



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

COMPARTMENT # 173 ENTRY YEAR: 2014

Compartment Acreage: 1422 County: Kalkaska

Stand Examiner: Steve Crigier

Legal Description: T28N R6W Sec: 18 & 19. T28N, R7W Sec: 13 & 24.

Management Goals: This compartment is dominated by Northern Hardwoods with a lesser component of aspen and red pine. The Northern Hardwoods are being managed with selective harvests promoting sawlog quality and allowing for regeneration in the canopy gaps. The compartment also encompasses the headwaters of the Rapid River, Rainbow Lake and Peters Lake. Applying appropriate buffers and applying Best Management practices around the lakes and river will keep their natural communities intact.

Soil and Topography: The uplands are dominated by Kalkaska sands. Some of the higher quality hardwood sites are on Southwell and Croswell sands tend to have well stocked bigtooth aspen above them. Land is generally flat with some moderate bluffs around the lakes and the Rapid River.

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

The compartment is near other state forest land mixed in with quite a bit of private ownership. The private lands are concentrated around the lakes, in the center of the compartment, many of which are seasonal residents. Oil and gas development is present in the area but land use is predominately recreation and forestry related.

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

The head waters of the Rapid River run through the north west portion of the compartment. There are a chain of lakes, Rainbow, Peters and Davis Lake that are in the south eastern end of the compartment. There has been a loon, osprey and eagle see in the area. There are eagles, loons and osprey adjacent to the compartment.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None known.

Special Management Designations or Considerations: None at this time.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and part of 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 that does not have a current economic use. Gravel pits are located in Sections 13 and 14 and potential is good, especially the upland.

Vehicle Access: Twin Lake Road provide paved access along the north boundary of the compartment. Wood and Priest Road are good gravel roads. The interior of the compartment can be access through poor dirt roads and two track trails.

Survey Needs: None

Recreational Facilities and Opportunities: The Leetsville ORV trail runs through the western portion of the compartment, the trail head is off Country Road 612. The Michigan Cross Country Cycle Trail run down the Priest Road and Croy Lake Road. There is a boat launch at Rainbow Lake off Priest Rd. The timberland offers various hunting and hiking opportunities.

Fire Protection: Fire protection for these compartments is directed out of the Kalkaska Field Office with back up assistance from the Gaylord unit as well as the Regional OSC if required. Local volunteer fire departments would also be dispatched in the event of a wildfire. Travel time from Kalkaska is roughly 15 minutes and roads into the area are fairly accessible. Water points for fire control could be established at one of the creek crossings or the water access point on Leetsville road. Submitted by: Rod Rader, DNR, 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:**

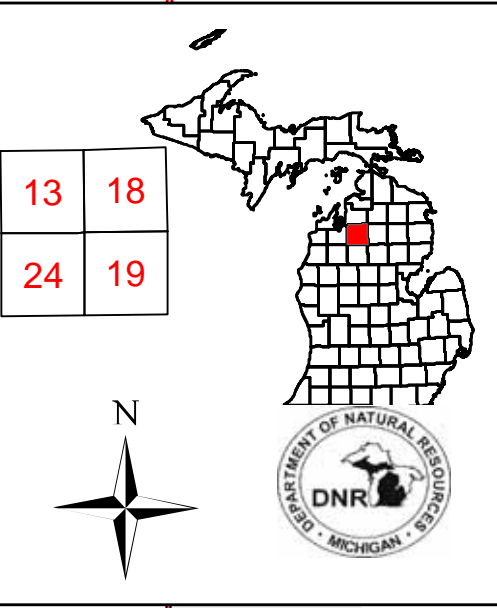
- Cover Type by Age Class**
- Cover Type by Management Objective**
- Compartment Volume Summary**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**

****** 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**

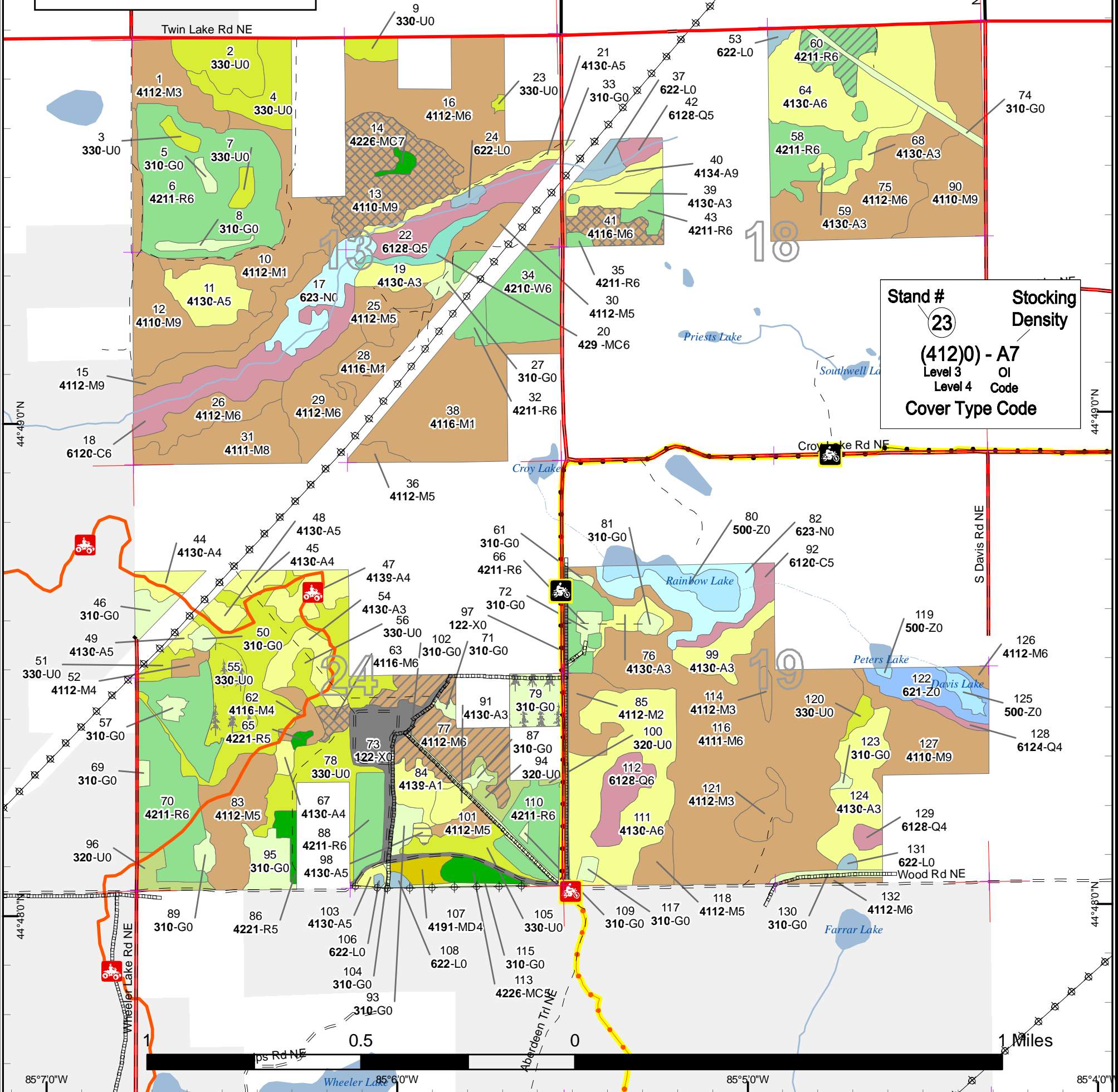
Cover Type & Treatment Map

Compartment: 173
 T28N R06W 18, 19
 T28N R07W 13, 24
 County: Kalkaska
 Unit: Traverse City
 YOE: 2014
 Acres: 1,422 GIS Calculated
 Examiner: Steven Crigier
 Map Revised: 5/23/2012
 Map Phase: Pre-Review



Legend

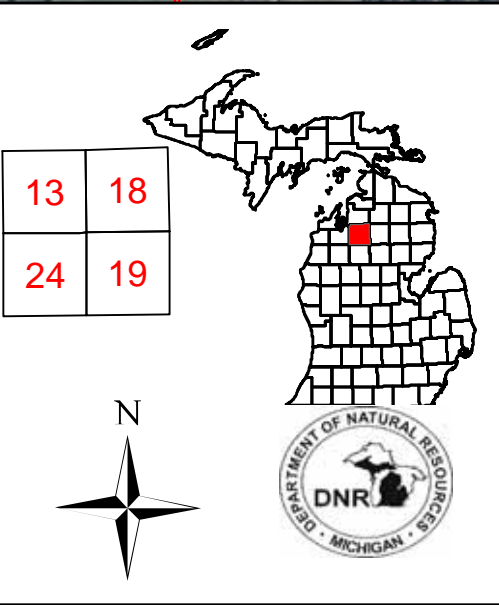
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| <ul style="list-style-type: none"> — Miris Corners — County Paved Roads — Paved Roads — County Gravel Roads = Gravel Roads - - Poor Dirt Roads — Pipeline — Powerline — Stream - - Intermittent Stream — Lakes and Rivers Motorcycle Trails (SOS License) Motorcycle Trails (DNR License) MCCCT Trails ORV Trails Motorcycle (DNR Sticker) Motorcycle (SOS License) ORV Trail | <h3>Treatments</h3> <ul style="list-style-type: none"> Clearcut (w/Reserves, Patch/Strip) Selection (Group, Single Tree) Thinning (Crown, Low, Systematic) Planting (tree species) <h3>Forest Stands</h3> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 413 - Aspen Types 419 - Mixed Upland Deciduous 421 - Planted Pines 422 - Natural Pines 429 - Mixed Upland Conifers 612 - Lowland Coniferous Forest <h3>Non-Forest Stands</h3> <p>Level 3</p> <ul style="list-style-type: none"> 122 - Road/Parking Lot 310 - Herbaceous Openland 320 - Upland Shrub 330 - Low-Density Trees 500 - Water 621 - Floating Aquatic 622 - Lowland Shrub 623 - Emergent Wetland |
|--|---|



Stand #	Stocking Density
23	
(4120) - A7	
Level 3	01
Level 4	Code
Cover Type Code	

Stand Boundary Map

Compartment: 173
 T28N R06W 18, 19
 T28N R07W 13, 24
 County: Kalkaska
 Unit: Traverse City
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Legend

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|--|---|

Stand #	Stocking Density
23	
(412)0 - A7	
Level 3	01
Level 4	Code
Cover Type Code	

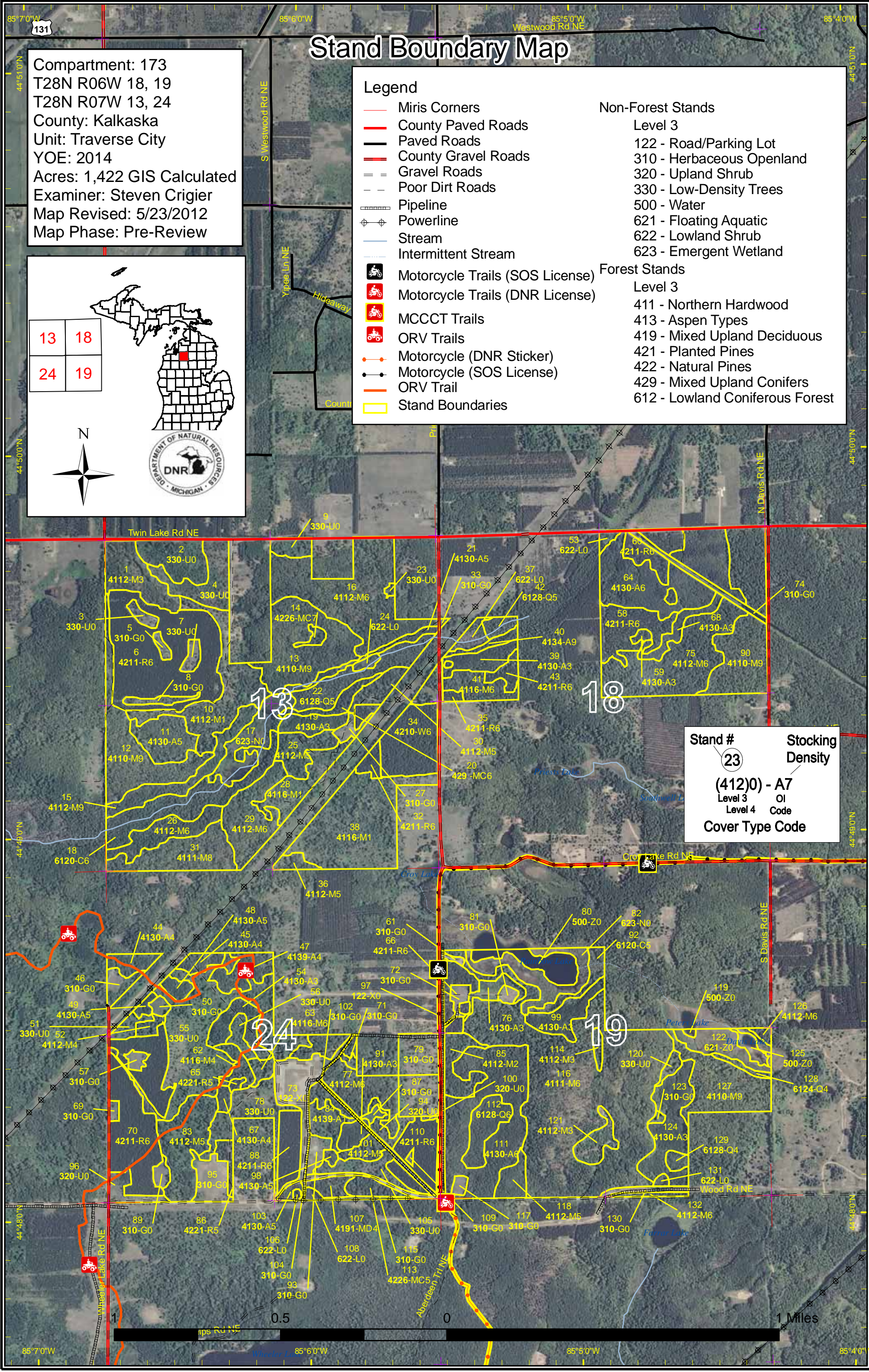


Table 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	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 +		Uneven Age
Aspen	6	55	22	72	59	0	0	3	0	0	0	0	0	0	217
Cedar	0	0	0	0	0	0	0	6	26	0	0	0	0	0	31
Herbaceous Openland	62	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Low-Density Trees	124	0	0	0	0	0	0	0	0	0	0	0	0	0	124
Lowland Conifers	0	0	0	10	0	0	5	2	16	0	0	0	0	0	34
Lowland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Marsh	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Mixed Upland Deciduous	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Natural Mixed Pines	0	0	0	0	5	0	0	2	0	0	0	0	0	0	7
Northern Hardwood	0	18	88	22	0	5	0	263	218	28	0	0	0	0	643
Red Pine	0	0	123	0	18	31	0	0	0	0	0	0	0	0	173
Upland Conifers	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Upland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Urban	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Water	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
White Pine	0	0	0	0	0	21	0	0	0	0	0	0	0	0	21
Total	294	73	234	109	82	57	10	275	260	28	0	0	0	0	1422



Table 2 – Proposed Treatment Summaries

Traverse City Mgt. Unit
Year of Entry 2014

Compartment 173
Total Compartment Acres: 1422

Acres by Treatment Type

Commercial Harvest - 84	Site Prep - 0	Tree Planting - 21	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	1	0	0	0	0	0	1
Northern Hardwood	0	46	0	0	26	0	72
Red Pine	0	0	0	0	11	0	11
Total	1	46	0	0	37	0	84



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13 61173013-Cut	33.8	4110 - Sugar Maple Association	High Density Log	86	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Thin stand down to 80sqft/ac. Maintain some of the cherry, beech and basswood.

Specs:

Other Looks like there is an old road/skid trail coming down from stand 9 and through 16 to the north edge of the stand. Would recomend using this as
Comments: the main access. Or coming off Wheeler Lk Rd and through stand 10.

Next
Steps:

Proposed
Start Date: 10/01/2013

41 61173041-Cut	8.9	4116 - Mixed N. Hardwood - Aspen	High Density Pole	77	51-80	Harvest	Group Selection	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
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Prescription Cut the aspen out of the stand and thin through the pockets of maple (70-80sqft/ac.)

Specs:

Other I didn't look for survey corners but looks like there is good evidence to go off. Stand 43 was thinned last YOE so blue should be good on the east
Comments: side. Hardwoods are more on the west side of the stand turning to more aspen on the east.

Next
Steps:

Proposed
Start Date: 10/01/2013

60 61173060-Cut	10.7	42110 - Planted Red Pine	High Density Pole	50	141-170	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Thin stand down to 120sqft/ac. Take out poor form.

Specs:

Other Access off 2 track on east side of the stand.
Comments:

Next
Steps:

Proposed
Start Date: 10/01/2013

77 61173077-Cut	26.4	4112 - Maple, Beech, Cherry Association	High Density Pole	78	81-110	Harvest	Crown Thinning	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
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Prescription Thin stand down to 80sqft/ac.

Specs:

Other Access will be off Road into well pad. Blue line is in from previous harvest and matched up with a few corners that I did find. A few pipelines run
Comments: through the stand will want to contact Merrit Energy.

Next
Steps:

Proposed
Start Date: 10/01/2013



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
98	61173098-Cut	1.0	4130 - Aspen	Medium Density Pole	46		Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal

Prescription: Clearcut stand. Leave a few cherry for retention.

Specs:

Other: Sell stand of timber with stand 77 to the north.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2013

55	NF_61173055-Plant_small	11.3	330 - Low-Density Trees				Tree Planting	Hand Plant	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription: West side of stand might be a good place to plant a few more red pine.

Specs:

Other:

Comments:

Next Regen check in 2-3 years.

Steps:

Proposed

Start Date: Unspecified

79	NF_61173079-Plant	9.8	310 - Herbaceous Openland				Tree Planting	Hand Plant	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription: Trench and plant red pine. Will want to have wildlife take a look at site first.

Specs:

Other: Will need to run property lines. There is a pipeline on the north side of stand.

Comments:

Next Regen check in 2-3 yrs.

Steps:

Proposed

Start Date: Unspecified

**Total Treatment
Acreage Proposed: 101.9**

Table 4 -- Treatments Prescribed with a Limiting Factor



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63 61173063-Cut	2.8	4116 - Mixed N. Hardwood - Aspen	High Density Pole	71		Harvest	Single Tree Selection	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal

Prescription Remove aspen from stand and thin through the clumpy maple.

Specs:

Other Comment: Sell stand with stand 77 to the east. Stand is close to the Leetsville ORV trail. Might need the trail protection spec. Also there is a buried electric line in the 2 track to the north.

Next Steps:

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason 4A: No merchantable products (see product standards)

Total Treatment Acreage Proposed: 2.8

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61043_OutOfY OE-Cut	2.1					Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal - Incomplete

Prescription

Specs: retain some pine and osk for mast and seed production, Follwo WLD guidance for CWD creation. Harvest all stems that are not retained.

Other New stand should have mix of oak, pine, aspen and maple.

Comments:

Next

Steps:

Proposed

Start Date: 09/01/2009

61231_OutOfY OE-Thin	4.6			0		Harvest	Low Thinning	4122 - Oak, Pine	Cmpt. Review Proposal
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Prescription Within harvest area, remove all aspen. Heavily thin oak and maple to a residual BA of about 50 sf. Leave retention in patches or strips sufficient to meet minimum retention goals.

Other Topography is rather hilly. Combine with treatment in Compartment 133.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 6.7**



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4112 - Maple, Beech, Cherry Association	High Density Sapling	16.1	37	1-50	Stand is a hardwood sapling stand that is starting to convert to pole timber. Nice sugar maple regen. Some pockets of aspen pole timber and some scatter hardwood log trees.
6	42110 - Planted Red Pine	High Density Pole	55.7	29	111-140	Red pine are 2-3 sticks tall. Good diameters right around 8". Rows are wide 10-12'.
10	4112 - Maple, Beech, Cherry Association	Low Density Sapling	28.7	26	1-50	Stand is an opening filling in. Mostly cherry with some pockets of aspen and maple.
11	4130 - Aspen	Medium Density Pole	13.1	44		Stand is and A5 with an M3/M4 underneath. Nice maple regen mostly sugar. Aspen is quaking and is poor quality stuff.
12	4110 - Sugar Maple Association	High Density Log	28.5	90	51-80	Mostly sugar maple, medium quality. Stand thinned last year of entry. Lots of ironwood and beech regen. Hold on treatment for 10-20yrs
13	4110 - Sugar Maple Association	High Density Log	33.8	86	111-140	Stand was thinned in 92. Heavy ironwood regen.
14	42260 - Natural Pine, Mixed Deciduous	Low Density Log	1.8	77	1-50	Stand is in a bit of a frost pocket filling in nice with sugar maple regen. With scattered white pine logs in the overstory
15	4112 - Maple, Beech, Cherry Association	High Density Log	14.2	84	81-110	Stand is a bluff on the north side of the Rapid River. Steep terrain and is inoperable. Stand has a few clones of bigtooth aspen.
16	4112 - Maple, Beech, Cherry Association	High Density Pole	49.0	83	81-110	Stand was thinned last year of entry. Tops have room to grow still. Lots of ironwood and beech in the understory. Should hold until next rotation.
18	6120 - Lowland Cedar	High Density Pole	25.7	89		A lowland conifer stand that has the rapid river running through it. North part of the stand is more fir and red maple. South of the river turns into more cedar, spruce and hemlock
19	4130 - Aspen	High Density Sapling	6.6	14		Stand has regenerated well. Cut in 98' and is mostly aspen but has a mix of maple, beech, cherry and birch.
20	429 - Mixed Upland Conifers	High Density Pole	5.1	68		Stand is on a bluff sloping down to the headwaters of the rapid river. Stand is mostly and upland conifer with a mix of white pine and fir with a mix of aspen and red maple.
21	4130 - Aspen	Medium Density Pole	5.1	29		Stand converting to a pole stand. Stand runs along the old railroad grade. Stocking becomes more sparse to the west. Stand also has some pot holes in it. Might have been used for fill for the RR grade.
22	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	16.1	84		Stand is a lowland conifer stand with some mixed red maple. Transition ground to the headwaters of the Rapid River.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4112 - Maple, Beech, Cherry Association	Medium Density Pole	10.0	81	51-80	Stand has some scattered logs but is mostly a pole stand with a few clones of bigtooth aspen. Lots of hazelnut in the understory also getting some nice sugar maple regen.
26	4112 - Maple, Beech, Cherry Association	High Density Pole	12.6	86	81-110	Stand is on some hilly terrain heading down to the Rapid River. Stand has some medium quality logs and some poor quality stems that could be removed. Terrain is less steep to the east end of the stand.
28	4116 - Mixed N. Hardwood - Aspen	Low Density Sapling	13.2	25		Stand is an opening filling in nicely with sugar maple. Also some scattered cherry pole timber
29	4112 - Maple, Beech, Cherry Association	High Density Pole	19.7	85	81-110	Stand is of poor quality. Stand was thinned in 94 pretty heavily. Lots of ironwood and beech in the understory. Stocking in the stand is variable. Some pockets were thinned heavily and then there is pockets that were hardly touched. Extra BAs 110, 110, 100, 80.
30	4112 - Maple, Beech, Cherry Association	Medium Density Pole	10.7	82	1-50	Stand is a mix of some M5 pockets with a few clones of aspen and also has some maple regen underneath.
31	4111 - S.Maple, Hard Mast Association	Medium Density Log	20.7	86	51-80	Stand was thinned in 94, tops still have room to grow and basal area isn't there yet. Lots of ironwood regen with some hard maple mixed in.
32	42110 - Planted Red Pine	High Density Pole	5.2	48	81-110	Stand was thinned last year of entry. Stand has pretty good height development 6-7 sticks. Long term plan might be to push stand to hardwoods, lots of regen underneath.
34	42100 - Planted White Pine	High Density Pole	20.7	52	111-140	Last treated in 98. White pine is poor quality. Crowns look like they still have room to grow. Hold on a thinning and let the white pine work as a nurse crop and let the hardwood regen get a little more established. Maybe look at leaving 30-40 sqft/ac of white pine next YOE and letting the stand convert to hardwoods.
35	42110 - Planted Red Pine	High Density Pole	1.5	48	81-110	Stand was thinned in 98.
36	4112 - Maple, Beech, Cherry Association	Medium Density Pole	3.0	77	51-80	Stand has a few open pockets in it. Lots of multi-stem trees. Would thin when hardwoods to the west is treated.
38	4116 - Mixed N. Hardwood - Aspen	Low Density Sapling	46.6	27		Stand is an opening filling in. Let stand convert to a hardwood stand some nice pockets of maple regen already present. Also a few clones of aspen out there with some scattered cherry pole timber.
39	4130 - Aspen	High Density Sapling	8.0	29		Regen is about 20-30' tall.
40	4134 - Aspen, Spruce/Fir	High Density Log	2.9	70		Stand is on bluff. Big aspen with balsam fir also. Leave for creek buffer.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	4116 - Mixed N. Hardwood - Aspen	High Density Pole	8.9	77	51-80	Stand is a poor quality hardwood stand mixed with some pockets of Bigtooth aspen. Hardwoods are more on the west end of the stand and turning to more aspen as you head east.
42	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	3.2	65		Stand is contains the headwaters to the Rapid River.
43	42110 - Planted Red Pine	High Density Pole	4.0	48	111-140	Some nice heights 6-7 stick. Hold on a thinning until next YOE.
44	4130 - Aspen	Low Density Pole	5.0	30		
45	4130 - Aspen	Low Density Pole	3.9	30		Stand is converting to a pole stand.
47	4139 - Aspen, Mixed Deciduous	Low Density Pole	9.3	30	1-50	
48	4130 - Aspen	Medium Density Pole	3.0	30		Stand is converting to a pole stand. About 3 stick timber.
49	4130 - Aspen	Medium Density Pole	1.6	30		Some 3-4 stick timber
52	4112 - Maple, Beech, Cherry Association	Low Density Pole	2.3	71	1-50	
54	4130 - Aspen	High Density Sapling	9.2	28		Poor quality timber 20-25' tall. Stand has Leetsville ORV trail running through it.
58	42110 - Planted Red Pine	High Density Pole	16.8	50	81-110	Row thinned last YOE. Tops look like they have room to grow. Timber is about 6 sticks tall. Lots of Hardwood regeneration underneath.
59	4130 - Aspen	High Density Sapling	1.1	5		Stand was cut with the adjacent R6 in 97. Thick regen about 10' tall
60	42110 - Planted Red Pine	High Density Pole	10.7	50	141-170	Row thinned in 2004. Crowns are tight together. Good height development, 6-7 sticks in some spots.
62	4116 - Mixed N. Hardwood - Aspen	Low Density Pole	4.9	51	1-50	Mortality in the aspen.
63	4116 - Mixed N. Hardwood - Aspen	High Density Pole	2.8	71		Stand is a bunch of clumpy soft maple to the north with a few clones of aspen through out. Nice quality bigtooth. the quaking is falling down.
64	4130 - Aspen	High Density Pole	43.3	40		Stand turn more of an A5 in the southwest part of stand and is heavier to quaking. Nice quality aspen about 4-5 stick in the bigtooth clones

S t a n d	Traverse City Mgt. Unit		5 – Forested Stands			Compartment: 173 Year of Entry: 2014	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		
65	42210 - Natural Red Pine	Medium Density Pole	0.9	58	51-80	Red pine is 4-5 sticks tall.	
66	42110 - Planted Red Pine	High Density Pole	7.8	45	111-140	Row thinned in 2007. Tops have room to grow.	
67	4130 - Aspen	Low Density Pole	2.0	30		Stand is converting from a sapling to a pole stand.	
68	4130 - Aspen	High Density Sapling	6.1	15		Dense regen about 15' tall 2-3" in diameter.	
70	42110 - Planted Red Pine	High Density Pole	42.8	28	141-170	RP is 3 sticks tall, occasionally some 4 stick trees.	
75	4112 - Maple, Beech, Cherry Association	High Density Pole	54.5	76	81-110	Real clumpy and poor quality timber. Good amounts of sugar maple regen!! Stand was last thinned in 98. Stocking is variable some pockets could be thinned other BA is pretty low. Extra BA's 80, 110, 70, 100,	
76	4130 - Aspen	High Density Sapling	4.8	5		Regen 5-10' tall	
77	4112 - Maple, Beech, Cherry Association	High Density Pole	26.4	78	81-110	Stand looks like it has been thinned through before. West part of stand is clumpy soft maple turning into more hard maple pole timber to the east. Looks like it was thinned around 1994.	
83	4112 - Maple, Beech, Cherry Association	Medium Density Pole	22.7	70	1-50	Scattered timber.	
84	4139 - Aspen, Mixed Deciduous	Low Density Sapling	6.9	17		Portion of stand looks like it was cut with the aspen stand to the south east.	
85	4112 - Maple, Beech, Cherry Association	Medium Density	9.0	18			
86	42211 - Natural Red Pine, Mixed Deciduous	Medium Density Pole	3.1	58	51-80		
88	42110 - Planted Red Pine	High Density Pole	9.6	28	171-200	Hold stand for 10 yrs. Doesn't quite have the height about 3 stick timber. Good diameters though.	
90	4110 - Sugar Maple Association	High Density Log	21.8	88	81-110	Real nice quality logs, thinned in 2007. Lots of blackberry brush. More pole timber in the western of the stand. High % of veneer and #1 logs.	
91	4130 - Aspen	High Density Sapling	4.1	17		Regenerated well 20-25'	
92	6120 - Lowland Cedar	Medium Density Pole	5.5	75		transition ground to the wetland to the north.	



S t a n d	Traverse City Mgt. Unit		5 – Forested Stands			Compartment: 173	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
98	4130 - Aspen	Medium Density Pole	1.0	46			Would be nice to cut, need something to go with it. Quaking is starting to fall apart.
99	4130 - Aspen	High Density Sapling	9.7	17			Thick regeneration 15-20' tall.
101	4112 - Maple, Beech, Cherry Association	Medium Density Pole	4.2	78	1-50		
103	4130 - Aspen	Medium Density Pole	1.5	46			Would be nice to cut but is small acreage with a V0 in it surrounded by a road, pipeline and a powerline.
107	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	4.2	35	1-50		
110	42110 - Planted Red Pine	High Density Pole	14.7	28	171-200		Stand has good diameters but is only about 3 sticks tall. Hold for another 10yrs to get some more height on them
111	4130 - Aspen	High Density Pole	47.2	38			Some pockets are more of and A4 to A5 where there is more quaking aspen. Some of the bigtooth is 5 sticks tall. Bigtooth is nice quality wood. Some mature stuff out on Priest Rd.
112	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	10.5	38			Lowland stand aspen overtop the cedar and balsam fir. Providing some nice thermal cover.
113	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	4.9	43	1-50		Poor quality White pine.
114	4112 - Maple, Beech, Cherry Association	High Density Sapling	1.8	17			Lots of beech. 10-20' tall
116	4111 - S.Maple, Hard Mast Association	High Density Pole	136.6	79	81-110		Stand is pretty poor quality, lots of multi-stem stuff and defect. West half of stand was thinned in 07 and the eastern portion was cut in 2011.
118	4112 - Maple, Beech, Cherry Association	Medium Density Pole	5.8	38	1-50		Stand is converting from sapling to pole stand.
121	4112 - Maple, Beech, Cherry Association	High Density Sapling	6.8	17			Regen 10-20' tall
124	4130 - Aspen	High Density Sapling	21.5	17			Stand is real nice aspen regen about 20' tall.
126	4112 - Maple, Beech, Cherry Association	High Density Pole	1.3	74	51-80		
127	4110 - Sugar Maple Association	High Density Log	24.1	88	81-110		Stand has a lot of pole timber on the west side and then turns into a real high quality log stand in the eastern part. Lots of raspberry. Stand includes a bluff that overlooks the lake to the north. Stand thinned in 2007.



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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 173
Year of Entry: 2014



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
128	6124 - Lowland Spruce- Fir	Low Density Pole	1.9	65		
129	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	2.1	70		Stand is real wet, lots of mortality in the black spruce, high water table.
132	4112 - Maple, Beech, Cherry Association	High Density Pole	1.8	83	81-110	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	330 - Low-Density Trees	13.8	No	Unspecified	
3	330 - Low-Density Trees	2.3	No	Unspecified	
4	330 - Low-Density Trees	14.4	Yes	Oak	
5	310 - Herbaceous Openland	1.5	No	Unspecified	
7	330 - Low-Density Trees	2.5	No	Unspecified	
8	310 - Herbaceous Openland	2.7	No	Unspecified	
9	330 - Low-Density Trees	4.4	No	Unspecified	
17	623 - Emergent Wetland	15.8	No	Unspecified	
23	330 - Low-Density Trees	0.6	No	Unspecified	
24	622 - Lowland Shrub	1.5	No	Unspecified	
27	310 - Herbaceous Openland	2.6	No	Unspecified	
33	310 - Herbaceous Openland	0.4	No	Unspecified	
37	622 - Lowland Shrub	3.9	No	Unspecified	
46	310 - Herbaceous Openland	4.1	No	Unspecified	
50	310 - Herbaceous Openland	1.7	No	Unspecified	
51	330 - Low-Density Trees	3.2	No	Unspecified	
53	622 - Lowland Shrub	1.6	No	Unspecified	
55	330 - Low-Density Trees	54.0	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
56	330 - Low-Density Trees	3.6	No	Unspecified	
57	310 - Herbaceous Openland	1.8	No	Unspecified	
61	310 - Herbaceous Openland	0.7	No	Unspecified	
69	310 - Herbaceous Openland	1.2	No	Unspecified	
71	310 - Herbaceous Openland	1.0	No	Unspecified	
72	310 - Herbaceous Openland	2.7	No	Unspecified	
73	122 - Road/Parking Lot	16.3	No	Unspecified	
74	310 - Herbaceous Openland	4.5	No	Unspecified	
78	330 - Low-Density Trees	15.6	No	Unspecified	
79	310 - Herbaceous Openland	9.8	No	Unspecified	
80	50 - Water	10.0	No	Unspecified	
81	310 - Herbaceous Openland	1.5	No	Unspecified	
82	623 - Emergent Wetland	15.2	No	Unspecified	
87	310 - Herbaceous Openland	1.1	No	Unspecified	
89	310 - Herbaceous Openland	2.2	No	Unspecified	
93	3102 - Grass	3.6	No	Unspecified	
94	320 - Upland Shrub	4.3	No	Unspecified	
95	310 - Herbaceous Openland	8.5	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
96	320 - Upland Shrub	5.1	No	Unspecified	
97	122 - Road/Parking Lot	10.5	No	Unspecified	
100	320 - Upland Shrub	0.4	No	Unspecified	
102	310 - Herbaceous Openland	3.0	No	Unspecified	
104	310 - Herbaceous Openland	0.4	No	Unspecified	
105	330 - Low-Density Trees	7.7	No	Unspecified	
106	622 - Lowland Shrub	0.5	No	Unspecified	
108	622 - Lowland Shrub	1.0	No	Unspecified	
109	310 - Herbaceous Openland	0.4	No	Unspecified	
115	310 - Herbaceous Openland	1.4	No	Unspecified	
117	310 - Herbaceous Openland	1.5	No	Unspecified	
119	50 - Water	0.5	No	Unspecified	
120	330 - Low-Density Trees	2.1	No	Unspecified	
122	621 - Floating Aquatic	11.4	No	Unspecified	
123	310 - Herbaceous Openland	0.7	No	Unspecified	
125	50 - Water	3.0	No	Unspecified	
130	310 - Herbaceous Openland	2.9	No	Unspecified	
131	622 - Lowland Shrub	0.9	No	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



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.