



TRAVERSE CITY FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 66 ENTRY YEAR: 2007

Compartment Acreage: 1795 County: Manistee

Stand Examiner: Steve Griffith

Legal Description: T22N, R16W, sections 25, 34, 35, 36
T21N, R16W, sections 2, 3

Management Goals: The Resource Management Unit (RMU) designation for this compartment is Habitat/Vegetative – Wildlife Intensive in the Resource Management Plan for the Pere Marquette State Forest (RMP-PMSF). This places the emphasis of activities in this compartment on the creation and maintenance of habitat for both game and non-game species.

Soil and Topography: Soils in this compartment consist of poorly drained Newton sands on the flat river floodplain. Steep banks rise from the edges of the floodplain to the surrounding land types. Soils to the south of the floodplain are predominately Rubicon loamy sands and similar excessively drained sands, with only minor relief in topography. Plainfield, Rubicon sands, and Roselawn loamy sands make up the relatively level landscape immediately north of the floodplain. The northern most extent of the compartment consists of a small portion of undulating moraine ridges consisting of Roselawn and Coloma sands.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Compartment 66 consists of the east half of the Manistee River State Game Area. Public ownership is a contiguous, essentially linear strip along the Manistee River and its floodplain. Private property within the dedicated boundary is on the periphery of state ownership. Ownership immediately to the east of this compartment is mixed private and federal (Manistee National Forest). Blacker Airport is adjacent to the north of this compartment. The remaining neighboring private property consists mostly of year round and seasonal residences. There is one private campground adjacent to state land within the compartment.

Unique, Natural Features (include only non-site specific and non-sensitive information): The Manistee River and several of its tributaries and bayous, along with their associated riparian corridors, flow through this compartment.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): There are several prehistoric and woodland Indian camps located in or near this compartment.

Special Management Designations or Considerations: The majority of land was purchased with Pittman-Robertson (P-R) Funds to create the Manistee River State Game Area. P-R purchased lands are mandated to be managed to insure the perpetuation of wildlife resources for economic, scientific and recreational purposes. In addition, this compartment was designated a “Wildlife Intensive” compartment by the RMP-PMSF. A small percentage of land was acquired through tax reversion and probably some government land exchanges.

Watershed and Fisheries Considerations: The Manistee River flows through Compartment 66. The Manistee River hosts huge annual runs of Chinook salmon, and steelhead, as well as smaller runs of coho

salmon and brown trout. The water in compartment 66 is heavily fished for salmon and steelhead, mostly by anglers from fishing from boats. The Manistee River also receives an annual run of lake sturgeon. Lake sturgeon are a state-threatened species, and the Manistee River population is quite fragile, possibly consisting of only a few hundred individuals. Any timber treatments in Compartment 66 should take place at least 100' back from the Manistee River, per MDNR BMPs.

Wildlife Habitat Considerations: Compartment 66 is essentially the east half of the Manistee River State Game Area. The majority of state ownership is located in the floodplain (LTA 5541) of the Manistee River which is dominated by a Southern Floodplain Forest. Green ash and red maple with a scattering of basswood make up the majority of this lowland hardwood canopy. Tag alder and other scattered shrubs dot the understory. Ground cover consists of a lush growth of grasses and sedges with a mix of forbs. The lowland hardwood forest is occasionally broken-up by various non-forested lowland communities, such as low density deciduous openings, wet meadows, alder/willow thickets, and pockets of cattails. Approximately 150 acres of timber was harvested from the floodplain in the early 1970s. The intent of the sale was to salvage elm that had not yet succumbed to Dutch elm disease. Other species harvested included aspen, red maple, ash, basswood, sugar maple, and cherry.

Little, if any silvicultural treatments are needed along this riparian corridor. Natural windthrows, floodings, and occasional insect damage create openings in the canopy which provide the potential for timber regeneration. Lowland coniferous species can occasionally be found at the toe of the slopes along the periphery of the floodplain and act as small winter deer yards. However, the majority of the floodplain provides little winter thermal cover for deer. Treatments prescribed within the floodplain are limited to hand felling 1-2 acre patches of deciduous species near conifer pockets to mimic small wind events. These cuts are intended to increase the mosaic of cover types, provide opportunity for forest regeneration, and to provide wildlife food and cover. A large number of wildlife species can be found in the floodplain forests. Species that may be encountered in this stretch include deer, bear, raccoon, Indiana bat, massasauga rattlesnake, spotted salamander, and a wealth of breeding birds such as bald eagle, great blue heron, yellow-throated warbler, and redheaded woodpecker.

A limited acreage of state ownership on the sandy lake plain (LTA 6111) supports upland communities. These communities are mostly mixes of aspen, oak, and white pine. Hardwoods with hemlock are also found here. Two timber treatments are scheduled for these communities. One in a mixed upland deciduous stand is designed to stimulate oak regeneration in an effort to preserve oak in the community for mast production. The second treatment is a final harvest with residuals of an aspen/oak type intended to diversify the age class structure of this type. Creation of coarse woody debris and retention of mast producing shrubs and trees are included in this treatment. One opening in an aspen/oak stand is scheduled for some hand felling to reduce woody encroachment. All slash from hand felling will be used to create brush piles. Also, two forested stands have garlic mustard, an aggressive exotic forb, and are scheduled for treatments to eradicate it. One of the two affected stands is partially located on the floodplain near a small tributary. Treatment of garlic mustard here will employ mechanical means rather than herbicide.

The northern most extent of this compartment begins to climb up the slopes of a series of moraine ridges (LTA 1311). More of the above aspen/oak type dominates state ownership and is also scheduled for several small cuts to diversify the age class structure. The same specifications as above will be incorporated in these cuts to provide food and cover for various wildlife species, particularly ruffed grouse. Other wildlife species found here and that will benefit from this management strategy and its various stages of regeneration include deer, chestnut-sided warbler, rose-breasted grosbeak, deer mouse, (and other small mammals), Fowler's toad, short-eared owl, and American Kestrel.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine sand and gravel and minor glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Devonian Ellsworth Shale.

The Ellsworth is used for cement products. The nearest gravel pit is located in Section 1 and potential should be good on upland areas. This area is located along the south edge of the Niagaran reef trend and may have Antrim Shale gas potential. Only two parcels of State land are currently leased for oil and gas development.

Survey Needs: A full survey of State owned land is needed as there are no survey records on file in the Traverse City or Cadillac offices. The minimum survey needs are for stands with proposed treatments bordering private property. These stands are 14, 19 and 35 in the NE of the compartment, stand 55 in the SE, and stands 2 and 9 in the north central part of the compartment.

Q:\# 2020 Inventory & Comp Rev\CmptRevTemplateBlank.doc

Recreational Facilities and Opportunities: There are no constructed facilities located within this compartment. The compartment with its lush floodplain and bottom land hardwoods provides many opportunities for outdoor recreation. Some of the activities pursued here include bear, deer, small game, and waterfowl hunting, canoeing, fishing, camping, and bird watching. The small portion of upland forest provides similar recreational opportunities.

Fire Protection: This compartment is mainly a wet/marshy lowland area. Fire occurrence has been low, and the potential for large fire here is small. Manistee Twp. VFD has initial attack responsibilities here, and DNR response is from the Platte River Field Office.

Additional Compartment Information:

Recommended Land Acquisitions: Several parcels were recommended for purchase in the Manistee State Game Area Strategic Plan written by Richard Earle, Wildlife Habitat Biologist, in 2003. The parcels include:

1. T21N R16W Sec. 3 SE NE & SW NE, 55 acres
2. T21N R16W Sec. 3 portion of the SE ¼ north of Claybank Bayou.
3. T21N R16W Sec. 2 SW, 128 acres
4. T21N R16W Sec. 2 W ½ NE, ~80 acres
5. T22N R16W Sec. 36 E ½ SW, 79 acres
6. T22N R16W Sec. 36 SW SE, 40 acres
7. T22N R16W Sec. 36 NE SE, 30 acres
8. T22N R16W Sec. 36 NW NW, 40 acres
9. T22N R16W Sec. 35 NW SW, 40 acres

Recommended Land Disposals: none.

**** Cover Type details and proposed treatments are listed in the attached reports:

Cover Type by Age Class
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



Stage 1 Acres Summary By Level 3 Cover Type By Age

Compartment: 84091

Date: 10/26/2005

	0	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	>89	Uneven Age	Grand Total
Aspen Types	0	0	9.7	83.9	8.9	28.9	0	0	0	0	0	0	131.4
Emergent Wetland	45.1	0	0	0	0	0	0	0	0	0	0	0	45.1
Herbaceous Openland	27.3	0	0	0	0	0	0	0	0	0	0	0	27.3
Low-Density Trees	131	0	0	0	0	0	0	0	0	0	0	0	131
Lowland Coniferous Forest	0	0	0	5.3	0	0	0	0	3.4	0	25.3	0	34
Lowland Deciduous Forest	0	0	0	0	0	0	31.7	554.4	442.1	61	0	0	1089.2
Lowland Shrub	146.1	0	0	0	0	0	0	0	0	0	0	0	146.1
Mixed Upland Deciduous	0	0	0	0	0	4.6	20	0	0	0	0	0	24.6
Oak Types	0	0	0	0	24.3	1.1	0	0	0	0	3.6	0	29
Water	143.6	0	0	0	0	0	0	0	0	0	0	0	143.6
Grand Total	493.1	0	9.7	89.2	33.2	34.6	51.7	554.4	445.5	61	28.9	0	1801.3

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

S t a n d	Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Follow Up Activities After Treatment	Pg. 1
2	84091002- Spray	7.4	Other Mixed Upland Deciduous	6	51	0	Pesticide	Pest Management			

Rev treat stand for garlic mustard

Spec:

Rev

Cmnt:

9	84091009- Other	4.6	Mixed Upland Deciduous with Conifer	9	44	35	Other	Pest Management			
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Rev --Stephen Griffith : 10/17/2005 comments:

Spec:

Treat for garlic mustard. Use non-chemical treatment because portion of this stand is on floodplain and near a small tributary.

Rev

Cmnt:

14	84091014-Cut	12.6	Other Mixed Upland Deciduous	9	57	80	Group Selection	Habitat Management	Oak, Pine	--Stephen Griffith : 10/10/2005 comments: Scarify soil to encourage oak regeneration. Possibly hand plant acorns along edges of stand to compliment natural oak regeneration.	
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Rev Cut all aspen and red maple. Selectively cut some red oak.

Spec:

Rev Remove enough of canopy to facilitate oak regeneration. Harvest some oak to encourage some oak regeneration from stump sprouting.

Cmnt:

19	84091019- Cut_small	26.8	Aspen, Oak	6	25	35	Clearcut with Reserves	Habitat Management	Aspen	--Stephen Griffith : 10/06/2005 comments: Expect vigorous aspen and oak sprouting.	
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Rev --Stephen Griffith : 10/10/2005 comments:

Spec:

clearcut pole aspen and oak. leave log sized trees as residual (these are the residuals from the previous harvest). leave 1-2 10"-12" dbh trees as cwd with 4' guard stump. Keep slash to a minimum by most appropriate means (burning, mechanically crushing, or whole tree harvesting).

Rev --Stephen Griffith : 10/06/2005 comments:

Cmnt:

treatment proposal is on approximately 25% of the original AOI to diversify local age classes. Treatment combines portions of stands 19, 23, & 35. Use existing 2-tracks, utility ROW, and slopes to delineate cut boundaries. Goal is to create mosaic of 4 age classes of aspen. Mark 1-2 trees per acre to leave for cwd creation.

27	84091027-Cut	46.6	Lowland Deciduous with Cedar	9	73	0	Patch or Strip Clearcut	Habitat Management	Lowland Deciduous with Cedar		
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Rev Handfelling of deciduous tree species in 1-2 acre patches mimicing small windthrow events for wildlife food and cover. Total of approximately 8 acres.

Spec:

Rev

Cmnt:

28	84091028-Cut	308.7	Lowland Deciduous with Cedar	9	73	0	Patch or Strip Clearcut	Habitat Management	Lowland Deciduous with Cedar		
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Rev Handfelling of deciduous tree species in 1-2 acre patches mimicing small windthrow events for wildlife food and cover. Total of approximately 10 acres.

Spec:

Rev

Cmnt:

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Follow Up Activities After Treatment	Pg. 2
55 84091055-Cut_small	7.8	Aspen	9	40	0	Clearcut with Reserves	Habitat Management	Aspen, Oak		

Rev --Stephen Griffith : 10/07/2005 comments:

Spec: clearcut pole aspen and oak. leave marked trees as residual. Create 1-2 cwd logs with guard stumps per acre.

Rev --Stephen Griffith : 10/10/2005 comments:

Cmnt: Cutting a portion of the stand to enhance age class diversity and to retain aspen as component of this forest community. Potential for red-shouldered hawk nesting. Restrict logging activities seasonally if active nest is found.

54 NF_84091054-NonFor	3.3	Unspecified	0	0	0	Non-Forest Management	Habitat Management			
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Rev --Stephen Griffith : 10/10/2005 comments:

Spec: Handfell woody encroachment to maintain forest opening. Leave scattered mast producing shrubs/trees.

Rev
Cmnt:

**Total Treatment
Acreage Proposed: 417.8**

S
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Mgt. Unit

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**

Compartment:

Entry Yr:

Inventory Method: IFMAP

Treatment
Name

Acres

Stage1
CovType

Size
Density

1st
Age

2nd
Age

Treatment
Method

Treatment
Purpose

Cover Type
Objective

Follow Up Activities
After Treatment

Pg. 1

Limiting Factor
and Comment:

Rev
Spec:

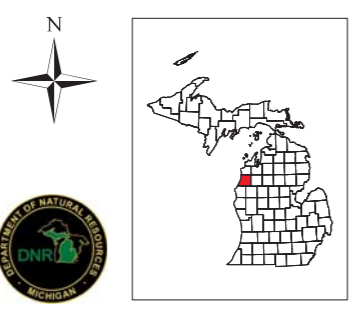

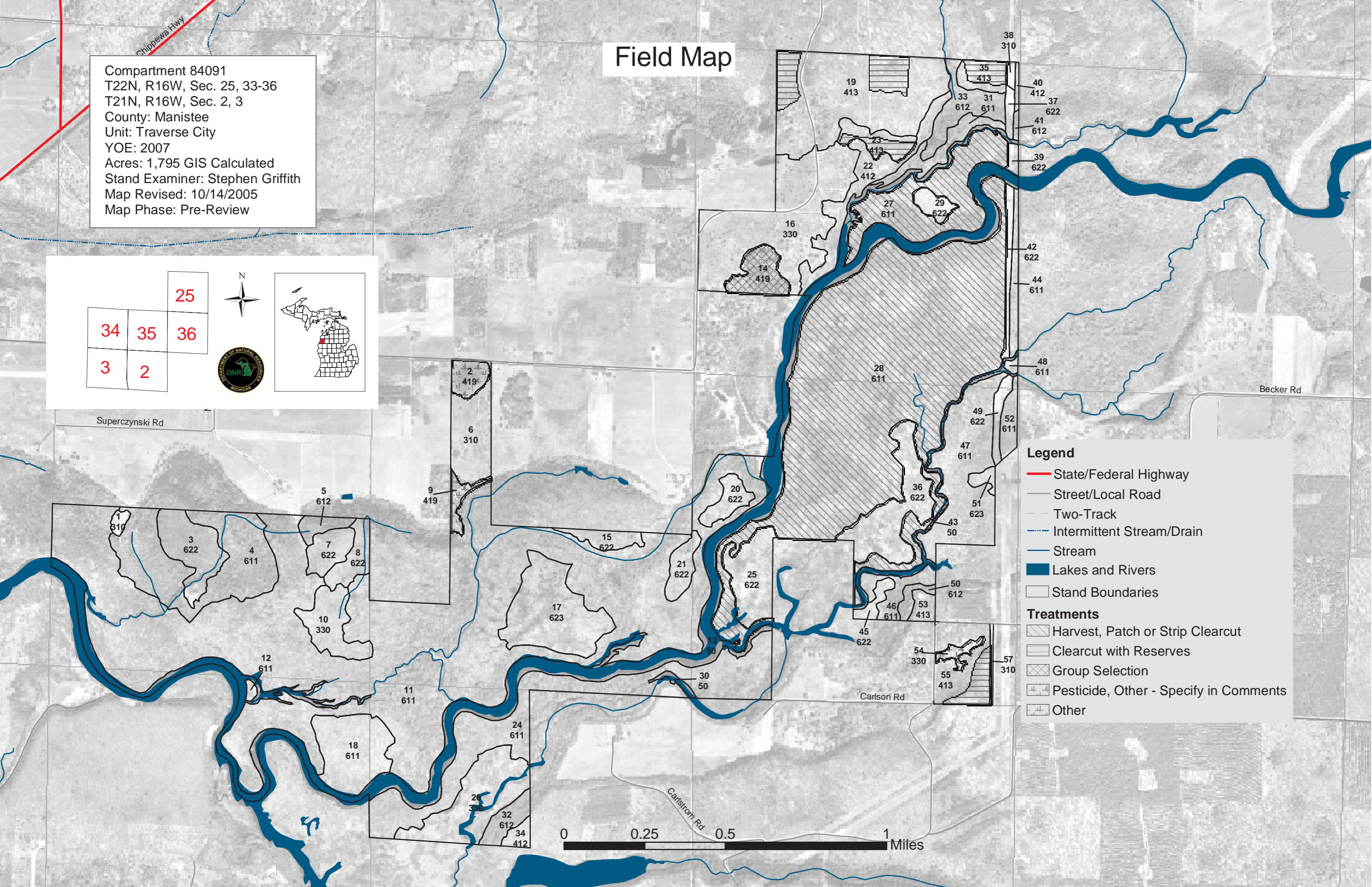
Rev
Cmnt:

**Total Treatment
Acreage Proposed: #Error**

Field Map

Compartment 84091
 T22N, R16W, Sec. 25, 33-36
 T21N, R16W, Sec. 2, 3
 County: Manistee
 Unit: Traverse City
 YOE: 2007
 Acres: 1,795 GIS Calculated
 Stand Examiner: Stephen Griffith
 Map Revised: 10/14/2005
 Map Phase: Pre-Review

		25
34	35	36
3	2	

Legend

- State/Federal Highway
- Street/Local Road
- Two-Track
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- Stand Boundaries

Treatments

- Harvest, Patch or Strip Clearcut
- Clearcut with Reserves
- Group Selection
- Pesticide, Other - Specify in Comments
- Other

Cover Type & Treatment

Compartment 84091
 T22N, R16W, Sec. 25, 33-36
 T21N, R16W, Sec. 2, 3
 County: Manistee
 Unit: Traverse City
 YOE: 2007
 Acres: 1,795 GIS Calculated
 Stand Examiner: Stephen Griffith
 Map Revised: 10/14/2005
 Map Phase: Pre-Review

		25
34	35	36
3	2	

