



## ESCANABA FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

**COMPARTMENT # 21 ENTRY YEAR: 2008**

**Compartment Acreage: 1210      County: Menominee**

---

*Last Revised: August 9, 2006*

**Stand Examiner:** Dustin Salter; Forester, FMFMD, Bill Rollo and Craig Albright, Wildlife Division

**Legal Description:** T35N R28W Sections 10, 15, and 22

**Management Goals:** This compartment contains a large percentage of lowland conifer swamps, some are productive and others are very poor quality. There are a number of upland areas mixed in among the lowland areas. The upland areas consist primarily of aspen, with some areas of northern hardwoods and white pine. This decade some of the lowland and upland areas will be treated. We are contemplating treatment of three lowland conifer stands. Two of these stands could be final harvested, leaving a mix of scattered seed trees. These stands would regenerate back to mix of conifer species. The third conifer stand that could be treated is a cedar/ash type. This stand could be thinned. This harvest is intended to improve the overall size and quality of all the species within the stand, while still maintaining a fully stocked stand. One mature aspen stand will be final harvested, with the intention of maintaining this acreage as aspen. One large white pine stand will receive a shelterwood cut. This cut is intended to start to regenerate the white pine on the site. The basal area will be lowered to 40 to open the stand up enough to allow for enough sunlight. After this stand is harvested, this site will be burned to eliminate the balsam and spruce advanced regeneration and also to expose bare mineral soil to allow for white pine to regenerate. There will also be a lower quality hardwood stand cut, using a shelterwood treatment. This stand will be converted to a white pine stand over the next few rotations. This site will also be burned after it is harvested.

**Soil and Topography:** This compartment contains: Tawas-Deford complex; Lupton-Tawas association; Mancelona-Nadeau complex; Cathro-Solona-Onaway complex; Cathro-Ensley complex; among a few other minor soil types. The lowland areas are comprised primarily of poorly drained black muck over fine sand and sandy loam. The upland areas contain some rolling terrain which is well drained. These areas are primarily loamy sand and black loam over gravelly sand and sandy loam.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** This compartment is separated from any other state land by about a half a mile on two sides and on the other two sides it is all private property. There are a few private holdings within this compartment. There are no developed structures within the compartment on state land. But, there are a number of private houses and camps in very close proximity to this compartment. The primary land use is hunting, camping, and ORV riding. There are a number of family farms to the east of the compartment.

**Unique, Natural Features :** None known

**Archeological, Historical, and Cultural Features:** None known

**Special Management Designations or Considerations:** None

**Watershed and Fisheries Considerations:** Longrie Lake is within this compartment. The Shakey River and Longrie Creek flow through parts of this compartment as well.

**Wildlife Habitat Considerations:** *Ecological Context:* This compartment is at the boundary of 2 landscape ecosystems: sandy outwash plains and a broad plain of loamy ground moraine. This compartment tends toward the latter, although drumlin ridges are not prominent here as elsewhere farther east. Historically, upland ridges were

covered with northern hardwood forests of sugar maple, beech, hemlock, cedar, and yellow birch. Between the ridges, swamps of cedar, tamarack, black spruce, or bog were common. Small knolls within wetlands were often dominated by hemlock and white pine. Wind throw was the most common natural disturbance regime. During the past 100 years much of this landscape was converted to agriculture. Aspen forest increased greatly and hemlock and white pine declined due to early-day logging practices.

*Recommendations:* During the last year of entry, 10 years ago, a cluster of stands at both the north and south ends of the compartment were designated as a Special Conservation Area (SCA) to promote potential old growth conditions. This decade we propose to remove an aspen stand from SCA designation in the north so it can be harvested and regenerated. SCA status will remain around Longrie Lake, Longrie Creek, and Little Shakey Creek to provide mature forest habitat in riparian corridors for wildlife and aesthetic benefits. For example, a great blue heron nesting rookery will be protected by this designation. In addition to a couple of aspen regeneration harvests, which will benefit early successional wildlife (ruffed grouse, woodcock, deer), 2 stands will be managed to increase white pine regeneration through harvest treatments and prescribed burning. White pine and other upland conifer habitat has been greatly diminished on this landscape. Three lowland conifer stands have been proposed for treatment, but discussion will continue at the final compartment review.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of primarily peat and muck. The glacial drift thickness varies between 10 and 50 feet. Beneath the glacial drift is the Cambrian Munising Formation. The Munising may have been used as a building stone in the past and it overlaps Precambrian aged rocks, which may have metallic and nonmetallic mineral potential. All State land is currently leased for metallic mineral exploration. A gravel pit is located in Section 10, but potential is limited. No economic oil and gas production has been found in the UP. There are no developed pits within this compartment.

**Vehicle Access:** Vehicle access is fairly good through the north two-thirds of the compartment. The Longrie Lake road runs through the northern half of the compartment. This road is a system road. There are some two-track roads that branch off through parts of the compartment. The land in section 22 on the South end can only be accessed by vehicle through private property.

**Survey Needs:** None

**Recreational Facilities and Opportunities:** There are no developed recreational facilities within this compartment. The primary recreational opportunities are hunting, camping, fishing, and ORV riding.

**Fire Protection:** There are only a few stands within this compartment that have potential for a large fire. A large percentage of the compartment is wet throughout most of the year. There is also an abundance of water resources present for fire suppression.

**Additional Compartment Information:** Stands 11,53, and 24 had no agreement reached at the Pre-Review and will be moved up to the Compartment Review.

**\*\*\*\* Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

- Cover Type by Age Class**
- Cover Type by Management Objective**
- Compartment Volume Summary**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**

**\*\*\*\* The following information is displayed on the attached compartment maps:**

- Base feature information, stand numbers, cover types**
- Proposed treatments**
- Proposed road access system**

## **Suggested potential old growth**

09/01/2006 9:15:39 AM

Michigan Department of Natural Resources - Operations Inventory System  
Individual Compartment Report

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 21

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	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	150-159	All Aged	Total
Aspen		90	96	14	7	98	30		1										336
Black Spruce										15									15
Cedar												299	90		4				393
Grass	7																		7
LowInd Brush	31																		31
LowInd Poplr						11													11
Marsh	22																		22
Mx Swmp Cnfr			14		3	73			11		7	5							113
Non Stocked	2																		2
Paper Birch						3													3
Spruce Fir			17		4	1													22
Swamp Hrdwds						20	42		5	8									75
Tamarack			3	4															7
Upland Brush	11																		11
Upland Hdwds										5		4						83	92
Water	14																		14
White Pine												2						54	56
<b>Total</b>	<b>87</b>	<b>90</b>	<b>130</b>	<b>18</b>	<b>14</b>	<b>206</b>	<b>72</b>		<b>17</b>	<b>28</b>	<b>7</b>	<b>310</b>	<b>90</b>		<b>4</b>			<b>137</b>	<b>1210</b>

09/01/2006 9:15:42 AM

Michigan Department of Natural Resources - Operations Inventory System  
Individual Compartment Report

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 21

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	336																										336
S Black Spruce		15																									15
C Cedar				393																							393
G Grass					7																						7
L LowInd Brush									31																		31
P LowInd Poplr										11																	11
N Marsh											22																22
Q Mx Swmp Cnfr												113															113
X Non Stocked													2														2
B Paper Birch															3												3
F Spruce Fir																			22								22
E Swamp Hrdwds																				75							75
T Tamarack																					7						7
U Upland Brush																								11			11
M Upland Hdwds																								84	8	92	
Z Water																									14	14	
W White Pine																										56	56
Total	336	15		393	7				31	11	22	113	2		3				22	75	7		11	84	14	64	1210

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 21

**Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS**

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	5704 Cds	Hardwood	2174 Cds
Hardwood	252 Mbf	Hardwood	10 Mbf
Softwood	13577 Cds	Softwood	808 Cds
Softwood	777 Mbf	Softwood	258 Mbf
Sum TotVol	21339 Cds	Sum CutVol	3518 Cds
<b>Total Cmpt Acres</b>		Acres Proposed For Cut.....	
1210		174	

**ESCANABA FOREST MGT UNIT**

**Proposed Treatments  
With NO Limiting Factors**

**Compartment: 21**

**Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
11	Q6	11	70	40	mixed swamp conifer	mature	seed tree	1	natural regeneration	
<p>comnts Fmd : The spruce and tamarack are dying out of this stand and the cedar is very poor quality. All species should be removed; except leave some scattered spruce, tamarack, and cedar seed trees throughout the stand. And either mark some white pine to keep or leave all of them, depending on the overall quantity and quality. This stand will be managed for Q. A regeneration mix of T-S-F-C-E is acceptable. After the pre-review no decision was made on this stand - Wildlife was not in favor of cutting this.</p> <p>Wld : Cedar comprises 47% of this stand (70BA). This compartment had numerous strip cuts done in cedar in the late 60's, early 1970's. 30+ years later, these stands are still Q or E-types with no replacement of the cedar that was cut. Parts of this stand is heavy with white cedar. White-tailed deer are bedding here and ruffed grouse were drumming in this stand during time of inspection. WLD recommends not cutting this stand. Discuss at Compartment Review.</p>										
23	M6	8		70	white pine	unevenaged	shelterwood-seed	1	natural regeneration	
<p>comnts Fmd : This stand should be managed for W. This should be done by harvesting all but 30 to 40 BA. The 30 to 40 BA should consist of all of the current overstory species; except balsam fir, aspen and balm. Enough W should be left to seed in the site. This stand should be burned after it is harvested to expose the mineral soil. White Pine is the main objective, but a mix of W, M, C, or Fs is acceptable also. After the pre-review it was decided to treat this stand as was originally prescribed; except all cedar and hemlock should be left. The portion of this stand to the North and East of the road that runs through this stand is to be combined with stand 37 to the North to provide some large white pine close to the heron rookery.</p> <p>Wld : It was agreed that 40BA was to be left and no cutting of cedar or hemlock. Concur with FMFMD.</p>										
24	Q6	7	96	35	mixed swamp conifer	two aged	seed tree	2	natural regeneration	
<p>comnts Fmd : This stand was cut in 1990, with a management objective of F. This has only been partially successful. In the areas where the BA was lowered to less than 30, there is sufficient F regen. But throughout the rest of the stand the BA ranges from 40 to 160. The BA should be evened out throughout the stand. Leaving only 20 to 30 BA throughout. The remaining seed trees should be a mix of the current overstory species. After the pre-review no decision was made. Wildlife was not in favor of cutting this stand.</p> <p>Wld : For the last entry period, the objective of F was not met for the entire stand. The areas of higher BA is heavier in hemlock and white cedar. After walking through the stand, it appears that the prior prescription of this stand was to leave the hemlock and cedar islands. It is very difficult to regenerate hemlock and cedar. These islands provide added diversity to the stand. WLD recommends keeping these hemlock/cedar islands with the higher BA. Discuss at Compartment Review.</p>										
36	A6	40	45	70	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : This stand should be harvested, removing all species: except leave some white pine. After the pre-review it was decided to final harvest this stand; except leave all oak and white pine.</p> <p>Wld : Concur with FMFMD.</p>										
41	A1	8	7	65	aspen (upland)	sparse		0	other - specify in remarks	
<p>comnts Fmd : The majority of this stand has not regenerated. There are a few clumps of aspen and balm regen, but most of the stand is filled with bracken fern and raspberries. This stand is high and dry. We should scarify this site and let the trees from the adjacent stands seed in this site. I think this stand was cut in the winter and did not get any scarification when the stand was cut. This stand should fill in with Fb, Fs, and W; primarily. Avoid the clumps of aspen and balm regen when scarifying the stand. No seed trees were left in this stand, when it was cut.</p> <p>Wld : Concur with FMFMD.</p>										
53	C6	24	103	26	cedar	immature	thinning	2		
<p>comnts Fmd : This stand is a mix of cedar and ash. More of an upland cedar stand. This stand should be marked down to 80 BA. This should be done by removing some of all species and in all size classes. This harvest is intended to improve the overall size and quality of all of the species, while still maintaining a fully stocked stand. There are some pockets of low quality cedar, within this stand that I will not mark through. After the pre-review there was no decision made. Wildlife was not in favor of cutting this stand.</p> <p>Wld : This compartment had numerous strip cuts done in cedar in the late 60's, early 1970's. 30+ years later, these stands are still Q or E-types with no replacement of the cedar that was cut. The west portion is a deer yard. WLD strongly disagree with the cutting of cedar until reliable methods to regenerate this tree specie are established. Discuss in Compartment Review.</p>										
74	W9	54		65	white pine	unevenaged	shelterwood-seed	1	natural regeneration	
<p>comnts Fmd : This stand should be treated to regenerate the white pine. Currently there is only balsam and spruce regeneration. Harvest all but 30 to 40 BA of this stand. The 30 to 40 BA should mainly consist of WP, but there should be a component of most of the overstory species left. Cut all aspen, balm, and balsam fir. This stand should be burned following harvest to prepare the seedbed and eliminate F regeneration. W.P. is the desired species, but any mix of the current overstory species is acceptable as long as the largest component of regen is W.P.. After the pre-review it was decided to do the original treatment; except leave all cedar and oak. Use the cedar spec for any cedar that might need to be cut in order to harvest the designated species. Also 40 BA will be left throughout the stand, with the majority of it being large mature white pine.</p> <p>Wld : No cutting of upland cedar and oak, except for the NE corner using the cedar spec (double the stumpage). Favor leaving supercanopy trees, the 40BA should consist mainly of white pine. If the perscription fails, mechanically plant white pine or seed. Concur with FMFMD.</p>										

**ESCANABA FOREST MGT UNIT**

**Proposed Treatments  
With NO Limiting Factors**

**Compartment: 21**

**Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
407	G0	5		55	grass	nonstocked		0	opening maintenance	

comnts Fmd : This stand should be burned when stands 23 and 74 are burned, to maintain the grassy opening.

Wld : This landscape historically has had wildfires. If possible, burn this opening when other understory burns in this compartment are being implemented. Fire acts as a natural fertilizer, returning nutrients to the soil. It also reduces the competition for space and sunlight, which can be limited by dead plant material. Fire will also favor fire-dependant plant species.

**Total Acres..... 157**

**ESCANABA FOREST MGT UNIT**

**Proposed Treatments  
With Limiting Factors**

**Compartment: 21**

**Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
6	A6	30	49	80	aspen (upland)	mature	final harvest	1	natural regeneration	

TREATMENT LIMITING FACTORS: Adjacent landowner denies access

comnts Fmd : After pre-review it was decided to remove this stand as a SCA and harvest this mature aspen stand. Cut all species; except hickory and oak. Leave a 300 foot buffer where the topography isn't steep enough to prevent beavers from daming up the Shakey Creek. This parcel is limited factored, because the only access is through the private land to the West.

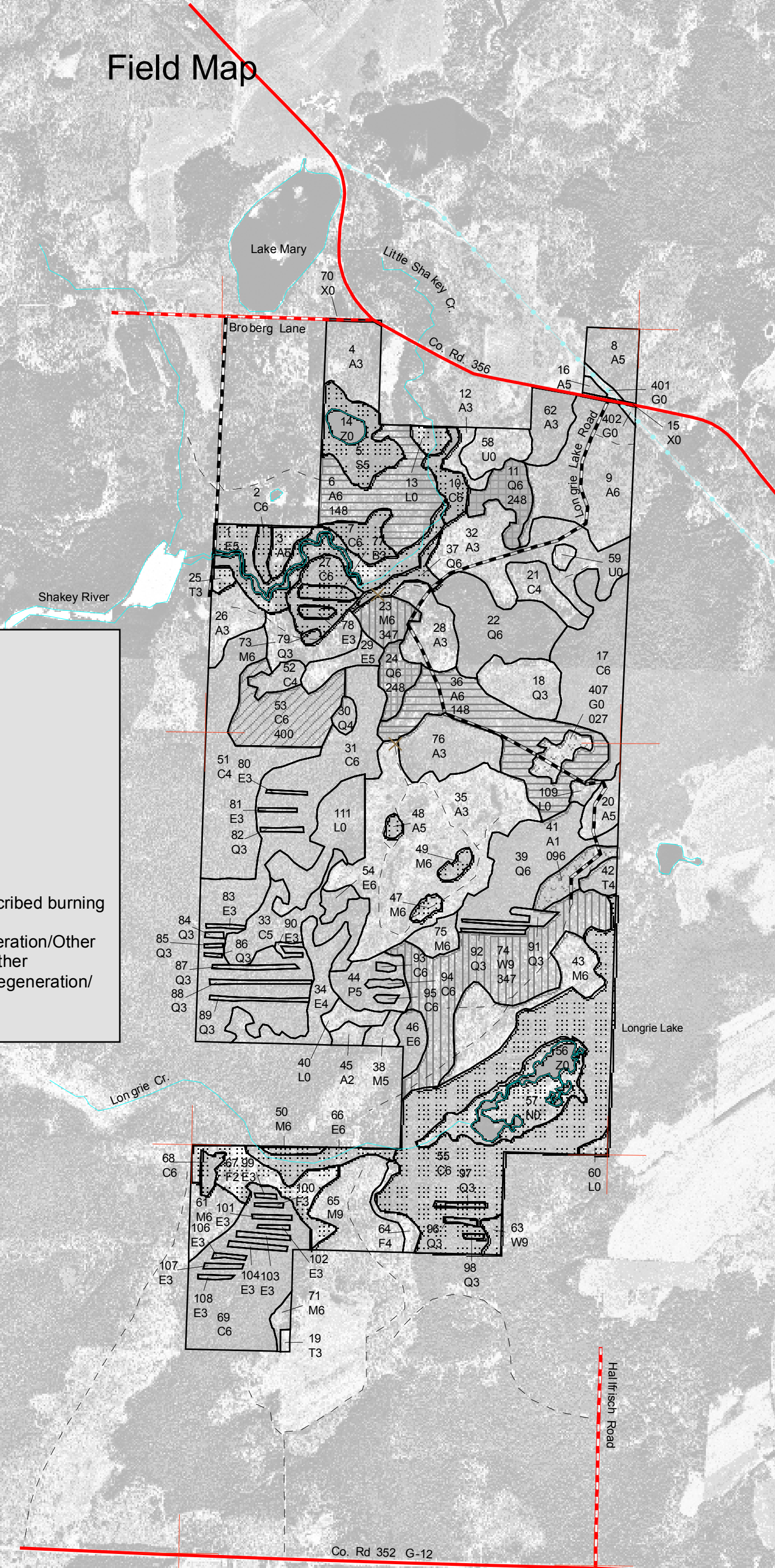
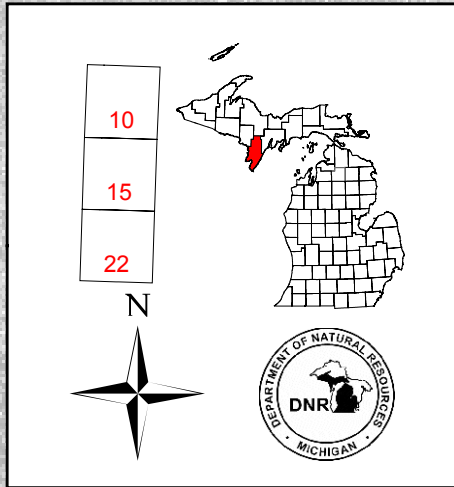
Wld : Concur with FMFMD.

---

**Total Acres..... 30**

# Field Map

Compartment 21  
 T35N, R28W, Sec. 10, 15, 22  
 County: Menominee  
 Unit: Escanaba  
 YOE: 2008  
 Acres: 1,210 GIS Calculated  
 Stand Examiner: Dustin Salter  
 Map Revised: 8/22/2006  
 Map Phase: Pre-review



## Legend

- Miris Corners
- County Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Powerlines
- Water Features
- Berms
- Stand Boundary
- Biodiversity/Old growth area
- 027 - Opening maintenance/Prescribed burning
- 096 - Other
- 148 - Final harvest/Natural regeneration/Other
- Seed tree/Natural regeneration/Other
- 347 - Shelterwood-seed/Natural regeneration/Prescribed burning
- 400 - Thinning

