



**ESCANABA FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 18 ENTRY YEAR: 2009
Compartment Acreage: 1,719 County: Menominee

Last Revised: July 6, 2007

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

Legal Description: T36N R28W Sections 22, 23, 26, 27, and 34

Management Goals: This compartment is a mix of upland aspen, oak, and grass stands with a number of smaller lowland conifer stands mixed in. There will be a number of aspen stands that will be final harvested this decade, we will retain the majority of the pine and mark some of the larger oak. Two lowland conifer stands will be harvested, managing them for a mix of the current overstory species. A poor quality red maple stand mixed with oak and aspen will also be final harvested, managing it for a mix of the current species. One oak stand is prescribed to be harvested, but as of the pre-review we had not decided if it would be. Three large grassy openings will be burned, when funding is available.

Soil and Topography: Topography is level with some gently rolling hills. Soils include well drained loamy fine sand over loamy sand, black muck over sandy loam, and black muck over gravelly sandy loam.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is located in the middle 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 West sides. There are a number of private parcels around this compartment. The primary use of this land is for recreational purposes, but there is some farm land scattered around this compartment.

Unique, Natural Features (include only non-site specific and non-sensitive information): Cooper's Milk Vetch is known to occur in this compartment.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: The Shakey River and the Little Shakey Creek flow through this compartment with a number of small creeks and drainages flowing into them. Part of Linnbeck Lake is also within the compartment boundaries.

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 compartment is largely comprised of aspen forest intermixed with large grass openings and a few pockets of lowland conifer forest. One oak stand is present, and oak trees are a common

component of aspen and hardwood stands. This compartment might best be managed for early successional wildlife species---those that utilize aspen forest, upland brush, and savanna-like systems. Accordingly, several aspen stands are proposed for harvest and regeneration. A component of large oak will be retained for mast in these stands, and some smaller oak will be harvested in an attempt to maintain it in the future stands through stump sprouting. Three large grass openings are proposed for prescribed burns to reduce encroachment of trees and stimulate the herbaceous species. In addition, a 4th large opening near a private property boundary will be maintained through timber harvest. Forest managers would like to plant spruce in 2 poorly-stocked stands, which is agreeable to Wildlife Division, but a tree planting prescription for the opening mentioned above was removed due to the value of open land habitats for wildlife. The historic "Linnbeck Lake Hunter Walking Trail" may be maintained by Wildlife Division this decade for grouse and woodcock hunters. Several forest stands along Shakey River, Little Shakey Creek, and Linnbeck Lake will remain designated as "Special Conservation Areas" to provide mature riparian wildlife habitat along these water bodies.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of an end moraine of medium-textured till and medium-textured glacial till with drumlins. The glacial drift thickness varies between 10 and 50 feet. The Cambrian Munising Formation underlies the glacial drift. The Munising may have been used as a building stone previously and it overlaps Precambrian aged rocks, which may have metallic and nonmetallic mineral potential. This compartment has been leased for metallic exploration and Sections 34 through 36 are currently leased. A gravel pit is located in Section 25 and potential is good on the upland drumlins. No economic oil and gas production has been found in the UP.

Vehicle Access: There is limited public access into the majority of this compartment. The South piece and the southeast part of the compartment can be accessed off of the Swanson Road and the Linnbeck Lake Road. The majority of the compartment can only be accessed by the neighboring landowners or if someone wants to walk into it from across a bridge on the Little Shakey Creek. This bridge is in need of replacement to allow logging equipment across it.

Survey Needs: Approximately 9 corners will need to be set.

Recreational Facilities and Opportunities: There are no developed facilities within the compartment. The primary recreational uses are hunting, fishing, four wheeling, and snowmobiling.

Fire Protection: A large percentage of the compartment is very dry and could support a fast moving fire throughout most of the year. There are a number of lowland areas that provide natural fire breaks across the landscape. There are a number of good water sources available.

Additional Compartment Information: There might be a potential epi-center of oak wilt within stand 28. Treat the oak wilt as needed throughout the compartment and as money is available.

****** 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

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

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 18

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		96	240	224	33	22	27	96	101										839
Black Spruce										7									7
Cedar											66		27	113					206
Grass	164																		164
LowInd Brush	81																		81
LowInd Poplr		17																	17
Marsh	3																		3
Mx Swmp Cnfr						13			86	39		32							170
Non Stocked	2																		2
Oak									5	56									61
Spruce Fir		21	28																49
Swamp Hrdwds								17			15								32
Upland Hdwds									77	9									86
Water	2																		2
Total	252	134	268	224	33	35	27	113	269	111	81	32	27	113					1719

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

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 18

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	839																										839
S Black Spruce		7																									7
C Cedar				206																							206
G Grass					164																						164
L Lowlnd Brush									81																		81
P Lowlnd Poplr										17																	17
N Marsh											3																3
Q Mx Swmp Cnfr												170															170
X Non Stocked													2														2
O Oak														44					17								61
F Spruce Fir																			49								49
E Swamp Hrdwds																				32							32
M Upland Hdwds	39																							47			86
Z Water																									2		2
Total	878	7		206	164				81	17	3	170	2	44					66	32					47	2	1719

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: **18**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	10286 Cds	Hardwood	7517 Cds
Hardwood	402 Mbf	Hardwood	240 Mbf
Softwood	10068 Cds	Softwood	290 Cds
Softwood	312 Mbf	Sum CutVol	8287 Cds
Sum TotVol	21782 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	363
1719			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	DFD Status
5	A6	22	41	60	aspen (upland)	immature	final harvest	1	natural regeneration	
<p>comnts Fmd : Aspen is mature and is beginning to die out. Final harvest this stand; leaving red and white pine, white oak, and some scattered large diameter red oak. Also, leave all oak < 5" and all thornapple and blue beech. By cutting the smaller diameter red oak it will allow them to stump sprout and with leaving the large diameter red oak there will still be mast production within the stand. This stand is being managed for a mix of aspen and oak. # After pre-review it was decided to treat as prescribed; except mark oak to leave. Wildlife will assist.</p> <p>Wld : Concur with FMFMD. Will assist in marking of the oak trees to leave.</p>										
14	A6	96	58	62	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : This stand is mature. Final harvest the stand; leaving white oak, the majority of the pine, red oak greater than 16", and a buffer along the two marshes in the south half of the stand. # After pre-review it was decided to treat as prescribed; except mark oak to leave. Wildlife will assist. Leave a 100 foot buffer along the Shakey River.</p> <p>Wld : Concur with FMFMD. Wildlife will assist in marking the leave oak.</p>										
16	Q6	32	100	45	mixed swamp conifer	mature	seed tree	2	natural regeneration	
<p>comnts Fmd : Very poor quality stand. The majority of the species within the stand are mature. Final harvest this stand; leaving a mix of seed trees throughout. Manage this stand for a mix of species that are currently present. There is a drainage on the East side of the stand that will need to be buffered. This drainage flows into Little Shakey Creek.</p> <p>Wld : Concur with FMFMD. As a reference, use the Within-Stand Retention Guidelines. This document includes targeted retention characteristics that may include; diversity (tree species, vertical, horizontal), mast trees, cavity trees/standing dead/down wood, retention, and additional characteristics.</p>										
17	S6	7	83	48	black spruce-swamp	mature	seed tree	1	natural regeneration	
<p>comnts Fmd : Very nice quality mature spruce. Final harvest this stand; leaving elm, white pine, and spruce, tamarack, and cedar seed trees. Leave a 50 foot buffer along Little Shakey Creek. This stand will be managed for a mix of S and T.</p> <p>Wld : Concur with FMFMD. As a reference, use the Within-Stand Retention Guidelines. This document includes targeted retention characteristics that may include; diversity (tree species, vertical, horizontal), mast trees, cavity trees/standing dead/down wood, retention, and additional characteristics.</p>										
23	A6	27	54	60	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : Poor quality aspen-over mature. Final harvest this stand; leaving cherry, oak, pine, and a buffer along the drainage flowing out of stand 24. Leave a 100 foot buffer along Little Shakey Creek.</p> <p>Wld : Concur with FMFMD. As a reference, use the Within-Stand Retention Guidelines. This document includes targeted retention characteristics that may include; diversity (tree species, vertical, horizontal), mast trees, cavity trees/standing dead/down wood, retention, and additional characteristics.</p>										
27	A6	72	77	60	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : Mature aspen, was held last decade. Final harvest this stand; leaving cherry, pine, and red oak greater than 14". # After pre-review it was decided to treat as prescribed; except mark oak to leave. Wildlife will assist. Leave a 100 foot buffer along Little Shakey Creek where there is not a steep bank.</p> <p>Wld : Concur with FMFMD. Wildlife will assist in green marking the oak leave trees. After sale is completed, WLD may plant the hunting walking trail to a wildlife mix and mow prior to fall hunting seasons. This will only occur if funding and personnel is available.</p>										
33	M6	39	72	65	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : Poor quality red maple and the aspen is in a state of decline. Final harvest this stand; leaving pine, white oak, and some large diameter oak. This stand will be managed for a mix of A, Mr, and Oak. By cutting the smaller diameter oak they will stump sprout and by leaving the larger oak they will provide mast. # After pre-review it was decided to treat as prescribed; except mark oak to leave. Wildlife will assist.</p> <p>Wld : Concur with FMFMD. Wildlife will assist in green marking the oak leave trees.</p>										
34	O9	39	81	65	oak	mature	shelterwood-seed	2	natural regeneration	
<p>comnts Fmd : This stand should be managed for a mix of oak and maple. The majority of the oak still is young and healthy enough to stump sprout vigorously. Cut all species, leaving 20 BA of oak throughout the stand. The majority of the oak should be the larger diameter ones, to continue to produce mast. If regeneration fails, mechanically scarify the site after it is harvested. # After the pre-review no decision was made on whether to treat this stand. Wildlife is not sure if they want to harvest this stand or how it will be harvested. They are concerned with the amount of oak wilt we are treating on the unit. Don K. was to put together an acreage list of the oak wilt sales we have did in the past 4 to 5 years. I tried to compromise with lowering the stand BA to 50 or 60 and create some gaps within the stand.</p> <p>Wld : Discuss at compartment review.</p>										

ESCANABA FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 18

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
36	F1	15	15	55	spruce-fir (uplands-including upland black spruce)	sparse		0	planting	
<p>comnts Fmd : Area was disced in Sept. of 01, and direct seeded on 10-29-01 to a mixture of red and white pine seed, and a bag of acorns, under FTP 33-533. The seeding failed, this FTP should be canceled. There are two high of deer numbers to plant pine, so we should trench and plant white spruce. In stand 99 the white spruce has seeded in well and is growing good.</p> <p>Wld : Concur with FMFMD.</p>										
75	A4	29	71	60	aspen (upland)	mature	final harvest	2	planting	
<p>comnts Fmd : Part of this stand was trenched and seeded with a mix of pine species in 2002, this failed. This seeding under FTP 33-535 should be canceled. I combined what was stand 407 and stand 75 into one stand. There are scattered clumps of mature aspen throughout both of these stands. The aspen, maple, and balsam should be harvested; leaving the oak and cherry. After the aspen is cut another FTP should be made out to trench and plant white spruce in the areas that did not fill in with aspen. This will probably be at least half of the stand. # At the pre-review wildlife decided they did not want to plant this stand this decade, even though it was on an FTP to plant last decade. They are okay with harvesting the aspen, maple, and balsam but do not want to plant this stand. If stand 34 is not treated this stand does not have enough volume in it to have a logger secure permission from the private landowners to gain access. So, do not treat this stand if stand 34 is not treated. I would still prefer to plant this stand, because that was the plan for the area last time around.</p> <p>Wld : Discuss at Compartment Review.</p>										
403	G0	105		60	grass	nonstocked		0	opening maintenance	
<p>comnts Fmd : This stand is prescribed for a prescribed burn. DO NOT burn through the aspen stands that are mapped out. Planting of fruit bearing shrubs was not brought up during the pre-review.</p> <p>Wld : A prescribed burn will be conducted within this opening. May want to put a plow-line around the aspen patches to discourage new aspen growth. This burn will benefit a variety of wildlife species.</p>										
405	G0	25		60	grass	nonstocked		0	opening maintenance	
<p>comnts Fmd : This stand is prescribed for a prescribed burn.</p> <p>Wld : A prescribed burn will be conducted within this opening. This burn will benefit a variety of wildlife species.</p>										
412	G0	31		60	grass	nonstocked		0	opening maintenance	
<p>comnts Fmd : This stand is prescribed for a prescribed burn.</p> <p>Wld : A prescribed burn will be conducted within this opening. Would like to maintain this opening, with the other large openings being prescribed. This burn will benefit a variety of wildlife species, including many game species such as grouse, pheasants, and white-tailed deer.</p>										
Total Acres.....		539								

ESCANABA FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 18

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
74	O4	17	81	65	spruce-fir (uplands-including upland black spruce)	sparse		0	planting	

TREATMENT LIMITING FACTORS: Retention of stand for regeneration purposes (ie. shelterwood)

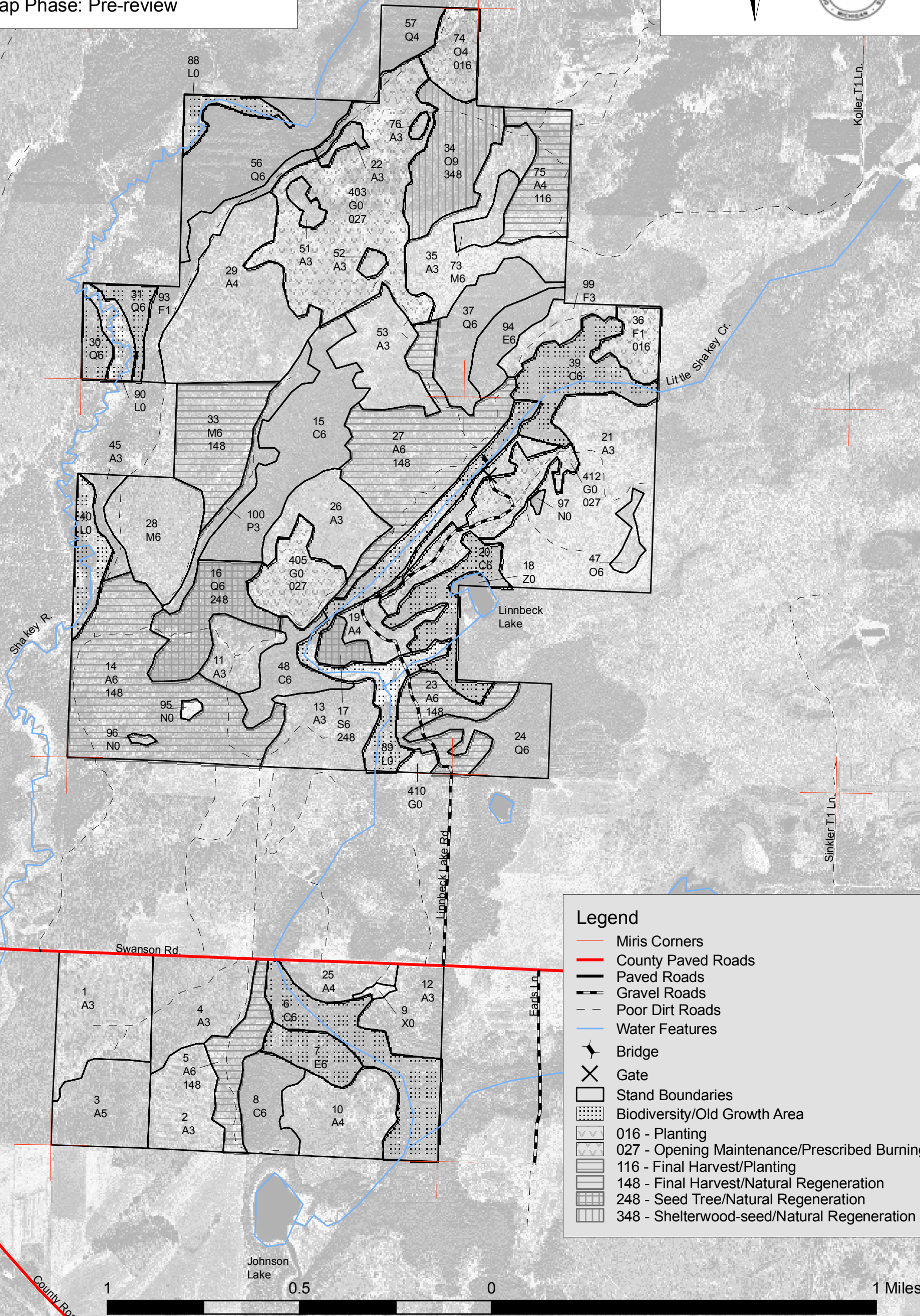
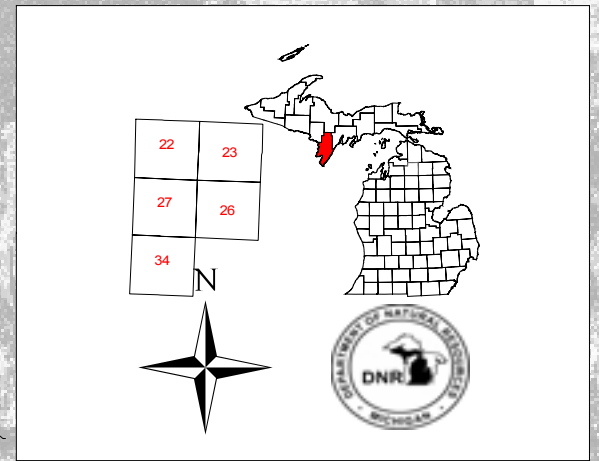
comnts Fmd : Stand was cut in 2000, under contract 28-99-01. The stand was to be trenched and seeded with a mix of pine species, under FTP 33-536. The area was trenched and seeded to a mix of R, W and J in June of 2002. The seeding failed, the old FTP should be canceled and a new one created. There is to high of deer numbers to plant pine, so we should trench and plant white spruce. The residual oak will be left for diversity and mast and also a seed source.

Wld : Concur with FMFMD.

Total Acres..... 17

Compartment 18
 T36N, R28W, Sec. 22, 23, 26, 27, 34
 County: Menominee
 Unit: Escanaba
 YOE: 2009
 Acres: 1,719 GIS Calculated
 Stand Examiner: Dustin Salter
 Map Revised: 7/17/2007
 Map Phase: Pre-review

Field Map



Legend

- Miris Corners
- County Paved Roads
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Water Features
- Bridge
- Gate
- Stand Boundaries
- Biodiversity/Old Growth Area
- 016 - Planting
- 027 - Opening Maintenance/Prescribed Burning
- 116 - Final Harvest/Planting
- 148 - Final Harvest/Natural Regeneration
- 248 - Seed Tree/Natural Regeneration
- 348 - Shelterwood-seed/Natural Regeneration

