

# TRAVERSE CITY FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT #156 ENTRY YEAR: 2012

Compartment Acreage: 1892 County: Kalkaska

**Stand Examiner:** Steve Crigier

Legal Description: T26N, R8W, Sec. 4, 5 & 6

**Management Goals:** The shelterwood and seed tree cuts in the compartment will encourage regeneration in the mixed pine and oak stands. Regenerating these timber types will ensure the presence of our natural pine and oak stands and provide food and shelter for many wildlife species.

**Soil and Topography:** The terrain is generally upland and well drained. These upland areas are on rubicon sand soil. Taylor Creek runs through the southern portion of the compartment adding some lowland timber types that are on Nester Peat soils.

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

The compartment has 1 private 20 acre parcel in section 5. The rest of the compartment is state ownership. The property adjacent to the compartment is also owned by the state. Most of this area is managed timberlands with some oil and gas activity.

Unique, Natural Features (include only non-site specific and non-sensitive information): None noted in the MNFI

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

**Special Management Designations or Considerations:** Taylor Creek is a natural rivers High Conservation Value Area. Any management in this area will have to buffer the creek at the appropriate distance.

#### **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. 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. The nearest gravel pit is within two miles to the south. Gravel potential in the compartment is thought to be limited. This area is located in the Silurian Niagaran reef trend. Part of the State land is currently leased and held by production. The rest of the Compartment is nominated for the May 2010 oil & gas lease auction.

**Vehicle Access:** The Boardman River Road provides the main access through the compartment. West Crofton road branches off the west and Vroom Road branches to the east. There are many poor dirt roads through out the compartment.

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**Survey Needs:** None

**Recreational Facilities and Opportunities:** The Boardman Valley Snowmobile Trail runs along side Boardman River Road through the compartment. The area is also used by hunters and ORVs.

**Fire Protection:** VFD Fire Protection is from the South Boardman Fire Dept., and DNRE protection is from the Kalkaska Field Office. This compartment is entirely within Zone 6, which means on a Very High or Extreme Fire day additional DNRE equipment from several stations will respond to the fire. Urban Innerface is not a problem, access is adequate, and travel time from the Kalkaska Field Office is acceptable.

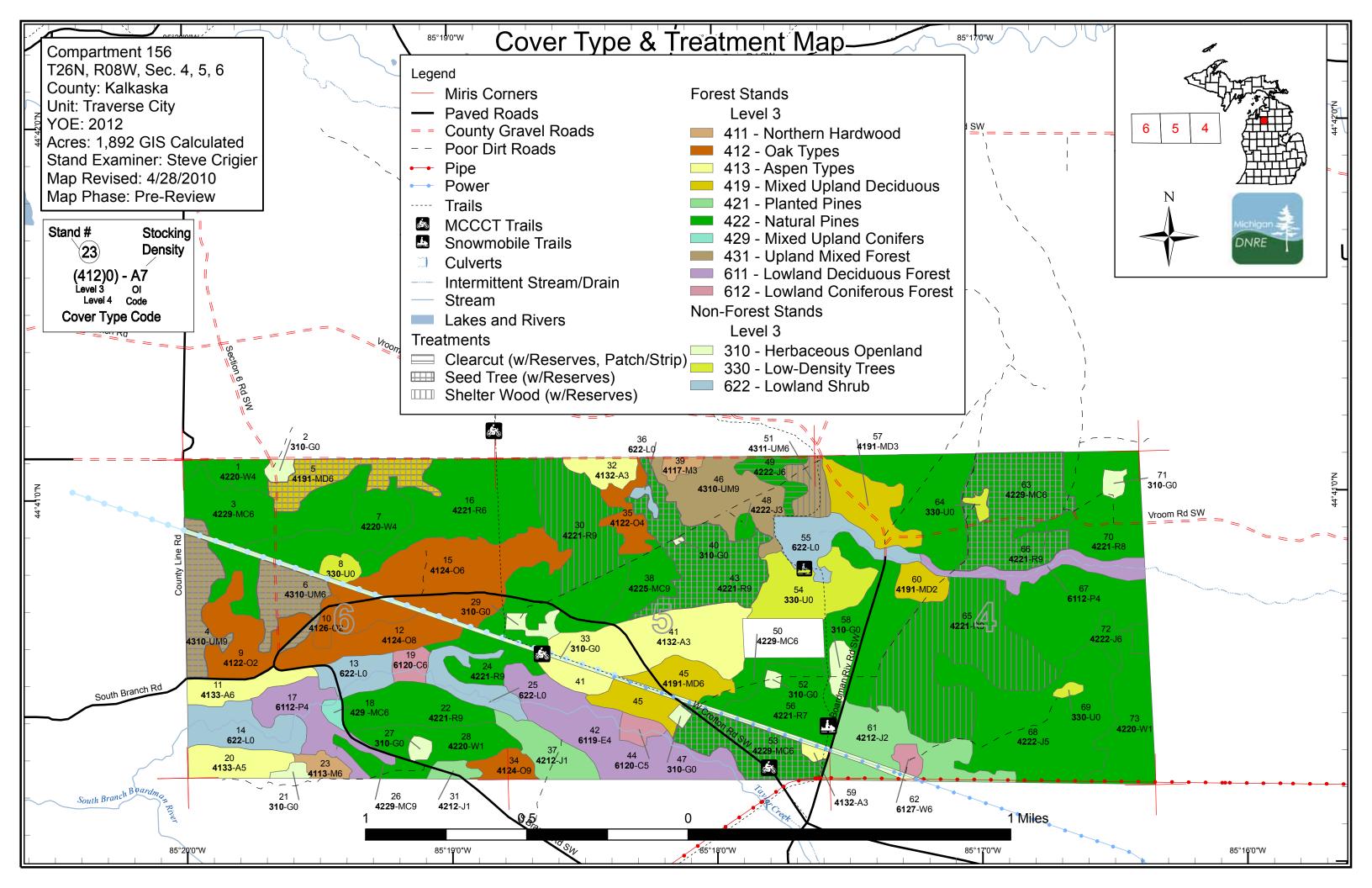
**Additional Compartment Information:** Many of the treatments proposed are portions of stands of timber. The remaining parts of the stands are being left until the next year of entry for age class distribution.

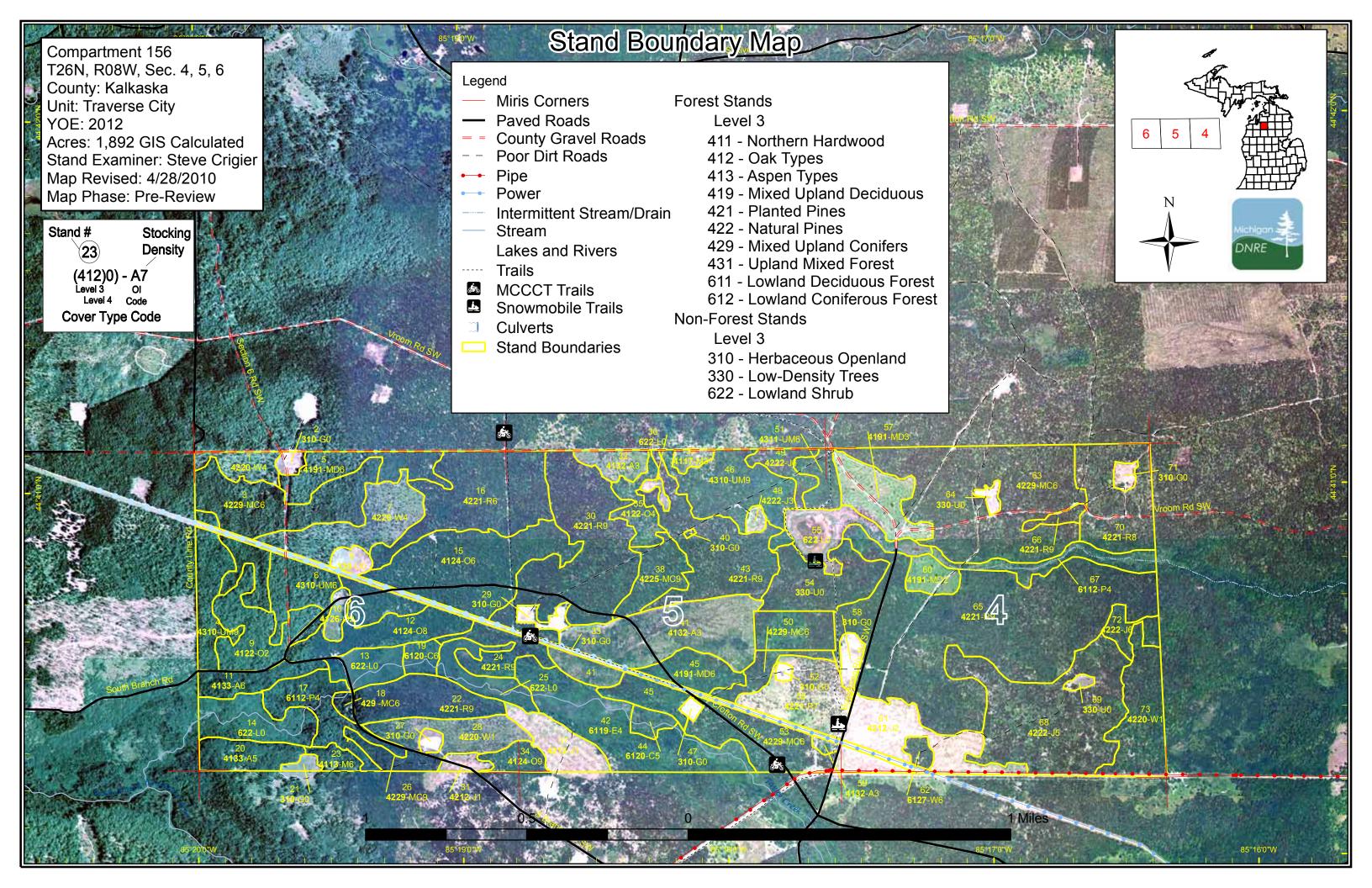
\*\*\*\* Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:

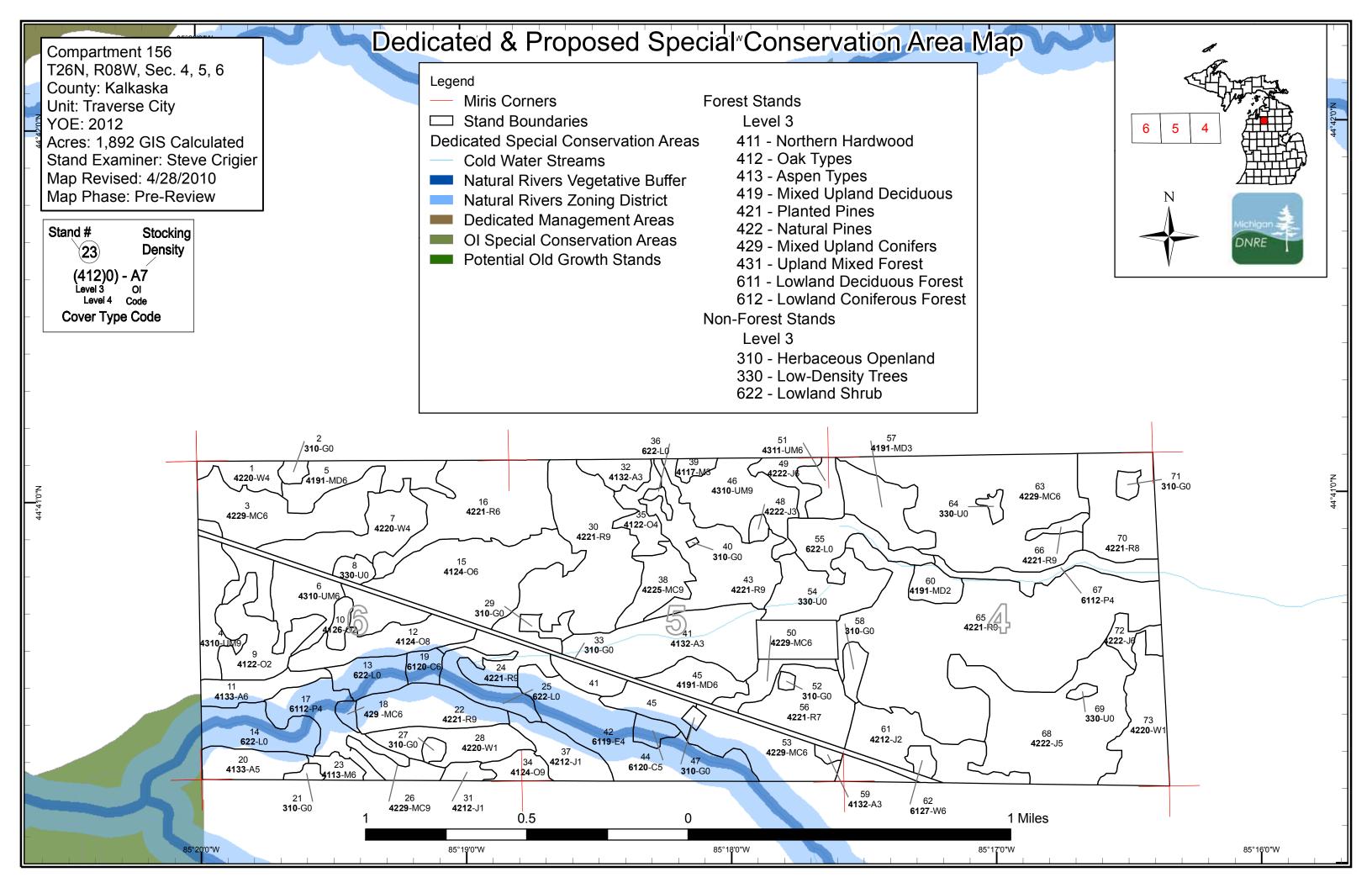
Cover Type by Age Class Cover Type by Management Objective Compartment Volume Summary Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors

\*\*\*\* 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







(Level 3 Cover Type)

Compartment 156 Year of Entry 2012



Age	Class
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	No.		? ?	, oz. oz.	,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	D. C. C.	\ SS. \	8 / S	18° / 1		8 /		70,70	20 <sup>×</sup> 30°		, so
Aspen Types	0	0	81	0	34	0	0	0	0	0	0	0	0	0	0	116	ſ
Herbaceous Openland	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	j
Low-Density Trees	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	j
Lowland Coniferous Forest	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18	j
Lowland Deciduous Forest	0	0	0	0	0	0	47	0	0	0	63	0	0	0	0	111	j
Lowland Shrub	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	ĺ
Mixed Upland Conifers	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	j
Mixed Upland Deciduous	0	37	0	0	0	0	0	26	31	0	0	0	0	0	0	94	
Natural Pines	0	37	3	26	93	0	221	43	314	232	0	0	0	0	44	1014	
Northern Hardwood	0	4	0	0	0	0	6	0	0	0	0	0	0	0	0	11	
Oak Types	0	32	6	0	0	0	0	0	124	9	0	0	0	0	0	171	
Planted Pines	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	70	
Upland Mixed Forest	0	0	0	0	0	0	42	12	0	0	48	0	0	0	0	101	
Total	184	181	90	26	127	0	319	81	469	259	112	0	0	0	44	1892	



# **Table 2 – Proposed Treatment Summaries**

Traverse City Mgt. Unit

Compartment 156

Year of Entry 2012

Total Compartment Acres: 1892

## **Acres by Treatment Type**

Commercial Harvest - 394 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Opening Maintenance - 21 Tree Seeding - 0 Pesticide - 0

#### **Cover Type by Harvest Method**

		Cover Type by Harvest Method								
		The last of the la								
Jack Pine		11	0	0	0	0	0	11		
Mixed Upland De	ciduous	0	0	26	0	0	0	26		
Natural Mixed Pir	nes	0	0	99	0	0	0	99	•	
Red Pine		0	0	55	144	0	0	198	•	
Upland Mixed Fo	rest	0	0	48	12	0	0	60		
	Total	11	0	228	155	0	0	394		

Compartment: 156 Traverse City Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2012 s t а **Treatment** Acres Stage1 Size Stand **Treatment Treatment** Cover Type Approval n Method Name CoverType Density Objective Status d Age Type 61156004-Cut 24.2 4310 - Pine, Oak High Density Log 92 Harvest Seed Tree with Oak, Pine Cmpt. Review Reserves Mix Proposal Prescription Seed Tree stand. Leave about 20sqft/ac of residual oak and pine. Protect white pine regen, don't cut white pine less than 4". Specs: Other Sell with stand 6. Comments: <u>Next</u> Regen check 4 yrs after harvest. Steps: 5 61156005-Cut 26.4 4191 - Mixed High Density Pole 61 Harvest Seed Tree with Oak, Pine Cmpt. Review **Upland Deciduous** Reserves Proposal with Conifer Prescription Seed tree stand. Leave about 10sqft/ac of pine and oak. Protect white pine regen. No cut white pine less than 4". Specs: <u>Other</u> West end of stand is better quality wood and has more of a pine component. Comments: Regen check 4 yrs after harvest. <u>Next</u> Steps: 4310 - Pine, Oak 6 61156006-Cut 23.8 High Density Pole 94 Harvest Seed Tree with Oak, Pine Cmpt. Review Mix Reserves Proposal Prescription Seed Tree stand. Leave 10-20sqft/ac of pine and oak. Specs: Look to leave the fingers that come off the south end of the stand as retention pockets. Comments: Regen check 4 yrs after harvest. Next Steps: 42210 - Natural Natural Red Pine. 30 61156030-Cut 44.6 High Density Log 79 Harvest Shelterwood Cmpt. Review Red Pine Mixed Deciduous Proposal Cut all aspen and jack pine. In addition mark some redpine and oak to cut. Target residual is 40-50sqft/ac. Don't cut and pine regeneration <u>Prescription</u>

<u>Other</u>

less than 4".

Specs:

Treatment area is north of the pipeline, south end of stand is being left for next YOE. When marking trees to cut target mature trees that are Other |

high risk. Comments:

Regen check 4 yrs after harvest <u>Next</u>

Steps:

61156043-Cut 54.5 42210 - Natural Seed Tree High Density Log 73 Harvest Natural Pine, Mixed Cmpt. Review Red Pine Deciduous Proposal

Prescription Seed tree stand. Mark to leave 20sqft/ac of red pine and oak. To protect advanced regen don't cut anything less than 4".

Specs:

<u>Other</u> Stand has pipline and well site in it.

Comments:

regen check 4 yrs after harvest. <u>Next</u>

Steps:

Compartment: 156 Traverse City Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2012 s t **Treatment** Acres Stage1 Size Stand **Treatment Treatment** Cover Type Approval n **Density** Method Objective Name CoverType Status d Age Type 49 61156049-Cut 10.6 42220 - Natural High Density Pole 58 Harvest Clearcut with Natural Pine, Mixed Cmpt. Review Jack Pine Reserves Deciduous Proposal Prescription Clearcut stand. Leave some scattered red pine and oak. Specs: Other | Comments: <u>Next</u> regen check 4 yrs after harvest. Steps: 61156051-Cut 11.7 4311 - Pine, Aspen 51 High Density Pole 65 Harvest Shelterwood Natural Pine, Mixed Cmpt. Review Mix Deciduous Proposal Prescription Leave all oak and mark some redpine to leave. Target residual ~20-30sqft/ac. Specs: <u>Other</u> Stand has snowmobile trail running through it and a pipeline Comments: Regen check 4yrs after harvest. <u>Next</u> Steps: 61156053-Cut 34.8 42290 - Natural High Density Pole Harvest Seed Tree Natural Mixed Pine Cmpt. Review Mixed Pine Proposal Prescription Seed tree stand. Leave all white pine and mark a few oak to leave. Specs: Other Stand has MCCCT trail running through it and snowmobile trail runs through the east part of stand. Comments: **Next** Regen check 4 yrs after harvest. Steps: 63 61156063-Cut 63.8 42290 - Natural High Density Pole 58 Harvest Seed Tree with Natural Mixed Pine Cmpt. Review Mixed Pine Reserves Proposal Seed tree stand. Target residual ~20sqft/ac, except where it is heavy to jack pine. Leave a mix of red and white pine, along with some oak. Prescription Specs: Probably be easiest to mark to leave. <u>Other</u> Only treating east 1/2 of stand this YOE. Protect advanced regen, don't cut any pine less than 4". Comments: Next Hopefully stand regenerates naturally, might have to do some filling in with hand planting with RP and WP. Steps: 61156065-Cut 99.2 65 42210 - Natural High Density Log Harvest Shelter Wood with Pine, Oak Cmpt. Review Red Pine Reserves Proposal Prescription Shelterwood stand. Leave around 50sqft/ac of white pine, red pine and oak. Might be easiest to mark to cut (target mature timber). Protect Specs: advanced regen, don't cut any pine less than 4". <u>Other</u> Just cutting middle part of stand this YOE. Has drain as north boarder. Comments:

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**Total Treatment** 

Acreage Proposed:

regen check in 4 yrs.

393.5

Next

Steps:

Traverse City Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 156 a Limiting Factor s Year of Entry 2012 t **Treatment Treatment Treatment Cover Type** n Acres Stage1 Size Stand

Age

Type

Density

Method

Objective

CoverType

0

DNRE Approval

Status

Prescription

Specs:

Other Comment:

Next Steps:

<u>Limiting Factor and No</u> <u>Treatment Reason</u>

Name

Total Treatment Acreage Proposed:

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s t	Traverse City Mgt. Unit				orested Sta	Nichigan
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42200 - Natural White Pine	Low Density Pole	12.2	51	1-50	Stand was an oak shelterwood with all the white pine left. Oak is regenerating fairly well along with some aspen. Quite a bit of browse. Cut in 2004
3	42290 - Natural Mixed Pine	High Density Pole	62.8	74	81-110	Mixed pine stand. West end of stand is more of a W6.
4	4310 - Pine, Oak Mix	High Density Log	24.2	92	81-110	North end of stand is a bit heavier to pine
5	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	26.4	61	81-110	Poor quality aspen and oak. West end of stand is better quality wood and has more of a pine component.
6	4310 - Pine, Oak Mix	High Density Pole	23.8	94	81-110	Some decent quality pine and oak logs. West end of stand is a bit heavier to oak and is poorer quality.
7	42200 - Natural White Pine	Low Density Pole	36.3	74	1-50	Stand cut in 2004. All white pine was left. Stand regenerating pretty well with oak, aspen and pine.
9	4122 - Oak, Pine	Medium Density	31.9	5		regenerating well.
10	4126 - White, Black, N. Pin Oak	Medium Density	5.5	17		Regen not doing so hot. Browse heavily
11	4133 - Aspen, Mixed Pine	High Density Pole	16.0	34		Transition from high ground to low. Decent popple ~ 4 sticks tall. Fairly small diameters yet
12	4124 - Red with White Oak	Medium Density Log	28.8	78	51-80	Recently cut (shelterwooded) in 2005 'Taylor Cr. Oak"
15	4124 - Red with White Oak	High Density Pole	81.4	76	51-80	Heavy white pine understory. Oak is real scrubby stuff.
16	42210 - Natural Red Pine	High Density Pole	64.1	54	51-80	Decent Rp regen
17	6112 - Lowland Aspen	Low Density Pole	28.3	57	1-50	Wet stand. Some areas are heavier to ash, other have more of an aspen component.
18	429 - Mixed Upland Conifers	High Density Pole	3.0	58		Mix of pine by the road. Stand is heavier to spruce and fir closer to the lowland.
19	6120 - Lowland Cedar	High Density Pole	7.0	85	51-80	Lots of cedar falling down. Filling in with tag alder and ash. Stand has Taylor Cr. Running through it
20	4133 - Aspen, Mixed Pine	Medium Density Pole	18.0	34		Stand is well stocked. A3 converting to A6.
22	42210 - Natural Red Pine	High Density Log	32.1	74	141-170	Nice logs. Aspen and hardwoods were removed in 2004. Pine is tall and has good form 6-7 stick

S t	Traverse City Mgt. Unit				orested Sta	Windship 3
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4113 - R.Maple, Conifer	High Density Pole	6.3	58	51-80	Stand is below bluff. Poor quality red maple pole with white pine logs overtop.
24	42210 - Natural Red Pine	High Density Log	18.7	78	81-110	Nice Log, Utility pole quality. 6-7stick wood. Stand surrounded by lowland type.
26	42290 - Natural Mixed Pine	High Density Log	9.7	72	51-80	Stand thinned last time around. Aspen regenerating.
28	42200 - Natural White Pine	Low Density Sapling	26.3	26		Pocket of pole timber along the west end of stand. 2/15/2000 This stand did not regenerate very well. W1-M1-J1, It will come back to white pine. Very bad wevil. (Grieve) 2/26/2000 Webb wants this stand burned for wildlife. (Grieve)
30	42210 - Natural Red Pine	High Density Log	85.2	79	81-110	Stand is a mix of mature and immature red pine, oak, with small amounts of jack pine and aspen.
31	42121 - Planted Jack Pine, Mixed Deciduous	Low Density Sapling	4.9	5		
32	4132 - Aspen, Jack Pine	High Density Sapling	10.4	17		some scattered white pine pole timber left in sale.
34	4124 - Red with White Oak	High Density Log	9.2	88	81-110	
35	4122 - Oak, Pine	Low Density Pole	13.9	78	1-50	timber stocking is variable. Looks like a U type, poor quality wood. Some area are regenerating to soft maple.
37	42121 - Planted Jack Pine, Mixed Deciduous	Low Density Sapling	20.0	5		Parts of stand has quite a bit of aspen and red maple competition.
38	42250 - Pine, Oak	High Density Log	19.3	57	81-110	Red pine is topped out. Heavy white pine understory. Oak is pretty scrubby
39	4117 - Mixed N. Hardwood - Pine	High Density Sapling	4.2	7		Stand cut in 11/4/03 'Boardman River Oak'
41	4132 - Aspen, Jack Pine	High Density Sapling	69.0	17		
42	6119 - Mixed Lowland Deciduous Forest	Low Density Pole	63.5	97	1-50	Wet stand tag alder understory. Has Taylor Cr. running through it. Some scattered cedar in stand.
43	42210 - Natural Red Pine	High Density Log	54.5	73	81-110	Decent red pine logs. timber seems to be topped out. some red pine regen. Jack pine is dying out.
44	6120 - Lowland Cedar	Medium Density Pole	6.1	85	51-80	Lots of windthrown cedar. Filling in with ash, tag alder and Bam
<b>45</b>	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	30.5	72	81-110	Poor quality oak with red and jack pine mixed.

S t	Traverse City Mgt. Unit				orested Sta	Management 2
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	4310 - Pine, Oak Mix	High Density Log	41.6	58	81-110	Mixed stand of white oak, red pine and white pine. White pine and white oak in understory
48	42220 - Natural Jack Pine	High Density Sapling	2.8	17		
49	42220 - Natural Jack Pine	High Density Pole	10.6	58	51-80	
50	42290 - Natural Mixed Pine	High Density Pole	10.9	72	81-110	Mixed stand. Leave for now, age class diversity
51	4311 - Pine, Aspen Mix	High Density Pole	11.7	65	81-110	Some nice red pine logs mixed with aspen, jack pine and oak. Stand has snow trail going through it.
53	42290 - Natural Mixed Pine	High Density Pole	34.8	82	81-110	Stand mostly 3-4 stick JP. Stand has ORV route running through it. More of an oak component on the south part of stand.
56	42210 - Natural Red Pine	Low Density Log	34.2	61	1-50	Stand was shelterwooded with scattered red pine logs left. Stand is regenerating to aspen and jack pine.
57	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	27.0	7		Some scattered pole timber left along with some oak logs. Sale 'Boardman River Rd. Oak'
59	4132 - Aspen, Jack Pine	High Density Sapling	2.0	17		popple about 15-20' tall
60	4191 - Mixed Upland Deciduous with Conifer	Medium Density	10.2	7		Some scattered pole timber left along with some oak logs. Some area didn't regenerate very well. some pockets of decent aspen regen.
61	42121 - Planted Jack Pine, Mixed Deciduous	Medium Density	45.3	5		Planted in 2005. south of pipeline has quite a bit of aspen competition
62	6127 - Lowland Pine	High Density Pole	4.4	84	81-110	Mixed stand of jack pine, red pine and oak.
63	42290 - Natural Mixed Pine	High Density Pole	114.8	58	51-80	jack pine is about 4 stick tall. natural stand. Some pockets of thick white pine regen very little red pine regen.
65	42210 - Natural Red Pine	High Density Log	197.3	84	111-140	Mixed stand has a bit of everything. North east part of stand is heavier to red pine. Some white pine regen present
66	42210 - Natural Red Pine	High Density Log	4.1	78	51-80	Big red pine logs. thinned in 2005 and in 1990.
67	6112 - Lowland Aspen	Low Density Pole	18.9	55		Stand has perennial drain running through it. Tag Alder with aspen and Bam over top.

S t	Traverse City Mgt. Unit				ested Sta Method: IFI	V CT - COLO
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
68	42220 - Natural Jack Pine	Medium Density Pole	92.8	34	51-80	some pockets of A3 coming in with the jack. Short scrubby jp. A few scattered RP and WP over top. 2-3 stick jp.
70	42210 - Natural Red Pine	Medium Density Log	44.2	Uneven Age	51-80	Big white and red pine logs over white pine regen. Maybe remove overstory in 10 yrs
72	42220 - Natural Jack Pine	High Density Pole	9.0	65	81-110	Some nice 6 stick jack pine. Lots of it already on the ground.  Don't know if will still be standing in 10yrs.
73	42200 - Natural White Pine	Low Density Sapling	37.1	3		Heavy deer browse in stand. Not regenerating real well. Stand is a mix of white pine, jack pine, aspen and red maple.

## 6 - Nonforested Stands Inventory Method: IFMAP

Compartment: 156 Year of Entry: 2012



Stand	Cover Type	Acres	Gen Cmts:
2	310 - Herbaceous Openland	3.6	
8	330 - Low-Density Trees	5.6	Planted to JP, not quite 3' tall.
13	622 - Lowland Shrub	15.7	
14	622 - Lowland Shrub	27.5	
21	3105 - Mixed Upland Herbaceous	2.7	
25	622 - Lowland Shrub	17.8	
27	3105 - Mixed Upland Herbaceous	3.0	Maintain as needed with mowing, seeding, fertilizing, burning, or removal of woody encroachment.
29	3105 - Mixed Upland Herbaceous	5.0	Maintain as needed with mowing, seeding, fertilizing, burning, or removal of woody encroachment.
33	310 - Herbaceous Openland	22.5	
36	622 - Lowland Shrub	2.2	
40	310 - Herbaceous Openland	0.4	
47	3104 - Degraded	1.9	Periodic maintenance such as mowing, burning, fertilization, reseeding, and/or removal of woody encroachment.
52	310 - Herbaceous Openland	1.6	
54	330 - Low-Density Trees	35.3	not regenerating well, lots of browse
55	622 - Lowland Shrub	24.9	
58	3105 - Mixed Upland Herbaceous	6.5	
64	3303 - Mixed Low Density Trees	2.8	
69	3303 - Mixed Low Density Trees	2.0	

Traverse City Mgt. Unit

## 6 - Nonforested Stands

Inventory Method: IFMAP

Compartment: 156 Year of Entry: 2012



Stand	Cover Type	Acres	Gen Cmts:
71	310 - Herbaceous Openland	3.5	

Traverse City Mgt. Unit Compartment: 156

Year of Entry: 2012



#### 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.

**Inventory Method: IFMAP** 

Stand	SCA Type	SCA Name	Acres	Comments	

Traverse City Mgt. Unit

Compartment: 156 Year of Entry 2012



#### 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.

Conservation Area	п Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish specified year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spapproved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table local folder.	S Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts
SCA	Potential Old Growth Areas	This category contains stands were identified for a broad range of database as stand condition 8 as potential old growth (POG). A identified through the Operations Inventory (OI)/Compartment Re Entry 2008 and forward, potential old growth is managed for the through the Biodiversity Conservation Planning Process (BCPP) objective (as an ERA, HCVA, or other type of SCA) and is releast designation; or 2) it is released from the potential old growth desprocess.	Approximately 310,000 acres have been eview process. For stands in Year of identified objective until it is: 1) vetted and given a specific designation and sed from the potential old growth