings were planted and had tree protectors placed over/around them. About 1/4 to 1/3 of the protectors have seedlings in them. Mature oak stand, that needs to be harvested while there is an opportunity to regenerate it.
31	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	7.4	77	1-50	Very low quality lowland conifer stand. Most of the trees are old, but are sub-merchantable. There isn't enough volume to harvest.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>32</b>	4122 - Oak, Pine	Sawtimber Medium	7.5	107	1-50	Stand was cut in 1993 on contract 015-89-01. The majority of the oak and pine was retained. The stand was on FTP 33-636 to scarify, but it was never done. The FTP can be canceled. Mature oak stand, that needs to be harvested while there is an opportunity to regenerate it.
<b>33</b>	4122 - Oak, Pine	Sawtimber Medium	37.9	107	1-50	Stand was shelterwood cut in 2010 on contract 030-09-01. About 50 basal area of pine and oak were retained. The stand is mature oak and pine over sparse regeneration. The residual densities were too high to allow good regeneration. There is potentially some active oak wilt within the stand. This stand needs to be harvested while there is an opportunity to regenerate it. The deer have heavily browsed the regeneration from the last harvest.
<b>34</b>	4131 - Aspen, Oak	Sapling Well	9.0	6	Immature	Stand was clearcut in 2011 on contract 030-09-01. Some oak and pine was retained. Fully stocked young aspen stand with some residual mature oak and pine.



Stand	Cover Type	Acres	Managed Site	General Comments:
19	6229 - Mixed lowland shrub	7.9	No	Lowland brush stand with some lowland conifers mixed in.
29	6224 - Treed Bog	46.6	No	Treed bog with areas of lowland brush and marsh grass. The tamarack is dying out of the stand, due to the eastern larch beetle. There isn't enough volume to salvage any wood.
35	310 - Herbaceous Openland	3.8	No	High density sedge with sweet fern and some clumps of merchantable trees.