



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

COMPARTMENT # 170 ENTRY YEAR: 2013

Compartment Acreage: 2631 County: Kalkaska

Stand Examiner: Steve Crigier

Legal Description: T28N, R7W, Sec. 26-28, 33-35

Management Goals: To increase the number of age classes in the aspen timber types. Improve stem quality in the mixed hardwood stand and get areas of regeneration.

Soil and Topography: Flat except near the Rapid River valley and the two tributaries. Mostly this is abandoned farm land on a Kalkaska soil. There is some Rubicon in section 35 and the very east part of section 26.

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

Only Section 35 has much block ownership. The rest of this compartment is fractionalized. The Compartment is only three miles north of Kalkaska on US-131. The area has some oil and gas activity but mostly the compartment area is into some type of forest management.

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

Osprey nesting in the area of the compartment as well as Red-shouldered and E. Bald eagle. Eastern flat-whorl (snail) to N. Spotted turtle to W. Red-legged spittlebug to E. Great blue heron to S, Kirtland's warbler to SW.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): No areas listed. Old homestead sites in sections 28 & 33.

Special Management Designations or Considerations: N/A

Watershed and Fisheries Considerations: A small un-named tributary to the Rapid River flows through this compartment. This tributary is a designated Type 1 trout stream. Since this is considered a high quality stream it is not stocked and the trout populations are supported only by natural reproduction. To keep this stream in good condition, it is critical that all BMP's are strictly adhered to.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. There is no current economic use for the Coldwater Shale. Gravel pits are located in Sections 29 and 32. Gravel potential in the compartment is considered good. This area is located along the northern edge of the Guelph (Niagaran) reef trend. Considerable development and production has occurred in the compartment. There may be additional reef potential. The Antrim Shale has not been developed in the area, but may have potential.

Vehicle Access: There is good gravel access on the south and the north end of the compartment with poor dirt roads in the interior of the compartment.

Survey Needs: Some corners will need to be placed for timbersale boundaries.

Recreational Facilities and Opportunities: Leetsville ORV trail runs through sections 26, 34

Fire Protection: Fire response for this compartment is provided by the MDNR Kalkaska Field Office. Due to it's proximity from the field office travel time is good. Road access in the area is good with a nearby water source being available for fire suppression support. Safety concerns during a fire event would be the Penn Central railroad and M-66 traffic as well as some residential and business properties. Fire assistance is provided by local township volunteer fire departments and DNR resources from Grayling as needed. (Comments by Rod Rader, Fire Supervisor, Traverse City Field Office.)

Additional Compartment Information:

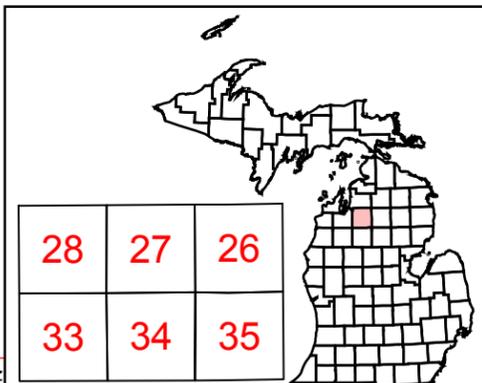
****** Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

- 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**

Cover Type & Treatment Map



28	27	26
33	34	35



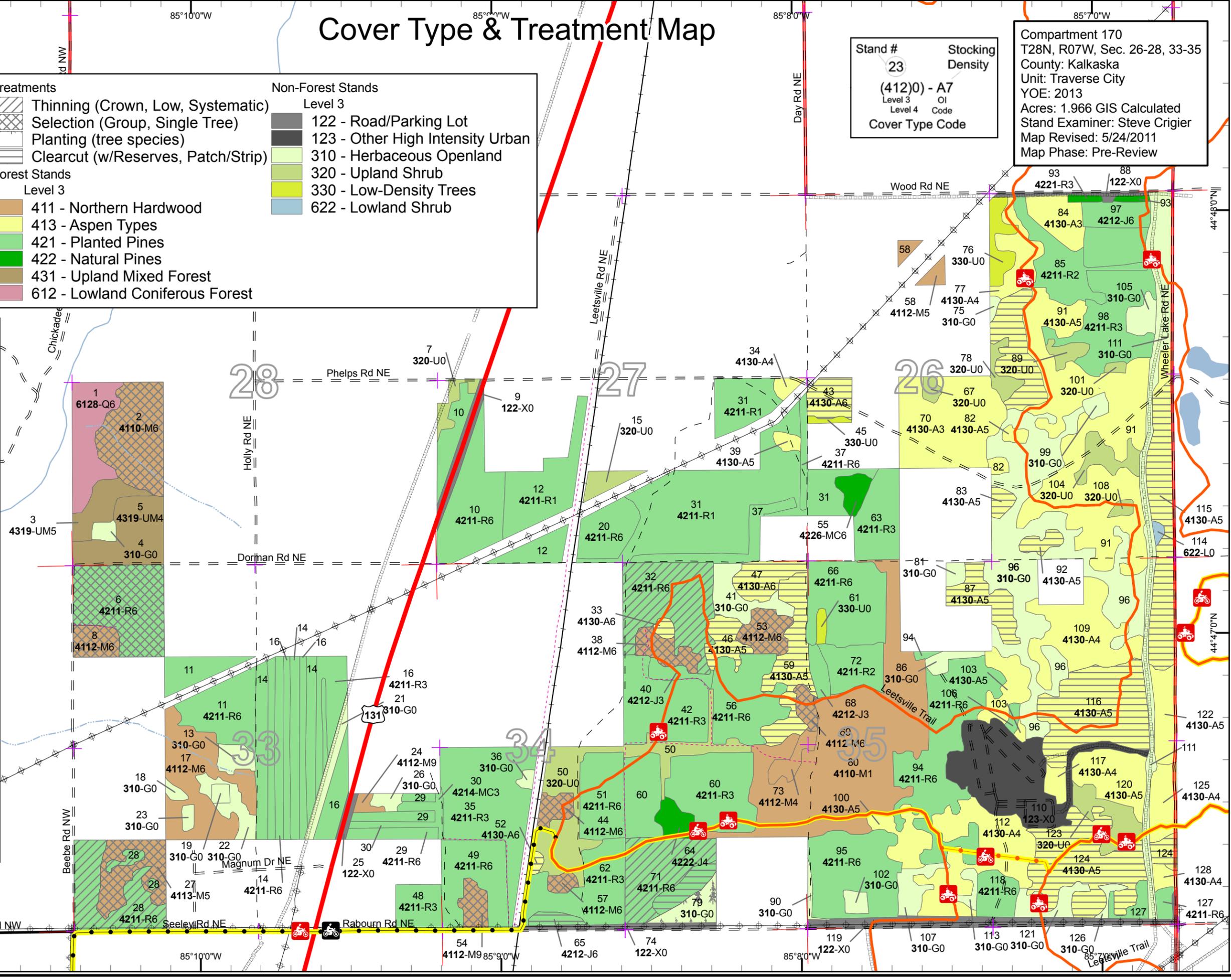
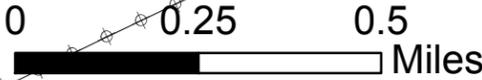
Treatments		Non-Forest Stands	
	Thinning (Crown, Low, Systematic)		Level 3
	Selection (Group, Single Tree)		122 - Road/Parking Lot
	Planting (tree species)		123 - Other High Intensity Urban
	Clearcut (w/Reserves, Patch/Strip)		310 - Herbaceous Openland
Forest Stands			320 - Upland Shrub
Level 3			330 - Low-Density Trees
	411 - Northern Hardwood		622 - Lowland Shrub
	413 - Aspen Types		
	421 - Planted Pines		
	422 - Natural Pines		
	431 - Upland Mixed Forest		
	612 - Lowland Coniferous Forest		

Stand #
23
(412)0 - A7
Level 3 OI
Level 4 Code
Cover Type Code

Compartment 170
T28N, R07W, Sec. 26-28, 33-35
County: Kalkaska
Unit: Traverse City
YOE: 2013
Acres: 1.966 GIS Calculated
Stand Examiner: Steve Crigier
Map Revised: 5/24/2011
Map Phase: Pre-Review

Legend

- Miris Corners
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Railroads
- Pipe
- Power
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- MCCCT Trails
- Motorcycle Trails (DNR License)
- Motorcycle Trails (SOS License)
- ORV Trails
- MCCCT Trail
- Motorcycle (DNR License)
- Motorcycle (SOS License)
- ORV Trail



Stand Boundary Map

- Legend**
- Stand Boundaries**
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 622 - Lowland Shrub

Stand #
23

Stocking Density
OI

(412)0 - A7

Level 3
Level 4

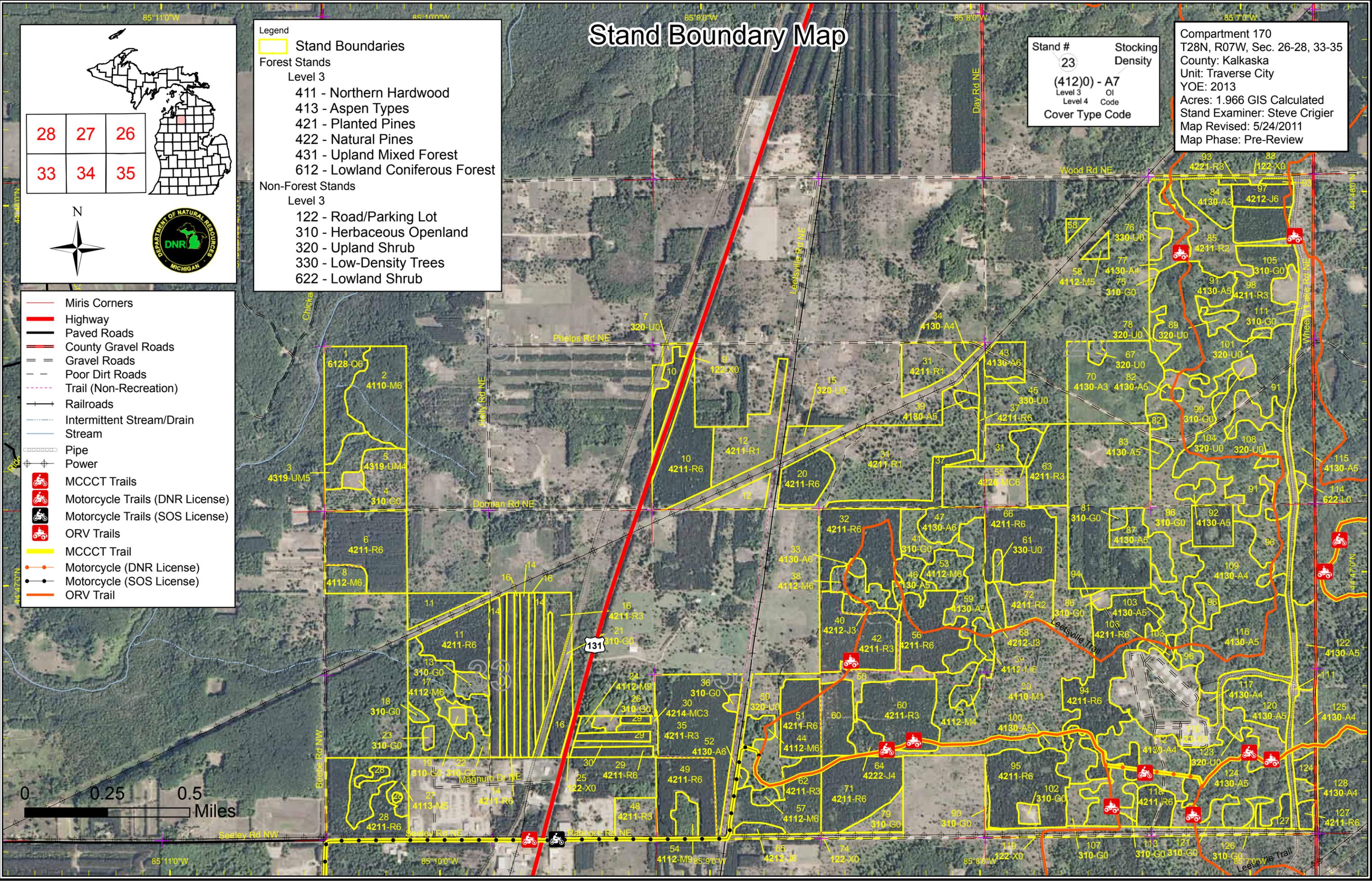
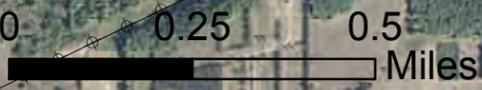
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Compartment 170
T28N, R07W, Sec. 26-28, 33-35
County: Kalkaska
Unit: Traverse City
YOE: 2013
Acres: 1.966 GIS Calculated
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28	27	26
33	34	35

N

- Miris Corners
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
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- Power
- MCCCT Trails
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- Motorcycle Trails (SOS License)
- ORV Trails
- MCCCT Trail
- Motorcycle (DNR License)
- Motorcycle (SOS License)
- ORV Trail



Dedicated & Proposed Special Conservation Area Map

28	27	26
33	34	35

Stand #	Stocking Density
(412)0 - A7	OI
Level 3	Code
Level 4	
Cover Type Code	

Compartment 170
 T28N, R07W, Sec. 26-28, 33-35
 County: Kalkaska
 Unit: Traverse City
 YOE: 2013
 Acres: 1.966 GIS Calculated
 Stand Examiner: Steve Crigier
 Map Revised: 5/24/2011
 Map Phase: Pre-Review

Legend

- Miris Corners
- Special Conservation Areas
- Cold Water Streams
- Stand Boundaries
- Forest Stands
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands
 - Level 3
 - 122 - Road/Parking Lot
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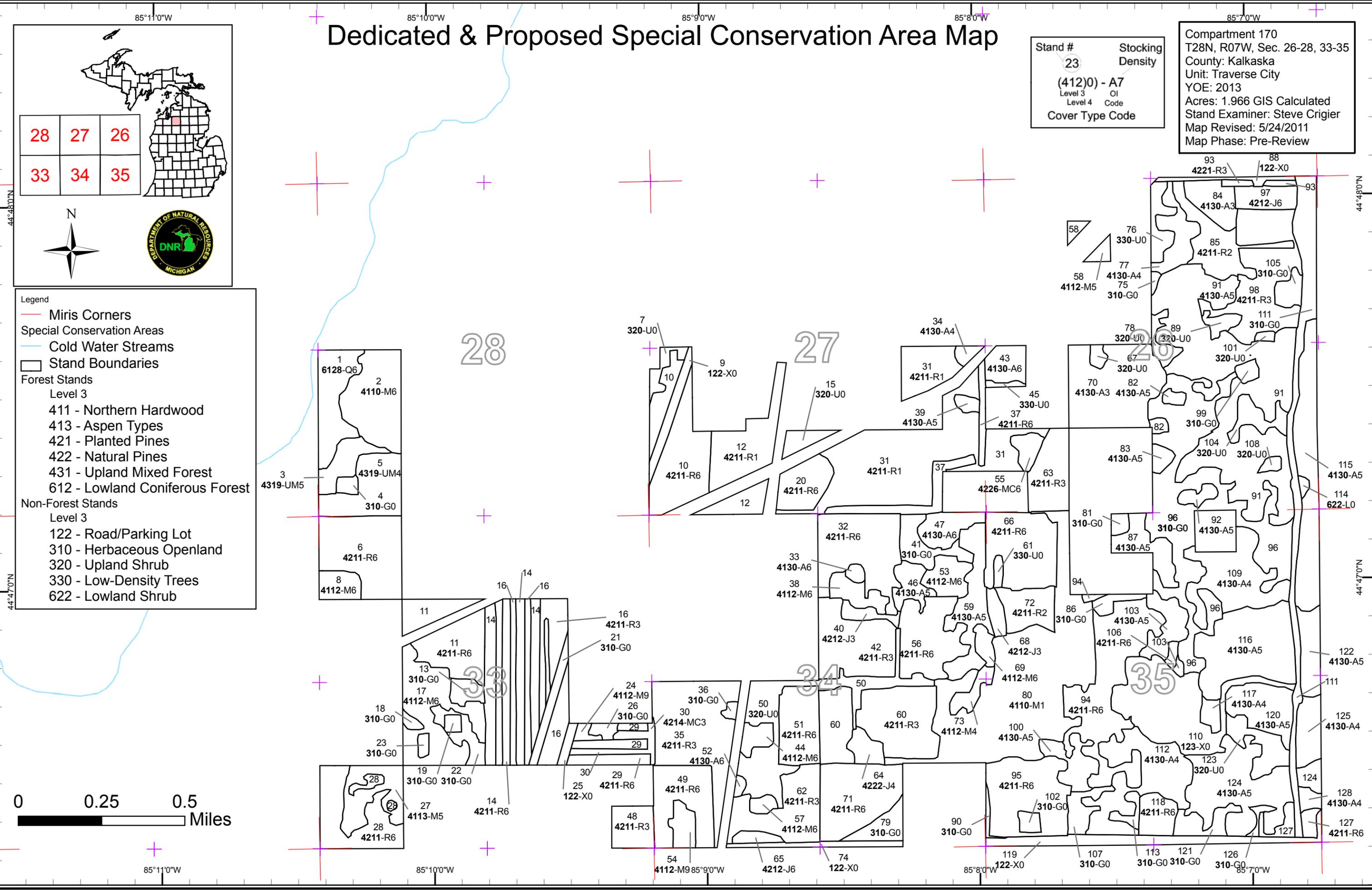
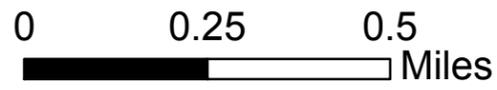


Table 1 – Total Acres by Cover Type and Age Class



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Unretn Age
Aspen	0	50	0	0	361	63	0	0	0	0	0	0	0	0	0	475
Herbaceous Openland	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
Jack Pine	0	0	8	0	5	8	0	3	0	0	0	0	0	0	0	24
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Conifers	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	19
Lowland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Natural Mixed Pines	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Northern Hardwood	0	0	0	0	101	0	35	55	6	28	0	0	0	0	0	225
Planted Mixed Pines	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Red Pine	0	137	252	90	253	25	33	46	0	0	0	0	0	0	0	835
Upland Mixed Forest	0	0	0	0	0	21	0	9	0	0	0	0	0	0	0	30
Upland Shrub	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
Urban	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77
Total	347	187	265	90	721	117	72	132	6	28	0	0	0	0	0	1966



Table 2 – Proposed Treatment Summaries

Traverse City Mgt. Unit
Year of Entry 2013

Compartment 170
Total Compartment Acres: 1966

Acres by Treatment Type

Commercial Harvest - 417	Site Prep - 0	Tree Planting - 7	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	211	0	0	0	0	0	211
Jack Pine	3	0	0	0	0	0	3
Northern Hardwood	0	82	0	0	0	0	82
Red Pine	6	33	0	0	81	0	121
Total	220	115	0	0	81	0	417



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	61170002-Cut	27.8	4110 - Sugar Maple Association	High Density Pole	81	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Thin stand down to 80sqft/ac. Creek will need a large buffer as terrain is steep. <u>Specs:</u> <u>Other</u> Access into the north half of the stand will require a temp bridge, for forwarding only. skid trail down to the creek is already scouted out. Coming <u>Comments:</u> from private land to the east would work best but currently there is no road or trail going into the stand. <u>Next</u> Will need to silt fence, water bar, stump, and seed skid trail in after the bridge is pulled. <u>Steps:</u></p>									
6	61170006-Cut	32.9	42110 - Planted Red Pine	High Density Pole	56	Harvest	Single Tree Selection	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Thin stand down to 120sqft/ac. Would recommend marking <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
8	61170008-Cut	6.7	4112 - Maple, Beech, Cherry Association	High Density Pole	65	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Thin stand down to 80sqft/ac. remove the aspen and poor quality hardwood stems. <u>Specs:</u> <u>Other</u> maintain component of cherry and other less prodominate spp. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
27	61170027-Cut	15.2	4113 - R.Maple, Conifer	Medium Density Pole	56	Harvest	Group Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Include stand with the adjacent RP sale and remove all the RP from this stand. <u>Specs:</u> <u>Other</u> This is part of the plantation to the west just this part has failed. <u>Comments:</u> <u>Next</u> Let stand fully convert to hardwoods. <u>Steps:</u></p>									
28	61170028-Cut	24.8	42110 - Planted Red Pine	High Density Pole	40	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Row thin stand. Remove all JP <u>Specs:</u> <u>Other</u> Stocking is more variable to the east. JP planted on the outside rows. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
32	61170032-Cut	33.3	42110 - Planted Red Pine	High Density Pole	36	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Row thin stand. <u>Specs:</u> <u>Other</u> ORV Trail runs through south part of stand. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
33	61170033-Cut	1.7	4130 - Aspen	High Density Pole	38	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut stand. Create some drumming logs. <u>Specs:</u> <u>Other</u> Harvest with adjacent hardwoods and aspen clones. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
38	61170038-Cut	7.4	4112 - Maple, Beech, Cherry Association	High Density Pole	57	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand down to 80sqft/ac. <u>Specs:</u> <u>Other</u> Prep with adjacent aspen and hardwood pockets. ORV trail runs through stand. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
43	61170043-Cut	8.1	4130 - Aspen	High Density Pole	36	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut stand. Create some drumming logs. <u>Specs:</u> <u>Other</u> Need to check for corners!! SW appears to be in. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
44	61170044-Cut	4.6	4112 - Maple, Beech, Cherry Association	High Density Pole	68	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand down to 70sqft/ac. <u>Specs:</u> <u>Other</u> Set up with near by hardwood and aspen pockets. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
46	61170046-Cut	7.4	4130 - Aspen	Medium Density Pole	39	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut stand. Create some drumming logs. <u>Specs:</u> <u>Other</u> Set up with nearby aspen and hardwood stands. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
47	61170047-Cut	9.4	4130 - Aspen	High Density Pole	39	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut stand, maybe leave some of the hard maple. Create some drumming logs. <u>Specs:</u> <u>Other</u> Set up with other aspen and hardwood pocket in the area. <u>Comments:</u> <u>Next Steps:</u></p>									
52	61170052-Cut	1.1	4130 - Aspen	High Density Pole	46	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut clone of bigtooth. Make a couple drumming logs. <u>Specs:</u> <u>Other</u> Treat with nearby aspen and hardwood pockets. <u>Comments:</u> <u>Next Steps:</u></p>									
53	61170053-Cut	8.8	4112 - Maple, Beech, Cherry Association	High Density Pole	60	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand to 80sqft/ac. <u>Specs:</u> <u>Other</u> set up with adjacent aspen and hardwoods. <u>Comments:</u> <u>Next Steps:</u></p>									
54	61170054-Cut	5.7	4112 - Maple, Beech, Cherry Association	High Density Log	75	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand down to 80sqft/ac. <u>Specs:</u> <u>Other</u> Harvest with adjacent aspen and hardwood pockets. <u>Comments:</u> <u>Next Steps:</u></p>									
57	61170057-Cut	2.4	4112 - Maple, Beech, Cherry Association	High Density Pole	64	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand down to 70sqft/ac <u>Specs:</u> <u>Other</u> Cut with nearby hardwood and aspen pockets. <u>Comments:</u> <u>Next Steps:</u></p>									



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
59 61170059-Cut	20.1	4130 - Aspen	Medium Density Pole	40	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Clearcut stand. Leave a few cherry standing. Also create some drumming logs.

Specs:

Other Comments: Set up with adjacent popple and hardwood pockets. ORV trail runs through stand.

Next Steps:

65 61170065-Cut	2.9	42120 - Planted Jack Pine	High Density Pole	60	Harvest	Clearcut	42221 - Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Clearcut patch of JP before it becomes a budworm issue.

Specs:

Other Comments:

Next Steps:

69 61170069-Cut	3.6	4112 - Maple, Beech, Cherry Association	High Density Pole	57	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
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Prescription Thin stand to 80sqft/ac

Specs:

Other Comments: set up with adjacent aspen and hardwood pockets. ORV Trail runs through stand.

Next Steps:

71 61170071_clearcut-Cut	6.4	42110 - Planted Red Pine	High Density Pole	36	Harvest	Clearcut	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Clearcut stand.

Specs:

Other Comments: This area was scorch by wildfire in 4/15/11. Some pocket are a total loss, ~ 1 acre, but the rest is salvageable.

Next Steps: replant along with stand 79 to the south

71 61170071-Cut	23.1	42110 - Planted Red Pine	High Density Pole	36	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Row thin stand. Rows are wide and timber is fairly short. Recommend cutting every fourth row to get height development.

Specs:

Other Comments:

Next Steps: monitor for bark beetle.

**Table 3 -- Treatments Prescribed
with No Limiting Factor**



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
83	61170083-Cut	2.7	4130 - Aspen	Medium Density Pole	38	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut stand. create some drumming logs <u>Specs:</u> <u>Other</u> private line is in. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
87	61170087-Cut	11.6	4130 - Aspen	Medium Density Pole	39	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
91	61170091- Cut_small	17.4	4130 - Aspen	Medium Density Pole	39	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut about 1/3 of the stand now. Save the rest for age class diversity. Save some cherry or oak if present, create some drumming logs. <u>Specs:</u> <u>Other</u> Rolling terrain in the northwest part of stand. Protect ORV trail and pipeling during harvest. <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
92	61170092-Cut	3.2	4130 - Aspen	Medium Density Pole	38	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut clone. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									
115	61170115-Cut	30.0	4130 - Aspen	Medium Density Pole	39	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut stand south of phelps Rd. Leave some cherry and pine for retention. <u>Specs:</u> <u>Other</u> Will need to contact ANR about pipeline <u>Comments:</u> <u>Next</u> <u>Steps:</u></p>									

**Table 3 -- Treatments Prescribed
with No Limiting Factor**



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
116	61170116-Cut	39.1	4130 - Aspen	Medium Density Pole	40	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Clearcut stand. Leave some retention along the ORV trail. 10-15' buffer/strip of retention. Create some drumming logs.

Specs:

Other Stand has pipeline on south and east side. Will need to contact ANR Storage about a crossing.

Comments:

Next

Steps:

124	61170124-Cut	42.1	4130 - Aspen	Medium Density Pole	39	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
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Prescription Clear cut stand. Leave some retention, 10-15', along the ORV trail Create some drumming logs.

Specs:

Other Pipeline on east side of stand will have to contact ANR Storage.

Comments:

Next

Steps:

79	NF_61170079- Plant	7.2	Non-Forested		0	Tree Planting	Hand Plant	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Plant opening with clear cut portion of stand 71.

Specs:

Other Stand was in a wildfire on 4/15/11

Comments:

Next watch it grow.

Steps:

**Total Treatment
Acreage Proposed: 406.7**

**Table 4 -- Treatments Prescribed with
a Limiting Factor**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 0**

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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 170
Year of Entry: 2013

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	19.3	65		Stand transitions from high to low ground. Steep slope. Stand is use heavily by deer in the winter. No access.
2	4110 - Sugar Maple Association	High Density Pole	27.8	81	111-140	High quality hardwood stand. Terrain is rolling and steep in areas.
3	4319 - Mixed Upland Forest	Medium Density Pole	9.3	65		mixed bag of species. Rolling terrain, steep in spots. Dune and swale like on the west end of the stand.
5	4319 - Mixed Upland Forest	Low Density Pole	20.8	45	1-50	JP was cut out of stand. Left all the maple, white pine and balsam. some JP, fir, and redmaple is regenerating. Stand has an old foundation in it.
6	42110 - Planted Red Pine	High Density Pole	32.9	56	141-170	6-7 stick RP, beech in the understory.
8	4112 - Maple, Beech, Cherry Association	High Density Pole	6.7	65	81-110	some clones of aspen. Hwds are small in diameter, there are trees of good form in stand
10	42110 - Planted Red Pine	High Density Pole	35.2	25	81-110	1-2 stick RP, young R6. Sawtimber along 131 that was left from original stand.
11	42110 - Planted Red Pine	High Density Pole	28.4	26	51-80	2-3 stick RP. Wide Rows, youn R6
12	42110 - Planted Red Pine	Low Density Sapling	29.8	5		Trees about 2' tall
14	42110 - Planted Red Pine	High Density Pole	35.5	60	111-140	Tall RP, Thinned in 07. Tops have room to grow for now.
16	42110 - Planted Red Pine	High Density Sapling	36.8	16		Planted RP with some JP volunteers.
17	4112 - Maple, Beech, Cherry Association	High Density Pole	30.5	60	81-110	Stand recently thinned.
20	42110 - Planted Red Pine	High Density Pole	13.1	27	51-80	1-2 stick RP. Wide Rows.
24	4112 - Maple, Beech, Cherry Association	High Density Log	1.8	67	51-80	
27	4113 - R.Maple, Conifer	Medium Density Pole	15.2	56	1-50	failed part of the adjacent plantation. Scattered RP throughout.
28	42110 - Planted Red Pine	High Density Pole	24.8	40	111-140	Row width are wide 10-12'. RP is 4-5 stick. JP is along the edges of stand. Stocking is variable in areas.
29	42110 - Planted Red Pine	High Density Pole	10.2	60	111-140	Nice tall RP, recently thinned. Trees have some room to grow.

Stand	Traverse City Mgt. Unit		5 – Forested Stands			Compartment: 170	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
30	42140 - Planted Mixed Pine	High Density Sapling	5.8	16			
31	42111 - Planted Red Pine, Mixed Deciduous	Low Density Sapling	84.7	5		trees ~2' tall. Scattered maple and cherry pole and sawtimber.	
32	42110 - Planted Red Pine	High Density Pole	33.3	36	141-170	RP is about 4 sticks tall. The only plantation in the area with some height?	
33	4130 - Aspen	High Density Pole	1.7	38			Nice big tooth.
34	4130 - Aspen	Low Density Pole	2.1	37			
35	42110 - Planted Red Pine	High Density Sapling	43.1	16		Rows are tight ~6'. RP is about 15' tall	
37	42110 - Planted Red Pine	High Density Pole	13.5	28	81-110		1-2 stick RP
38	4112 - Maple, Beech, Cherry Association	High Density Pole	7.4	57	81-110		Medium to poor quality hardwoods.
39	4130 - Aspen	Medium Density Pole	2.0	37			
40	42120 - Planted Jack Pine	High Density Sapling	3.8	16			JP about 15' tall
42	42110 - Planted Red Pine	High Density Sapling	28.2	16			RP 10-15' tall.
43	4130 - Aspen	High Density Pole	8.1	36			nice looking popple.
44	4112 - Maple, Beech, Cherry Association	High Density Pole	4.6	68	81-110		some sawtimber, medium to poor quality.
46	4130 - Aspen	Medium Density Pole	7.4	39			poor to medium quality wood.
47	4130 - Aspen	High Density Pole	9.4	39			Some nice clones of bigtooth. Timber become less impressive to the south.
48	42110 - Planted Red Pine	High Density Sapling	10.2	4			regen ~3' tall
49	42110 - Planted Red Pine	High Density Pole	22.5	36	141-170		Wide rows ~12', good diameter grow heights are mostly 3 stick with and occasional 4 stick.
51	42110 - Planted Red Pine	High Density Pole	18.1	36	141-170		3-4 stick RP. Row widths are wide 10-12'



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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 170
Year of Entry: 2013

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	4130 - Aspen	High Density Pole	1.1	46		Nice clone of bigtooth. diameters are on the small side. Nice height development.
53	4112 - Maple, Beech, Cherry Association	High Density Pole	8.8	60	81-110	
54	4112 - Maple, Beech, Cherry Association	High Density Log	5.7	75	81-110	Some decent sawtimber. Mostly softmaple. Medium quality.
55	42260 - Natural Pine, Mixed Deciduous	High Density Pole	4.6	57	51-80	
56	42110 - Planted Red Pine	High Density Pole	24.9	36	111-140	3 stick RP, wide row ~12' wide.
57	4112 - Maple, Beech, Cherry Association	High Density Pole	2.4	64	81-110	Stand is already marked.
58	4112 - Maple, Beech, Cherry Association	Medium Density Pole	3.8	55	1-50	
59	4130 - Aspen	Medium Density Pole	20.1	40		Poor quality aspen with a few nice clones. Some of the timber is starting to deteriorate.
60	42110 - Planted Red Pine	High Density Sapling	42.6	16		red pine about 15' tall.
62	42110 - Planted Red Pine	High Density Sapling	24.6	16		regen 10-15' tall.
63	42110 - Planted Red Pine	High Density Sapling	16.7	17		RP is about 10-15' tall.
64	42220 - Natural Jack Pine	Low Density Pole	5.4	38		
65	42120 - Planted Jack Pine	High Density Pole	2.9	60		small stand, JP starting to decline.
66	42110 - Planted Red Pine	High Density Pole	29.2	36	51-80	3 stick RP, wide rows.
68	42120 - Planted Jack Pine	High Density Sapling	3.8	14		JP 10-15' tall.
69	4112 - Maple, Beech, Cherry Association	High Density Pole	3.6	57	81-110	
70	4130 - Aspen	High Density Sapling	40.1	6		Regen coming along well 10-15' in spots. Some area aren't as dense.
71	42110 - Planted Red Pine	High Density Pole	29.5	36	141-170	3 stick RP. Rows are wide 12' or so. Fire burned 6 acres of the stand on 4/15/11.

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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 170
Year of Entry: 2013

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
72	42110 - Planted Red Pine	Medium Density	12.2	9		regen 6-8' tall. Stocking isn't very uniform.
73	4112 - Maple, Beech, Cherry Association	Low Density Pole	4.8	54	1-50	
77	4130 - Aspen	Low Density Pole	11.2	30		
80	4110 - Sugar Maple Association	Low Density Sapling	101.4	36		Upland brush stand. Quite a bit of pole sized cherry present with widely spaced 5yr old red pine underneath.
82	4130 - Aspen	Medium Density Pole	3.1	40		
83	4130 - Aspen	Medium Density Pole	2.7	38		
84	4130 - Aspen	High Density Sapling	10.4	6		regen is pretty even, seems to be more variable at the north end of the stand.
85	42110 - Planted Red Pine	Medium Density	18.3	17		Rolling terrain. planted same time as the RP to the east just not doing as well. Stocking is variable.
87	4130 - Aspen	Medium Density Pole	11.6	39		Nice clone of bigtooth at the north end of stand. South end is mostly poorer quality quaking that is starting to fall apart.
91	4130 - Aspen	Medium Density Pole	103.3	39		Rolling terrain, quaking aspen it starting to deteriorate, bigtooth is real healthy.
92	4130 - Aspen	Medium Density Pole	3.2	38		timber starting to fall down
93	42210 - Natural Red Pine	High Density Sapling	2.2	17		Nice plantation RP ~ 15' tall.
94	42110 - Planted Red Pine	High Density Pole	47.3	36	81-110	3 Stick RP, wide row ~12'. Good diameters but still real limby on the bottom stick or two.
95	42110 - Planted Red Pine	High Density Pole	32.4	36	111-140	Wide row spacing, timber is short. some hardwoods and aspen mixed in.
97	42120 - Planted Jack Pine	High Density Pole	8.3	41		Decent JP 4-5 stick.
98	42110 - Planted Red Pine	High Density Sapling	39.2	17		Nice plantation RP ~15' tall.
100	4130 - Aspen	Medium Density Pole	9.9	36		Decent quality wood.

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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 170
Year of Entry: 2013

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
103	4130 - Aspen	Medium Density Pole	10.9	36		Poor quality quaking aspen.
106	42110 - Planted Red Pine	High Density Pole	1.4	36	81-110	Wide row, timber is short.
109	4130 - Aspen	Low Density Pole	28.4	36		
112	4130 - Aspen	Low Density Pole	32.7	36		
115	4130 - Aspen	Medium Density Pole	32.4	39		
116	4130 - Aspen	Medium Density Pole	39.1	40		Some nice clones of bigtooth but mostly poor quality quaking that is starting to deteriorate.
117	4130 - Aspen	Low Density Pole	3.2	36		
118	42110 - Planted Red Pine	High Density Pole	8.3	37	81-110	3 stick RP. widely spaced rows.
120	4130 - Aspen	Medium Density Pole	16.5	38		
122	4130 - Aspen	Medium Density Pole	10.3	36		
124	4130 - Aspen	Medium Density Pole	42.1	39		Some nice clones of big tooth, otherwise moderate to poor condition of quaking aspen, some of which is starting to croak.
125	4130 - Aspen	Low Density Pole	9.4	36		
127	42110 - Planted Red Pine	High Density Pole	6.0	36	81-110	3 stick red pine, short, fat limby wood.
128	4130 - Aspen	Low Density Pole	2.6	36		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	310 - Herbaceous Openland	2.1	N/A	Unspecified	
7	320 - Upland Shrub	3.8	N/A	Unspecified	
9	122 - Road/Parking Lot	6.5	N/A	Unspecified	
13	310 - Herbaceous Openland	4.4	N/A	Unspecified	
15	320 - Upland Shrub	4.5	N/A	Unspecified	
18	310 - Herbaceous Openland	1.3	N/A	Unspecified	
19	310 - Herbaceous Openland	1.6	N/A	Unspecified	
21	310 - Herbaceous Openland	6.0	N/A	Unspecified	
22	310 - Herbaceous Openland	6.5	N/A	Unspecified	
23	310 - Herbaceous Openland	1.4	N/A	Unspecified	
25	122 - Road/Parking Lot	2.3	N/A	Unspecified	
26	310 - Herbaceous Openland	2.2	N/A	Unspecified	
36	310 - Herbaceous Openland	1.2	N/A	Unspecified	
41	310 - Herbaceous Openland	9.9	N/A	Unspecified	
45	330 - Low-Density Trees	1.2	N/A	Unspecified	
50	320 - Upland Shrub	32.0	N/A	Unspecified	
61	330 - Low-Density Trees	1.6	N/A	Unspecified	
67	320 - Upland Shrub	1.9	N/A	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
74	122 - Road/Parking Lot	5.3	N/A	Unspecified	
75	310 - Herbaceous Openland	0.9	N/A	Unspecified	
76	330 - Low-Density Trees	7.1	N/A	Unspecified	
78	320 - Upland Shrub	4.1	N/A	Unspecified	
79	3102 - Grass	7.2	No	Red Pine	Stand was involved with a wildfire on 4/15/2011.
81	310 - Herbaceous Openland	2.1	N/A	Unspecified	
86	310 - Herbaceous Openland	3.2	N/A	Unspecified	
88	122 - Road/Parking Lot	3.2	N/A	Unspecified	
89	320 - Upland Shrub	3.4	N/A	Unspecified	
90	310 - Herbaceous Openland	1.2	N/A	Unspecified	
96	310 - Herbaceous Openland	76.9	N/A	Unspecified	
99	310 - Herbaceous Openland	2.3	N/A	Unspecified	
101	320 - Upland Shrub	1.0	N/A	Unspecified	
102	310 - Herbaceous Openland	2.5	N/A	Unspecified	
104	320 - Upland Shrub	7.2	N/A	Unspecified	
105	310 - Herbaceous Openland	4.6	N/A	Unspecified	
107	310 - Herbaceous Openland	6.3	N/A	Unspecified	
108	320 - Upland Shrub	1.5	N/A	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
110	123 - Other High Intensity Urban	42.9	N/A	Unspecified	
111	310 - Herbaceous Openland	34.1	N/A	Unspecified	
113	310 - Herbaceous Openland	2.7	N/A	Unspecified	
114	622 - Lowland Shrub	0.9	N/A	Unspecified	
119	122 - Road/Parking Lot	17.2	N/A	Unspecified	
121	310 - Herbaceous Openland	6.9	N/A	Unspecified	
123	320 - Upland Shrub	10.4	N/A	Unspecified	
126	310 - Herbaceous Openland	1.5	N/A	Unspecified	



7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments
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8 – 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
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.