



**TRAVERSE CITY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 157 ENTRY YEAR: 2010

Compartment Acreage: 2768 County: Kalkaska

Stand Examiner: G.R.Grieve

Legal Description: T26N, R7W, Sec. 6; T26N, R8W, Sec's. 1, 2 & 3; T27N, R7W, Sec. 31; T27N, R8W, Sec's. 34, 35 & 36.

Management Goals: Multiple Use

Soil and Topography: Mostly Croswell, Au Gres & Rubicon soils. Also Tawas, Bowstring, AuSable, Roscommon, Leafriver, Kalkaska & Tawas soils. Upland areas are flat & well drained sands.

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

Mostly block state ownership. Multi ownership 80 in section 34 is only private in holding. The state has an in holding of private around Loon Lake.

Unique, Natural Features (include only non-site specific and non-sensitive information):

The North Branch Boardman River & the tributary, Crofton Creek, are part of the Natural Rivers system.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):

None listed on the Archeological Features list. There is an old homestead site near Loon Lake.

Special Management Designations or Considerations: North Branch Boardman River, Crofton Creek & Loon Lake.

Watershed and Fisheries Considerations: This compartment contains a variety of unique and critical watershed components as described in the **Unique, Natural Features** and **Special Management Designations or Considerations** sections. Therefore, please conform to all the BMPs listed in the Water Quality Management Practices on Forest Land (1994) handbook and the Natural Rivers vegetative buffers. In addition, do not harvest any trees in riparian areas that have the potential to provide woody debris or shade to the streams or lakes within this compartment. The vegetation buffer should compliment the natural contours and vegetation components of the Boardman River valley.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. The Coldwater does not have a current economic use. Gravel pits are not located in the area, but there should be some potential. The Compartment is within the prolific Niagaran reef trend and most State minerals are leased. Part of Section 34 has been nominated for the October 2008 lease auction.

Vehicle Access: No new access needed or closures at this time.

Survey Needs: None known at this time.

Recreational Facilities and Opportunities: Loon Lake needs a safe boardwalk type dock to replace the pellet dock which is there now.

Fire Protection: Initial attack responsibilities are from the Kalkaska Field Office. Sections 1,2, & 3 T26N R8W are in Zone Dispatch 6. On High or above days, suppression Units from Traverse City and Manton respond to fire, and Units from Evart, Platte River, and Grayling respond towards the fire. VFD protection is from Kalkaska Twp. for the northern part of the compartment, and South Boardman VFD for the southern portion. Urban innerface is not too much of a concern, with only a few scattered residences. Travel time from Kalkaska is good, and access is acceptable.

Additional Compartment Information:

****** 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

11/12/2008 8:49:05 AM

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

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 157

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		116	32	85		279	57												569
Cedar								5	50			142							197
Grass	58																		58
Hemlock								14		6									20
Jack Pine		77	53	37	173		219	9											568
LowInd Brush	10																		10
Marsh	24																		24
Mx Swmp Cnfr														24					24
Non Stocked	1																		1
Oak						11			48										59
Red Pine			76	71		94	35											146	422
Swamp Hrdwds							19		62										81
Treed Bog	4																		4
Upland Brush	227																		227
Upland Hdwds								14	5	57								94	170
Water	16																		16
White Pine						58	23	5										232	318
Total	340	193	161	193	173	442	353	47	165	63		142		24				472	2768

11/12/2008 8:49:10 AM

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

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 157

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	569																										569	
C Cedar				197																							197	
G Grass					56		2																				58	
H Hemlock						20																					20	
J Jack Pine							563									5											568	
L Lowlnd Brush									10																		10	
N Marsh											24																24	
Q Mx Swmp Cnfr												24															24	
X Non Stocked													1														1	
O Oak														59													59	
R Red Pine																422											422	
E Swamp Hrdwds																				81							81	
D Treed Bog																							4				4	
U Upland Brush																								227			227	
M Upland Hdwds																								170			170	
Z Water																									16		16	
W White Pine																										318	318	
Total	569			197	56	20	565		10		24	24	1	59		427				81			4	227	170	16	318	2768

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: **157**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	7333 Cds	Hardwood	1489 Cds
Hardwood	1927 Mbf	Hardwood	105 Mbf
Softwood	18216 Cds	Softwood	1514 Cds
Softwood	4692 Mbf	Softwood	1001 Mbf
Sum TotVol	38787 Cds	Sum CutVol	5215 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	353
2768			

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 157 Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
9	M6	7		54	northern hardwood	unevenaged	selection	2		
comnts Fmd : 8/19/2008 Retain all mast producing trees. (Grieve) 1/29/2008 Selection cut needed, small sale, water table down.. (Grieve) 4/5/1999, Hemlock also in understory. Stand is wet not practicale to harvest at this time. (Grieve)										
10	R6	1	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 This stand on the north side of the access road has never been treated. 3rd row thinning this time around. This parcel would be best served if it was sold to the oil & gas company. (Grieve)										
16	R6	5	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
18	R6	2	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 3rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
21	R6	2	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
23	J6	1	58	56	red pine	mature	final harvest	1	planting	
comnts Fmd : 3/21/2008 Missed last time area was cut. Try to do now but very small. May need to leave as a retention. (Grieve) 5/4/1999, Jack pine stopped growing about ten years ago. Fire hazard to gas plnt, cut. (Grieve)										
24	R6	5	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
26	R6	2	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
30	R6	3	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
37	R6	6	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
38	R6	3	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
39	R6	3	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
41	R6	6	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										
44	R6	3	45	56	red pine	immature	thinning	1		stand with fdf potential
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. (Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)										

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 157 Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status	
46	R6	3	45	56	red pine	immature	thinning	1		stand with fdf potential	
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)											
48	R6	2	45	56	red pine	immature	thinning	1		stand with fdf potential	
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)											
51	R6	3	45	56	red pine	immature	thinning	1		stand with fdf potential	
comnts Fmd : 2/29/2008 #rd thinning. Do not clearcut for 10 years. This is a visual management problem along US-131. Grieve) 3/4/2004 TS# 036-01-1 (Grieve) 4/15/99 Great growth! Cut in ten (Grieve). 3/8/1989 3rd row thinning (Byers)											
55	A6	9	46	55	aspen (upland)	mature	final harvest	1	other - specify in remarks		
comnts Fmd : 8/19/2008 Apply CWD specs for Wildlife. (Grieve) 2/14/2008 Variable stand, cut for diversity (Grieve)											
59	A6	8	46	55	aspen (upland)	mature	final harvest	1	other - specify in remarks		
comnts Fmd : 2/14/2008 Variable stand, cut for diversity (Grieve)											
93	R9	139		44	red pine	unevenaged	selection	1			
comnts Fmd : 2/25/2008 TS# 31-91 Old pine stumps. Some beech seedlings. Skid road from last harvest still open. Red Pine with rounded tops. White pine not rounding. Some areas are open with W2 understory. Heavy selection cut to open stand up & start regeneration. (Grieve) 4/27/1999, Big Pine. SI tree was from 1892. A pine stand, more red than white. Red Pine has stopped growing. Rounded tops. Last 50 years poor growth rings from open tree.											
97	O6	11	41	72	oak	immature	shelterwood-seed	2			
comnts Fmd : 8/19/2008 Shealterwood Seed, leave 40% of mature oak. (Grieve) 2/21/2008 Between the road and the Boardman River. Bluff on Natural River. Talk to biologist about thinning with shealterwood & converting to white pine. (Grieve) 4/29/1999, Over looks river valley. (Grieve)											
106	A6	57	57	54	aspen (upland)	mature	final harvest	1	other - specify in remarks		
comnts Fmd : 8/19/2008 Apply CWD specs for Wildlife. Leave retention at dog legs or around D & L types. Leave any oak. (Grieve) 2/26/2008 Old pine stumps. Jack pine in bad shape. High water table. Check with Wildlife but cut this time because of age. (Grieve) 5/4/1999, high water table, two age stand. This is the same stand as 94. Need to start breaking this stand up into different age classes. (Grieve)											
124	A6	12	43	55	aspen (upland)	mature	final harvest	1	other - specify in remarks		
comnts Fmd : 8/19/2008 Apply CWD specs for Wildlife. (Grieve) 2/26/2008 Harvest time. Small stand next to road, both sides.(Grieve)											
409	G0	2			jack pine	nonstocked		0	planting		
comnts Fmd : 2/21/2008 Abandon well site. This could be called a J1. Some knapweed. Plant to jack pine with volunteer crew. (Grieve) 4/5/1999, Grass, Old oil well site. Jack pine coming back on site. SW side, old pit where trees were buried has collapsed. Not a safety problem. Just a depression. Same at NE corner. (Grieve)											
Total Acres.....		295									

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 157 **Entry Year: 2010**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
15	M6	25		66	northern hardwood	unevenaged	selection	2		stand with fdf potential

TREATMENT LIMITING FACTORS: Inferior quality

comnts Fmd : 2/14/2008 Poor stand, selection cut this time around. (Grieve) 4/15/1999, Thin in 20 years. (Grieve) From review: list as clearcut but Hennig to look at and see what he wants to do with it.

17	J6	4	58	56	red pine	mature	final harvest	1	planting	
-----------	-----------	---	----	----	----------	--------	---------------	---	----------	--

TREATMENT LIMITING FACTORS: Land survey needed

comnts Fmd : 3/21/2008 Missed last time area was cut. Try to do now but very small. May need to leave as a retention. (Grieve) 5/4/1999, Jack pine stopped growing about ten years ago. Fire hazard to gas plnt, cut. (Grieve)

113	C6	31	100	28	cedar	immature	improvement	3		
------------	-----------	----	-----	----	-------	----------	-------------	---	--	--

TREATMENT LIMITING FACTORS: Inadequate volume due to low stocking/small diameter/etc.

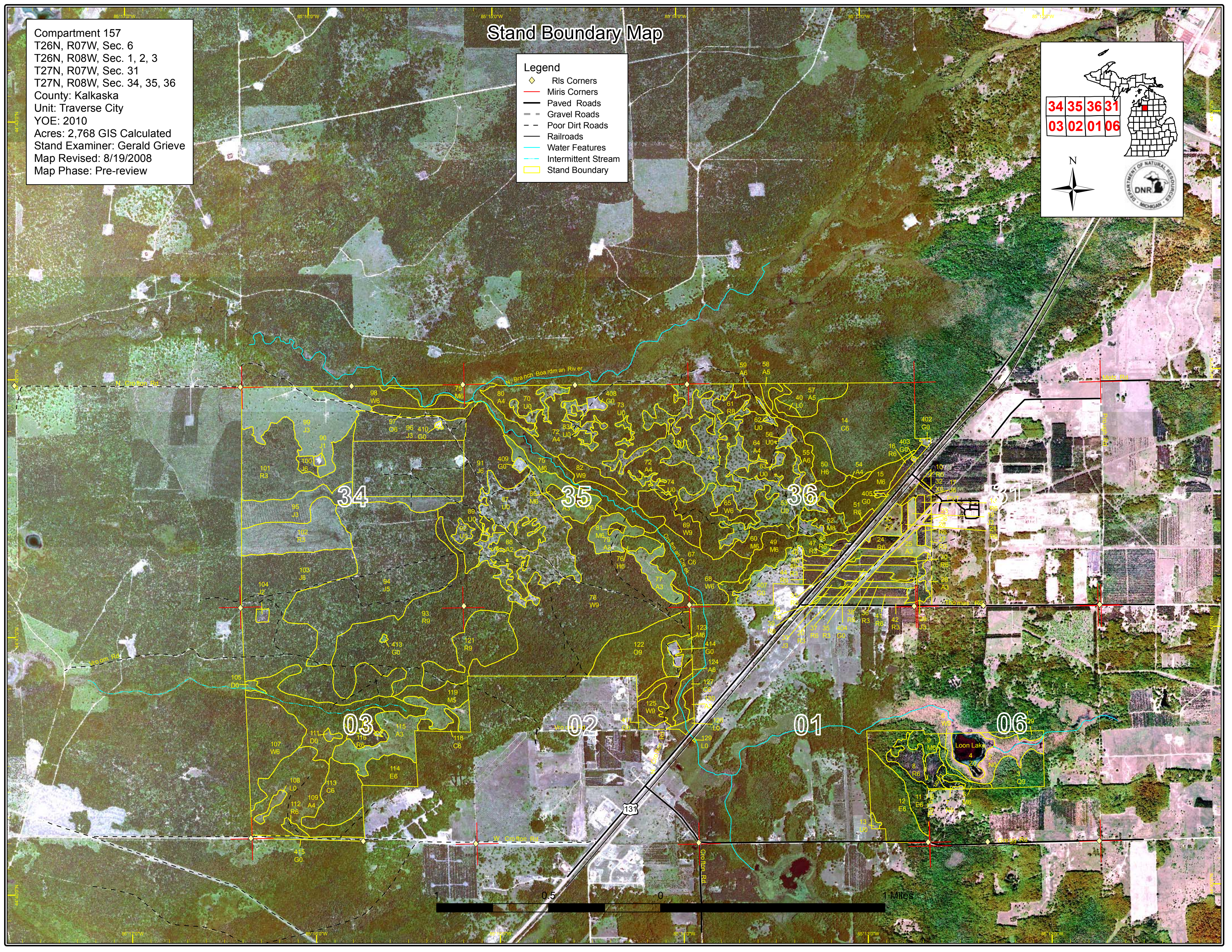
comnts Fmd : 4/30/1999, Stand is in poor shape. Blow Down cedar area. (Grieve)

Total Acres..... 60

Compartment 157
 T26N, R07W, Sec. 6
 T26N, R08W, Sec. 1, 2, 3
 T27N, R07W, Sec. 31
 T27N, R08W, Sec. 34, 35, 36
 County: Kalkaska
 Unit: Traverse City
 YOE: 2010
 Acres: 2,768 GIS Calculated
 Stand Examiner: Gerald Grieve
 Map Revised: 8/19/2008
 Map Phase: Pre-review

Stand Boundary Map

- Legend**
- ◆ Ris Corners
 - Miris Corners
 - Paved Roads
 - Gravel Roads
 - - Poor Dirt Roads
 - Railroads
 - Water Features
 - Intermittent Stream
 - Stand Boundary





DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.