

# **Compartment Review Presentation**

**Traverse City Forest Management Unit** 

Compartment 61154 Entry Year 2021 Acreage: 1,862

County Kalkaska

Management Area: Boardman Plains

Revision Date: 2019-06-11 Stand Examiner: Paul Roell

**Legal Description:** 

T26N R8W Sections 15-20

### **Identified Planning Goals:**

This compartment is part of the Boardman Plains management area (MA). Management will provide timber products; maintain or enhance wildlife habitat; and provide for forest-based recreational uses. Timber management objectives for this 10-year planning period include improving the age-class structure of aspen; increasing regeneration of oak; working toward balancing the red pine age-class structure; continuing emphasis on managing the northern hardwood resource for stand quality, age, and species diversity; wildlife values; and continued production of wood products. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity. Expected trends within this 10-year planning period are: increased recreational pressure, especially on the Muncie Lakes pathway, North Country and other established trails; increased oil and gas development; an increased wildland/urban interface; a need to restore oak/pine barrens communities; invasive plant control; and the conversion of poor oaks sites to mixed pine/oak sites.

#### Soil and topography:

Sections 15 and 16 are Low and wet. The rest of the compartment is gently rolling and well drained. There are scattered pot holes in Sections 19 and 20 some of which have water year round. The South Branch of the Boardman River and Taylor Creek flow through this compartment. Soils include Rifle peat, Rubicon sand, Kalkaska Loamy sand and Emmet sandy loam.

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

The Village of South Boardman is within this Compartment. The State land for this Compartment is fairy broke up with private property interface. East of the compartment its more contiguous private parcels and to the North, West and South there is bigger blocks of contiguous State ownership.

#### **Unique Natural Features:**

There are some historical records of features.

#### Archeological, Historical, and Cultural Features:

There are some sites present within the Compartment.

#### **Special Management Designations or Considerations:**

None

#### Watershed and Fisheries Considerations:

The South Branch of the Boardman River and Taylor Creek flow through Compartment 154. Both of which are protected under the Boardman River Natural Rivers Designation.

#### Wildlife Habitat Considerations:

On outwash plains such as this, maintain age class diversity including a component of young early successional aspen, oak, and pine mixed forest and open grass/brush habitat. Retaining tree species diversity when thinning pine types in both outwash plain and moraine landscapes will increase by wildlife. In swamp forests, retain mature conifer cover and provide a component of low deciduous cover as much as possible. On moraines, retain mixed tree sizes and species in northern hardwood forests. Maintaining or creating coarse woody debris is especially important in northern hardwood selection cuts and aspen final harvests. Consider allowing northern hardwoods to expand naturally into some pine plantations, grass and brush openings over time to connect blocks of existing hardwoods.

A wide variety of wildlife species are associated with this compartment, as it spans 4 different land-type associations. Conifer swamps harbor species such as snowshoe hare, bobcat, winter wren, white-tailed deer, and massasauga rattlesnake. Mixed oak-aspen-pine woods are important for species such as pine warbler, golden-winged warbler, red crossbill, barred owl, wild turkey, and hognose snake. Northern hardwood forests on moraines are important for black-

throated blue warbler, blue-spotted salamander, northern goshawk, and numerous neo-tropical migrant songbirds.

Compartment 154 is found in the Boardman Plains Management Area (MA) of the Regional State Forest Management Plan. Featured wildlife species for this MA include bear, pileated woodpecker, ruffed grouse, turkey, and deer. Based on the natural disturbance history of the land type associations within the Boardman Plains MA, the MA plan calls for managing the amount of open/semi-open lands at or above the current level to provide habitat for species which use openings.

#### Mineral Resource and Development Concerns and/or Restrictions

No known active sand/gravel operations exist in the area, but there appears to be good sand & gravel potential within the compartment. The compartment sits on the southern edge of the Niagaran reef trend. There may be limited potential for reefs here, but there has been no exploration within the compartment aside from seismic. Parcels along the US-131 ROW are currently leased and held by production. Oil & gas potential is considered moderate. There is no known metallic mineral potential in this part of the state. The state does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

#### **Vehicle Access:**

There is good access throughout the Compartment.

### **Survey Needs:**

None at this time

# **Recreational Facilities and Opportunities:**

The Boardman River offers fishing opportunities and hunting is also popular within this Compartment. The MCCT trail runs on Boardman River road and provides access to other trails north and west of the compartment.

#### Fire Protection:

This area is within a Zone 6 for DNR wildland fire response.

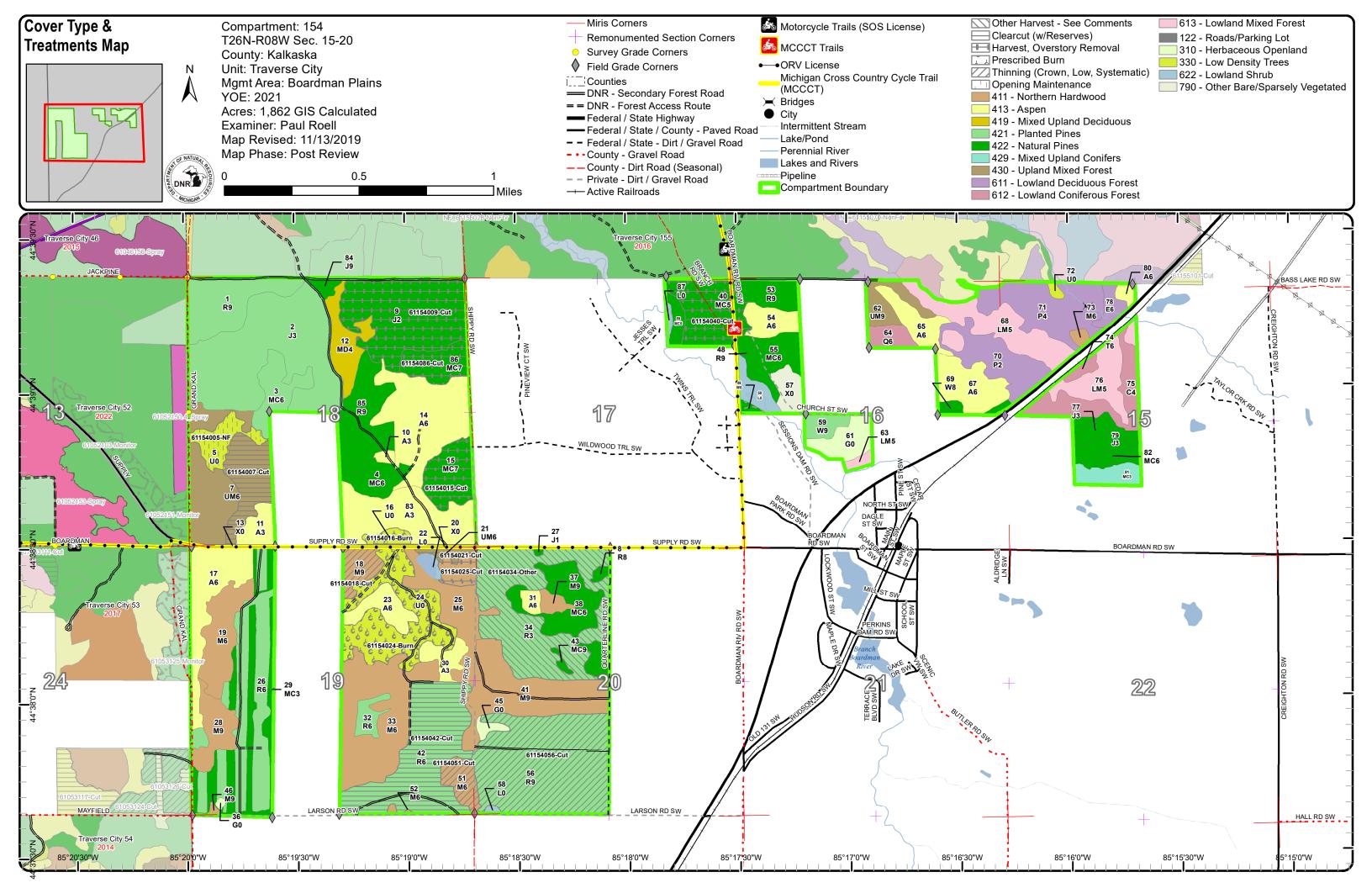
#### **Additional Compartment Information:**

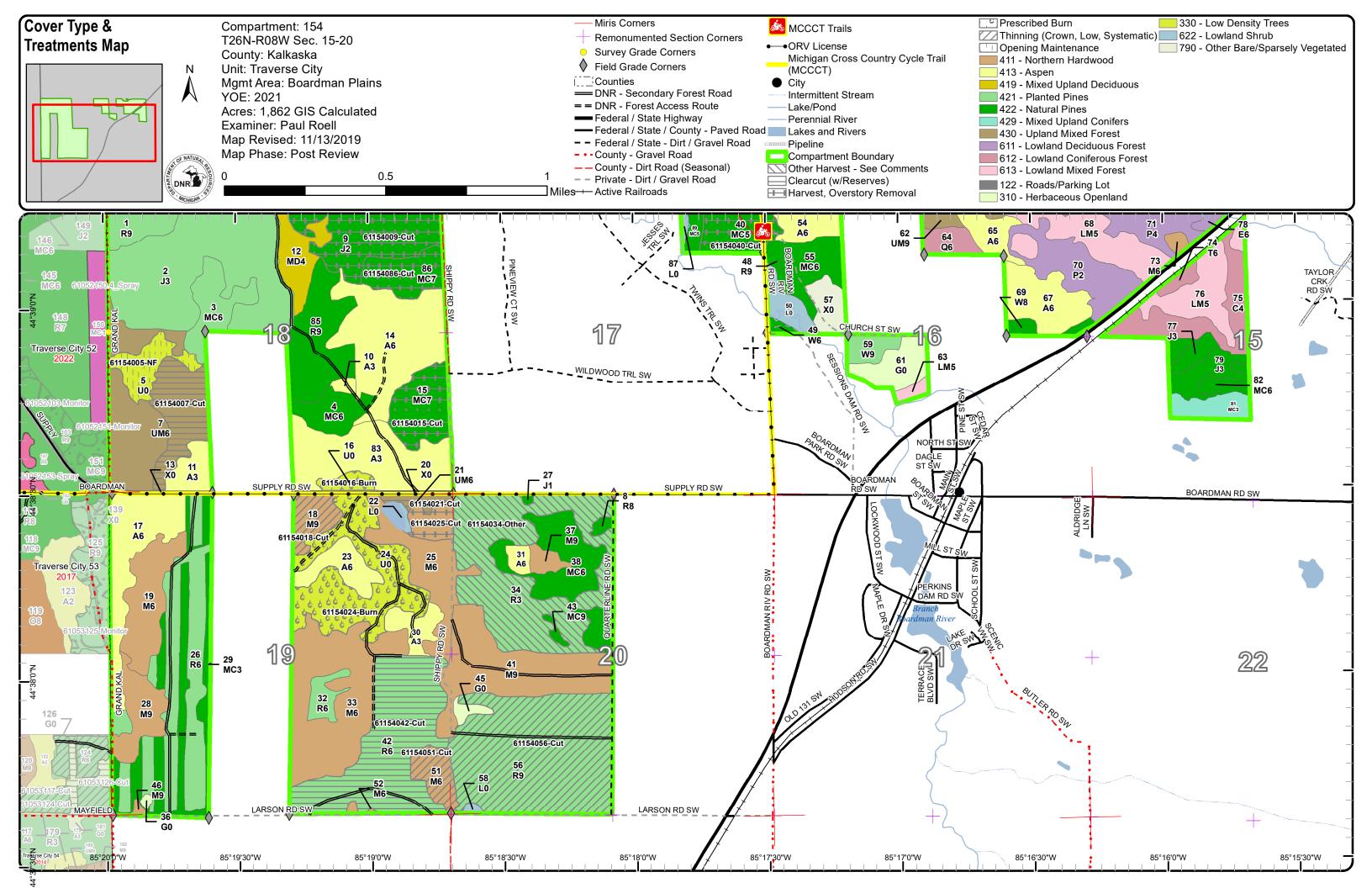
The following reports from the Inventory are attached:

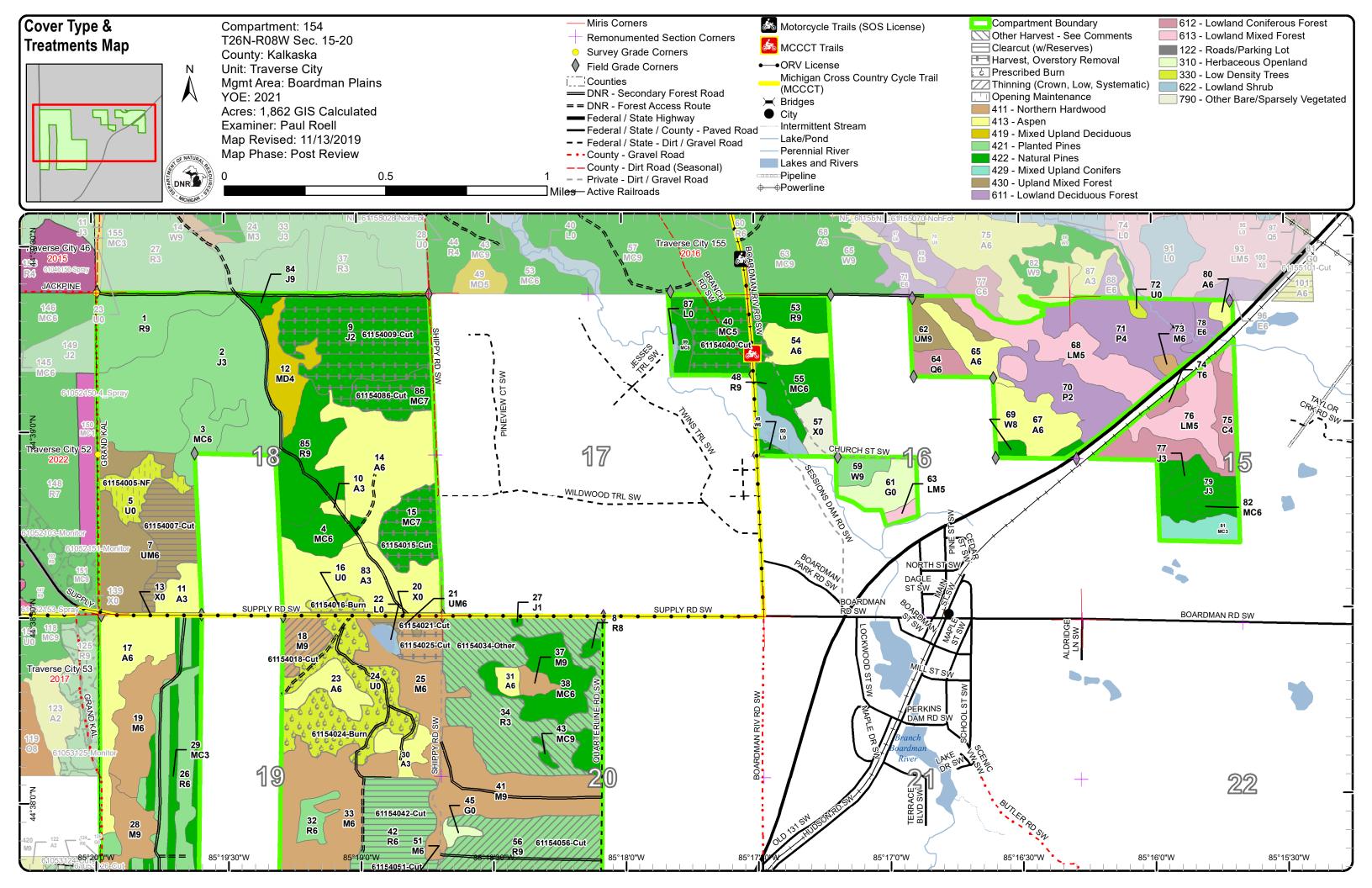
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

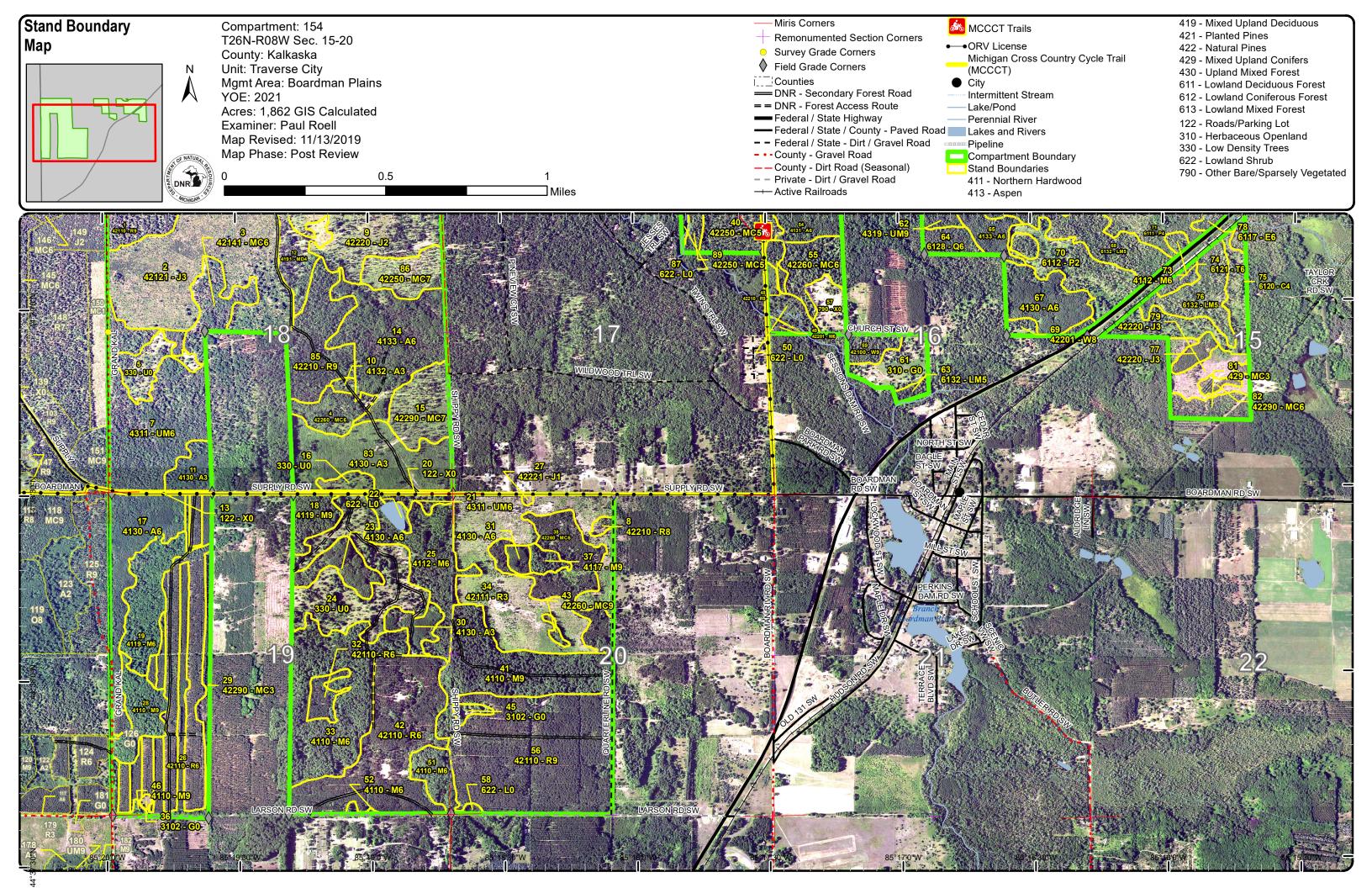
The following information is displayed, where pertinent, on the attached compartment maps:

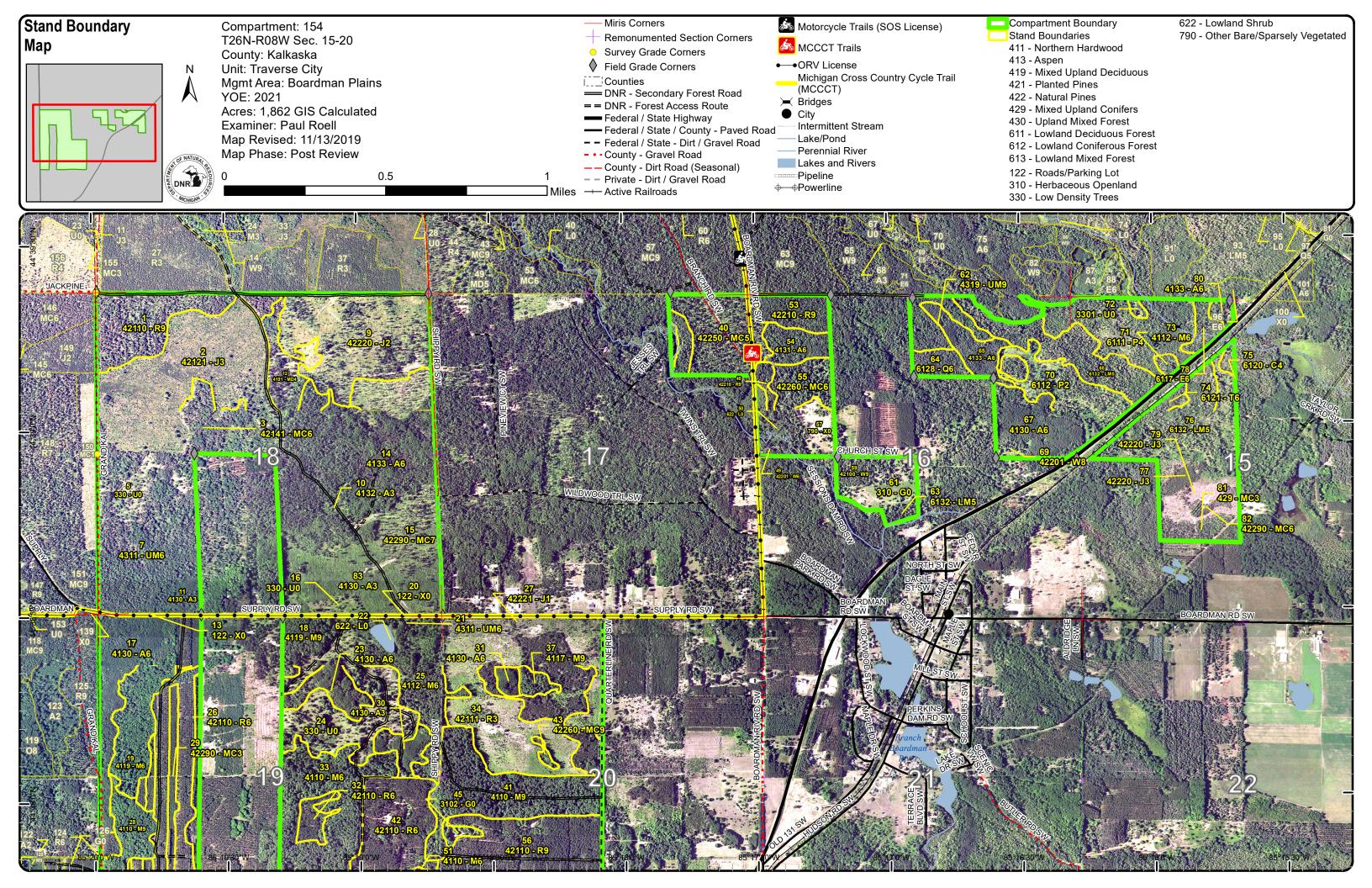
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

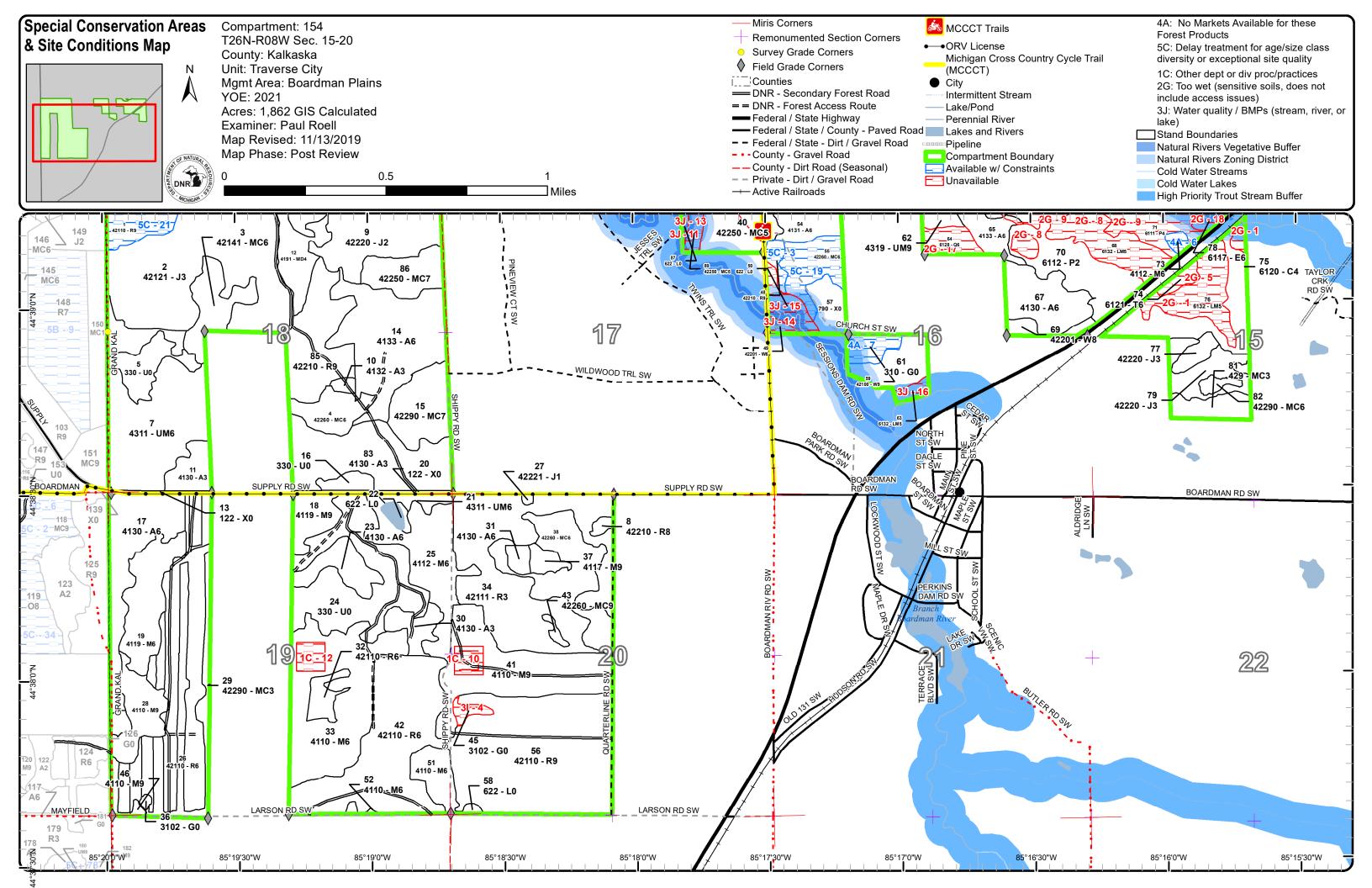


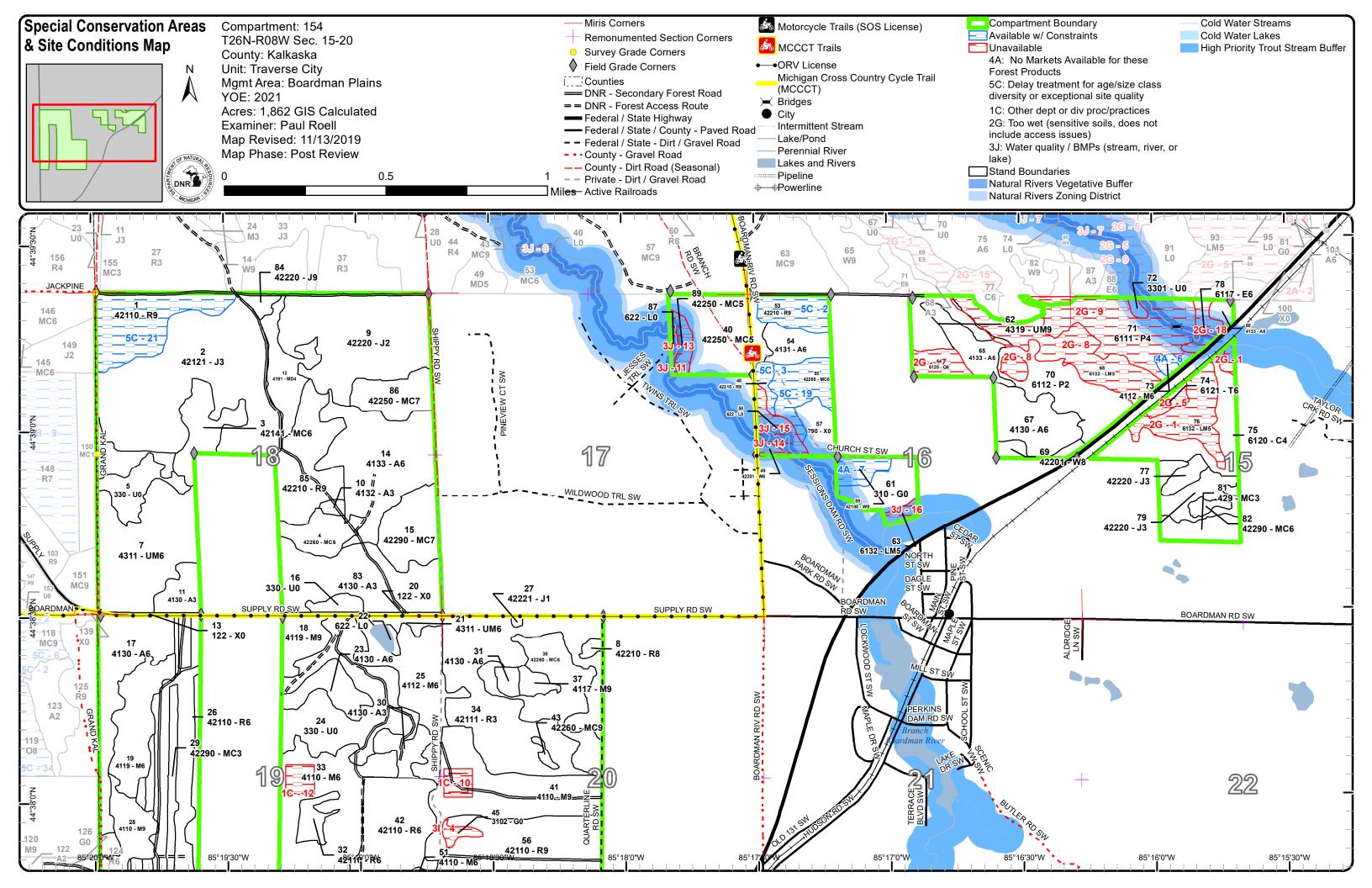












Traverse City Mgt. Unit
Paul Roell: Examiner



#### Age Class

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		Se Contraction of the Contractio	§ / s		P A		S K	3/8		8					R S		,	ş* / <sub>\$</sub> *	Exer Yage
	/ %		/ `	/ 'V	/ "	/ *	/ "	/ "	/ `	/ 8	/ "	/ %		/ 👯	/ %		/ `	1 35	/ /
Aspen	0	52	23	4	41	128	3	0	0	0	0	0	0	0	0	0	0	0	251
Bare/Sparsely Vegetated	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Cedar	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	28
Herbaceous Openland	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Jack Pine	0	94	114	5	0	0	0	4	0	0	0	0	0	0	0	0	0	0	216
Low-Density Trees	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Lowland Aspen/Balsam Poplar	0	31	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0	77
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Lowland Deciduous	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7
Lowland Mixed Forest	0	0	0	0	0	0	0	0	3	65	0	0	0	0	0	0	0	0	68
Lowland Shrub	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Mixed Upland Deciduous	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	20
Natural Mixed Pines	0	0	0	80	0	15	4	19	19	46	25	0	0	0	0	0	0	0	207
Northern Hardwood	0	0	0	0	0	0	0	0	0	144	44	59	0	0	0	0	0	5	252
Planted Mixed Pines	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	20
Red Pine	0	91	0	0	0	0	66	200	38	55	0	0	0	0	0	4	0	0	454
Tamarack	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Upland Conifers	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Upland Mixed Forest	0	0	0	0	0	0	71	5	14	0	0	0	0	0	0	0	0	0	90
Urban	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	0	0	0	13	2	0	0	0	0	0	0	0	0	0	15
Total	134	268	137	101	41	189	164	241	96	317	110	59	0	0	0	4	0	5	1863



# **Report 2 – Treatment Summary**

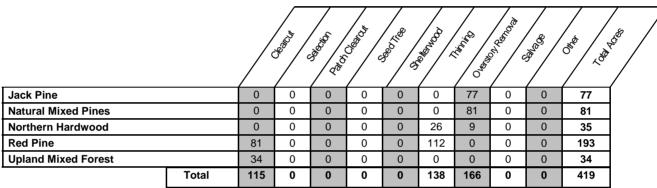
# Traverse City Mgt. Unit Year of Entry: 2021

#### **Acres of Harvest**

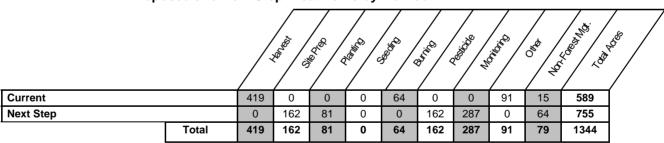
Compartment 154
Total Compartment Acres: 1,862

Commercial Harvest - 419 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



### **Proposed and Next Step Treatments by Method**



Traverse City Mgt. Unit

Acres

Report 3 -- Treatments

BA

Range

Compartment: 154 Year of Entry: 2021

**Cover Type** 

3205 - Mixed



Proposed Treatments:

**Treatment** 

Name

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d

**61154005-NF** 15.2 330 - Low-Density Nonstocked 0

Stand

CoverType

Size

**Density** 

Stand

Age

NonForestMgt

**Treatment** 

Type

Brush Cutting

**Treatment** 

Method

Objective Structure

Age

Habitat Cut

No

Trees Upland Shrub

Prescription Specs: Upland Shrub or trees, burning, or removal of woody encroachment.

Next Step Treatments:

Acceptable Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2020

7 61154007-Cut 29.2 4311 - Pine, Aspen Poletimber 53 51-80 Harvest Clearcut with 413 - Aspen Even-Aged No Mix Well Retention

<u>Prescription</u> cut all trees two inches in larger. Mark a few white oak to leave. The majority of the stand will be left so a portion of the parent stand will be <u>Specs</u>: retention.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, red maple, white pine and mixed oak.

Regen:
Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2020

9 61154009-Cut 76.5 42220 - Natural Sapling 7 Immatu Harvest Overstory 4222 - Natural Even-Aged No Jack Pine Medium re Removal Jack Pine

Prescription Cut all trees inches and larger. Mark a few large white oaks for seed. Minimal area retention.

Specs:

Next Step Treatments:

Acceptable Jack pine, aspen, red maple and

Regen:
Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2020

Report 3 -- Treatments

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or Type	٨٥٥	MICHIGAN

n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
15	61154015-Cut	24.6	42290 - Natural Mixed Pine	Sawtimbe Poor	r 92	1-50	Harvest	Overstory Removal	4139 - Aspen, Mixed Deciduous	Even-Aged	No

Prescription Overstory removal with standard area retention. Cut all trees 4 inches or greater in DBH. Cut to length operation required to protect Specs: advanced regeneration in the stand.

Next Step Treatments:

Acceptable Fully stocked aspen with any mixed upland species is acceptable.

Regen: Other Comment:

Site Condition

Proposed Start Date: 10/1 /2020

61154016-5.0 330 - Low-Density Nonstocked 3105 - Mixed 16 Burn Opening No Upland Burn Trees Herbaceous

Prescription Burn this stand at least once per entry period in order to set back woody encroachment, increase species diversity, stimulate native herbaceous vegetation, promote berry production, and recycle nutrients. The timing and frequency of the burns will be based on currents Specs: needs of restoration such as reducing woody encroachment or promoting grasses versus forbs.

Next Step NonForestMgt, Herbaceous/Crop/Grass Planting **Treatments:** 

<u>Acceptable</u> Regen:

**Other** Maintain as needed with mowing, seeding of native grasses and forbs, planting native mast bearing shrubs or trees, burning, or removal of Comment: woody encroachment.

Site Condition

Proposed Start Date: 10/1 /2020

18 61154018-Cut 411 - Northern 12.8 4119 - Mixed Sawtimber 111-Harvest Crown Thinning Even-Aged No Northern Hardwoods Well 140 Hardwood

Prescription Thin stand down to 80. Cut poor quality trees first then thin around crop trees. Cut all aspen. If there are groups of aspen mark all trees Specs: within aspen clone so aspen can regenerate.

Next Step Treatments:

Acceptable

Regen: Other

Comment: Site Condition

Proposed Start Date: 10/1 /2020

Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 154
Year of Entry: 2021

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**Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Habitat Method Density Objective Structure Name CoverType Age Range Type Cut

**21 61154021-Cut** 4.9 4311 - Pine, Aspen Poletimber 61 51-80 Harvest Clearcut 413 - Aspen Even-Aged Mix Well

<u>Prescription</u> Cut all trees two inches and larger. Mark a few large oak or pine for visual. no retention small stand size and regeneration concern. <u>Specs:</u>

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, oak, red maple and pine.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2020

24 61154024- 58.5 330 - Low-Density Nonstocked 0 Unspec Burn Opening 3105 - Mixed No Burn Trees ified Upland Herbaceous

Prescription Specs:

Burn on a rotational basis. The goal of prescribed burning is to restore and/or maintain a grassland/barrens ecosystem. The timing and frequency of the burns will be based on currents needs of restoration such as reducing woody encroachment or promoting grasses versus forbs. Remove exotics as needed by herbiciding or other methods. Maintain as needed with mowing, seeding of native grasses and forbs, planting native mast bearing shrubs or trees, burning, or removal of woody encroachment.

NonForestMgt, Herbaceous/Crop/Grass Planting

Treatments:

Acceptable Regen:

Other Mechanically treat woody encroachment in conjunction with controlled burning to maintain upland brush/grassland community. Leave <a href="Comment: conjunction-with-controlled-burning-to-maintain-upland-brush/grassland-community">Comment: conjunction with controlled burning to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover.

Site Condition

Proposed Start Date: 10/1 /2020

25 61154025-Cut 9.0 4112 - Maple, Poletimber 88 51-80 Harvest Overstory 413 - Aspen Even-Aged No Beech, Cherry Well Removal

<u>Prescription</u> Cut all trees two inches and larger. This portion of the hardwood stand has good aspen regeneration. We need to promote quality <u>Specs:</u> regeneration where we can.

Next Step Treatments:

Acceptable Aspen and red maple

Regen:

Other Comment:

Site Condition

Proposed Start Date: 3 /13/2019

S t									Year of Entry	y: 2021	DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
34	61154034- Other	91.4	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	8	Immatu re	Other	Other	42110 - Planted Red Pine	Even-Aged	No
Prese		ibed as pa	art of Jason Hartman	n's project.							
	<u>Step</u> Monito tments:	ring, Herb	icide Use								
Acce	ptable Fully s	tocked sta	and of Red Pine.								
Rege Othe Com											
Site (	Condition										
Prop	osed Start Date	<u>:</u> 10/1 /20	020								
40	61154040-Cut	37.8	42250 - Pine, Oak	Poletimbe Medium		51-80	Harvest	Overstory Removal	413 - Aspen	Even-Aged	No
Pres Spec		trees two	inches and greater.	Mark som	e big oa	ak and whi	ite pine to leave	e. Leave some area	retention at the co	ounty road inte	ersection.
	Step tments:										
Acce Rege		, red mapl	e, oak and mixed re	d/white pir	ie						
<u>Othe</u>											
	Condition										
	osed Start Date	<u>:</u> 10/1 /2	020								
42	61154042-Cut	80.8	42110 - Planted Red Pine	Poletimbe Well	er 68	111- 140	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	No
Prese			inches and larger. Note pockets of sugar	/linimal are		tion on the		low stumps and ch		itate planting o	operations
	<u>Step</u> Pestici tments: Monito	de, Aerial ring, Artifi	- Site Prep; SitePrecial Regen(3yr); Pe	ep, Roller esticide, Ae	Choppir erial - Re	ng; SiteP elease	rep, Trenching	; Planting, Initial P	lant; Monitoring,	Artificial Rege	n(1yr);
Acce Rege		stocked s	tand of red pine.								
Othe											
Site (	<u>Condition</u>										
Prop	osed Start Date	<u>:</u> 10/1 /20	020								
51	61154051-Cut	12.7	4110 - Sugar Maple Association	Poletimbe Well	er 89	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
Pres			to 80. Cut poor qua shing redline.	llity trees fi	rst then	thin arou	nd crop trees. (	Cut all aspen. Prote	ct any sensitive ar	eas found thro	oughout
	Step tments:		-								
	ptable										
<u>Othe</u>											
Site	Condition										
_											

Proposed Start Date: 10/1 /2020

Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 154
Year of Entry: 2021

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t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
56	61154056-Cut	112.1	42110 - Planted Red Pine	Sawtimbe Well	r 68	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
Nex Trea Acce Reg	cs: grass o t Step atments: eptable en:	and to a r		20 remove	the poo	orest quali	ty trees. Make	sure to red line out a	any potential sens	sitive sites arou	und the
	Condition  cosed Start Date: 61154086-Cut		020 42250 - Pine, Oak	Sawtimbe Poor	r 68	1-50	Harvest	Overstory Removal	413 - Aspen	Even-Aged	No
Spe Nex Trea	cs: t Step atments:		inches and larger.			tion.					
Othe Com	en: er nment:	and red m	naple. Maybe some	mixed pine							
	Condition cosed Start Date:	10/1 /20	020								

Total Treatment 589 Acreage Proposed:

Compartment: 154

Traverse City Mgt. Unit

9%

Paul Roell: Examiner Year of Entry: 2021

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres	Do	omina	nt Site	e Cond	dition	s	
Acres	Available	With Condition	Not Available		4A	5C	1C	2G	31	3J
251	251	0	1	Aspen				1		
10	10	0	0	Bare/Sparsely Vegetated						
28	28	0	0	Cedar				0		
20	17	0	3	Herbaceous Openland	0				3	
216	216	0	0	Jack Pine						
80	80	0	0	Low-Density Trees				0		
77	31	0	46	Lowland Aspen/Balsam Poplar	0			46		
9	0	0	9	Lowland Conifers				9		
7	0	0	7	Lowland Deciduous				7		
68	0	0	68	Lowland Mixed Forest				65		3
15	3	0	12	Lowland Shrub		0				12
20	20	0	0	Mixed Upland Deciduous						
206	182	19	6	Natural Mixed Pines		19				6
252	239	2	10	Northern Hardwood	2		10	0	0	
20	20	0	0	Planted Mixed Pines						
454	397	57	0	Red Pine		57				
4	0	0	4	Tamarack				4		
12	12	0	0	Upland Conifers						
90	90	0	0	Upland Mixed Forest				0		
8	8	0	0	Urban						
15	5	8	2	White Pine	8					2
1,862	1,609	86	167	Total Forested Acres	10	75	10	132	3	23

Relative Percent

\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

86%

5%

Traverse City Mgt. Unit
Paul Roell: Examiner

2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	(Inactive)3I: Historical / archeological (add locked comments)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	4A: No Markets Available for these Forest Products	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	4A: No Markets Available for these Forest Products	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
				-	-	-	

Traverse City Mgt. Unit

Compartment: 154 Year of Entry: 2021 Paul Roell: Examiner

8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	41	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	48	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
10	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walters Research	Project: Long-term beech reger	neration m	onitoring, up to 20 years	(through 2039)		
11	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
12	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walters Research I	Project: Long-term beech reger	neration m	onitoring, up to 20 years	(through 2039)		
13	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

Traverse City Mgt. Unit

Paul Roell: Examiner

14	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
15	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
17	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
19	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Traverse City Mgt. Unit

Compartment: 154 Year of Entry: 2021 Paul Roell: Examiner

21	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

11/5/2019 3:53:49 PM - Page 5 of 5 **BORUSZEWSKIA**  Mgt. Unit

Compartment: #Type! Year of Entry:



### Report 5 - 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Traverse City Mgt. Unit Compartment: 154





# Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservation Area	n Type	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 spec 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
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well
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

Report 7 - Stands



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
1	42110 - Pla	inted Red P	Pine	Sawtimb	er Well	38.1	88	81-110	N/A		Stand last thinned in 89. Lots of blue berries in understory
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Pine	100	Log/Pole	11	88	Red	d Maple	Medium	5 - 10 feet	Sapling	
				'		Jac	ck Pine	Low	5 - 10 feet	Sapling	
						Blac	k Cherry	Low	5 - 10 feet	Sapling	
2	42121 - Planted Dec	I Jack Pine, ciduous	, Mixed	Sapling		112.9	10	Immature	N/A		Stand trenched and planted. South eastpart of stand look to be regenerating on its own with more oak and maple coming in. Stand was harvested in 02 'Grand Kal Pine' 007-01-01. Not much
	Canopy Species	% Cover	Size Class	DBH	Age						competition. Stand was replanted in 2011 FTP 62-792. Average age.
	Jack Pine	65	Sapling	1	10						
3	42141 - Planted Dec	Mixed Pine	e, Mixed	Poletimb	er Well	19.8	76	81-110	N/A		Large white oak present.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Maple	20	Pole	8		Red	d Maple	Low	10 - 20 feet	Sapling	
	White Oak	10	Log/Pole	10		Re	ed Pine	Low	5 - 10 feet	Sapling	
	Red Pine	50	Pole/Log	8	76			'		'	
	Jack Pine	20	Pole	8							
4	42260 - Natural Pi			Poletimb		14.9	42	1-50	N/A		Stand is a mix of aspen with some poorer quality white pine. Stand has a couple open areas in it also.
	Canopy Species		Size Class		Age						ocapio opon arcae in it arcs.
	Quaking Aspen	30	Pole	6	42						
	White Pine	40	Pole	6	42						
	Jack Pine	15	Pole	5							
	Red Pine	10	Log/Pole	10							
5	330 - Low-	Density Tre	ees	Nonsto	cked	15.2	0		No		lots of blueberries
7	4311 - Pin	ie, Aspen M	1ix	Poletimb	er Well	71.3	53	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole/Log	8		Red	d Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	30	Pole	8	53	Wh	ite Oak	Low	5 - 10 feet	Sapling	
	White Pine	25	Pole/Log	8	65	Wh	ite Pine	Medium	5 - 10 feet	Sapling	
	Red Pine	10	Pole	8						1	
	Jack Pine	15	Pole	6							
8	42210 - Na	tural Red P	ine S	awtimber	Mediun	n 1.9	80	51-80	N/A		Red pine with dying ash in it.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Pine	80	Log/XLog/Po	ole 16	80	Wh	ite Oak	Low	Variable	Sapling	
											1
	White Ash	20	Log/Pole	10		E	Beech	Low	Variable	Sapling	



Stan	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
9	42220 - Nat	ural Jack P	ine	Sapling	Medium	76.5	7	Immature	N/A		Stand was harvested in summer of 2012, unit 1 of N.Shippy JP (61-040-
	Canopy Species	% Cover	Size Class	DBH	l Age						11-01). Stand was harvested with a tree length system, all the red & white pine were left as well as oak. Stand is starting to seed in, stocking
	White Pine	15	Log	12							is ok but not great.
	Red Pine	20	Pole/Log	9							
	Jack Pine	60	Sapling	1	7						
10	<u> </u>	en, Jack Pi		Saplin		2.0	15	Immature	N/A		2019 - Stand has regenerated nicely. Fully stocked aspen stand in good health.
	Canopy Species		Size Class		l Age						
	Red Maple	10	Sapling	1							2009 -Stand just cut with 'Grand Kal Pine. Mix of oak , pine and maple.
	White Oak	10	Sapling	1	15						
	Jack Pine	20	Sapling	2							
	Bigtooth Aspen	60	Sapling	2	15						
11	4130	- Aspen		Saplin	g Well	10.8	17	Immature	N/A		Thick regen about 15' tall. Cut with 'Boardman Aspen' in 02.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Bigtooth Aspen	85	Sapling	1	17						
	White Pine	10	Log	12							
12	4191 - Mixed Upla Co	and Deciduo onifer	ous with	Poletimb	er Poor	20.1	53	1-50	N/A		New stand added. poor qualilty stand lots of hypoxylum. stocking is variable.
	Canopy Species	% Cover	Size Class	DBł	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Bigtooth Aspen	30	Pole	8	53	Wh	nite Pine	Low	5 - 10 feet	Sapling	
	White Pine	20	Pole	6		Che	rry (spp.)	Low	5 - 10 feet	Sapling	
	Jack Pine	10	Pole/Sapling	g 5							
	Red Maple	25	Pole	6							
	Red Oak	10	Pole	8							
13	122 - Road	d/Parking Lo	ot	Nonst	ocked	2.1			No		
		n Mixed P	ine	Poletimb	er Well	61.1	40	Unspecified	N/A		Stand is an aspen stand with a nice mix of other upland species that are
14	4133 - Aspe	on, wiixca i							Acces III-laded		scattered throughout stand. Stand is very dense at this time. Stand is
14	4133 - Aspe		Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
14	<u>-</u>		Size Class Pole	<b>DB</b> H	l Age		nopy Specie nite Pine	Medium	10 - 20 feet	Size Sapling	healthy at this time.
14	Canopy Species	% Cover			<b>4</b> 0						
14	Canopy Species Red Maple	<b>% Cover</b> 15	Pole	6							



Stand	d Level 4 Co	over Type	S	ize De	ensity	Acres Stand Age I	BA Range	Managed S	ite	General Comments
15	42290 - Natu	ıral Mixed	Pine Sa	wtimb	er Poor	24.6 92	1-50	N/A		2019 - Stand top needs to be taken off to release the aspen. Stand will be fully stocked stand of aspen, with a pine component.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	be fully stocked stand of aspen, with a pine component.
	Red Oak	10	Log/Pole	12		Red Oak	Low	Variable	Sapling	Shelterwood stand. leave 30 sqft/ac of pine and oak?
	White Pine	50	Log/Pole/XLog	12	92	Bigtooth Aspen	Full	Variable	Sapling	40/24/42 stand was har rested lessing 20cett/es of nine and same sale
	Red Pine	30	Log/Pole	12		White Pine	Low	Variable	Sapling	10/21/13 stand was harvested leaving 30sqft/ac of pine and some oak. South end was heavier to aspen and is already starting to sprout (61-031)
						White Oak	Low	Variable	Sapling	11-01)
						Red Maple	Low	Variable	Sapling	
16	330 - Low-I	Density Tre	ees l	Nonst	ocked	5.0		No		Stand swapped from Forested to Non-Forested.
17	4130	- Aspen	Po	letimb	er Well	39.0 40	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	80	Pole	6	40	Red Maple	Low	5 - 10 feet	Sapling	
	White Pine	10	Pole	8		Ironwood	Medium	5 - 10 feet	Sapling	
10	4119 - Mixed No	orthern Har	dwoods Sa	wtimb	er Well	12.8 91	111-140	N/A		2019 - Stand has a basal area of 120-130 at this time. Stand is a high
18									0:	quality Northern hardwood with a lot of beech / ironwood in understory.
	Canopy Species		Size Class	_	I Age	Sub-Canopy Species		Avg. Height	Size	Stand has an aspen clone in the south part of the stand.
	Sugar Maple Basswood	55 20	Log/Pole	12	91	Beech	High Medium	< 5 feet Variable	Sapling Sapling	2009- regen coming in nicely. stand has a good mix of species and is of
	Bigtooth Aspen	15	Log Log/Pole	10		Horiwood	iviedium	variable	Sapility	good qualitly. Thinned in 02 'West Boardman Hardwood'
	<u> </u>				10/ - 11	00.0	54.00	N1/A		This and an Ornal Kall Hands and a 04 050 44 04 Day 0040 to Est 0044
19	4119 - Mixed No				er Well	29.9 90	51-80	N/A	0'	Thinned as Grand Kal Hardwoods, 61-052-11-01, Dec 2013 to Feb 2014 understory is full of beech and iron wood regen
	Canopy Species		Size Class		l Age	Sub-Canopy Species		Avg. Height	Size	•
	Sugar Maple	60	Pole/Log	9	90	Beech	High	< 5 feet	Sapling	
	Red Maple Basswood	10	Pole/Log	8		White Pine				
	Basswood		Las/Dala	40			Low	< 5 feet	Sapling	
		13	Log/Pole	10		Ironwood	Full	< 5 feet	Sapling	
	White Pine	10	Log/Pole Log	10 12						
20		10	Log	12	ocked					
20	White Pine	10 d/Parking L	Log .ot I	12 Nonsto	ocked per Well	Ironwood		< 5 feet		
	White Pine 122 - Road	10 d/Parking L e, Aspen M	Log .ot I	12 Nonsto		Ironwood 5.5	Full 51-80	< 5 feet		
	White Pine  122 - Road  4311 - Pine	10 d/Parking L e, Aspen M	Log  ot I	12 Nonsto	er Well	5.5 4.9 61	Full 51-80	< 5 feet  No  N/A	Sapling	
	White Pine  122 - Road  4311 - Pine  Canopy Species	10 d/Parking L e, Aspen M % Cover	Log  ot I  fix Po  Size Class	12 Nonsto	er Well	5.5 4.9 61 Sub-Canopy Species	Full 51-80 Density	< 5 feet  No  N/A  Avg. Height	Sapling  Size  Sapling	
	White Pine  122 - Road  4311 - Pine  Canopy Species  Red Maple	10 d/Parking L e, Aspen M <b>Cover</b>	Log  Log  Alix Po  Size Class  Pole	12 Nonste	er Well	5.5 4.9 61 Sub-Canopy Species Bigtooth Aspen	51-80 Density Low	< 5 feet  No  N/A  Avg. Height 5 - 10 feet	Sapling	
	White Pine  122 - Road  4311 - Pine  Canopy Species  Red Maple  Bigtooth Aspen	10 H/Parking L e, Aspen M Cover 10 30	Log  On I  Mix Po  Size Class Pole Pole	12 Nonsto	er Well	5.5 4.9 61 Sub-Canopy Species Bigtooth Aspen	51-80 Density Low	< 5 feet  No  N/A  Avg. Height 5 - 10 feet	Sapling  Size  Sapling	

Traverse City Mgt. Unit



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	iite	General Comments
23	4130	- Aspen		Poletimb	er Well	14.6	39	1-50	N/A		2019 - Stand converted to A6. Stand is healthy and is in good shape.
	Canopy Species Bigtooth Aspen Black Cherry Red Maple	% Cover 70 10 10	Pole Pole Pole	6 6 6	<b>Age</b> 39						2009- Stand converting from a3 to A6. healthy looking with a bit of Ironwood.
24	330 - Low-[	Density Tree	es	Nonsto	cked	58.5	0	Unspecified	Managed Op	pening	Stand is grassy opening with trees that are seeding in. Stand has log size
						Sub-Ca	nopy Specie	s Density	Avg. Height	Size	trees scattered throughout it and seedlings seeding into it. Stand has clumps of trees and single trees. Stand did have an old burn treatment
						Re	ed Maple	Low	>20 feet	Log	on it but does not look like it was burnt last year of entry.
						Bla	ck Cherry	Low	Variable	Sapling	
						W	hite Oak	Low	>20 feet	Log	
						Já	ack Pine	Low	Variable	Pole	
						Bigto	ooth Aspen	Low	Variable	Sapling	
						W	hite Pine	Low	Variable	Log	
25	4112 - Maple, Asso	Beech, Ch ciation	nerry	Poletimb	er Well	39.6	88	51-80	N/A		Thinned as Charlie's Hardwoods, 61-021-11-01, Sept 2012 to March 2013. North end of stand was more of a soft maple and aspen mix. There
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	is some V0 at the north end.
	Sugar Maple	50	Pole	8	88	Sug	gar Maple	Low	5 - 10 feet	Sapling	
	Red Maple	35	Pole	8			Beech	Medium	5 - 10 feet	Sapling	
						Ir	onwood	Medium	5 - 10 feet	Sapling	
26	42110 - Plar	nted Red Pi	ine	Poletimb	er Well	65.9	59	111-140	N/A		Stand was row thinned in 03 'Stone Cellar Pine'Stand was thinned in the spring of 2012 'Larson RP Thin' Every 4th tree was removed along
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	with some storm damage timber. (sc)
	Red Pine	95	Pole	8	59		Beech	Low	< 5 feet	Sapling	• , ,
						Sug	gar Maple	Low	5 - 10 feet	Sapling	
27	42221 - Natural Deci	Jack Pine, duous	Mixed	Sapling	Poor	0.6	15	Immature	N/A		Stand was a small opening that started to seed in.
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	65	Sapling	3	15						
	White Oak	10	Sapling	4							
	Beech	15	Sapling	2							
	Quaking Aspen	10	Sapling	2							
28	4110 - Sugar M	laple Assoc	ciation	Sawtimb	er Well	19.2	88	81-110	N/A		Stand recently thinned 'West Boardman Hardwoods' in 02. Thick beech and iron wood regen.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	and non wood regen.
	Sugar Maple	75	Log/Pole	10	88		Beech	High	5 - 10 feet	Sapling	
	Beech	10	Log	12		W	hite Pine	Low	5 - 10 feet	Sapling	
						Ir	onwood	Full	5 - 10 feet	Sapling	



Stan	d Level 4 C	over Type		Size D	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
29	42290 - Natu	ıral Mixed F	Pine	Saplir	ng Well	42.9	27	Immature	N/A		Jack Pine is naturally regenerating after cut, red pine is planted after
	Canopy Species	% Cover	Size Class	DB	H Age						harvest also. Hopefully red pine will over take the jack pine over time.
	Beech	10	Sapling	1							
	Bigtooth Aspen	10	Sapling	1							
	Red Pine	25	Sapling	3							
	Jack Pine	50	Sapling	4	27						
30	4130	- Aspen		Saplir	ng Well	10.1	17	Immature	N/A		Cut in 02 'Boardman Aspen'
	Canopy Species	% Cover	Size Class	DB	H Age						
	Bigtooth Aspen	90	Sapling/Pole								
	Black Cherry	10	Sapling	1							
31	4130	- Aspen	ı	Poletim	ber Wel	I 3.8	25	1-50	N/A		Stand is fully stocked aspen stand at this time.
	Canopy Species	% Cover	Size Class	DB	H Age						
	Bigtooth Aspen	80	Pole	6	25						
	Jack Pine	10	Sapling/Pole	e 4							
32	42110 - Pla	nted Red P	ine I	Poletim	ber Wel	l 7.2	69	141-170	N/A		
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Ca	anopy Specie	es Density	Avg. Height	Size	
	Red Pine	100	Pole/Log	9	69		Beech	Medium	5 - 10 feet	Sapling	
33	4110 - Sugar M	<u> </u>			ber Wel	l 69.3	88	51-80	N/A		There are a couple patches of planted white pine within the stand.  Thinned as Charlie's Hardwoods, 61-021-11-01, Sept 2012 to March
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Ca	anopy Specie	es Density	Avg. Height	Size	2013. South part of stand was thinned in 2002 'West Boardman
	Sugar Maple	75	Pole	8	88	Su	gar Maple	Low	< 5 feet	Sapling	Hardwood'.
	Red Maple	10	Pole	8			Beech	High	5 - 10 feet	Sapling	
						I	ronwood	High	5 - 10 feet	Sapling	
34	42111 - Planted Dec	I Red Pine, iduous	Mixed	Saplir	ng Well	91.4	8	Immature	N/A		Stand appears to be fully stocked with red pine. There is competition throughout most of the stand. There are a some pockets throughout the
	Canopy Species	% Cover	Size Class	DB	H Age						stand that are just sold red pine. Consider spray this year or regen will be to large to spray in the future.
	Red Pine	60	Sapling	1	8						be to large to spray in the luture.
	Jack Pine	8	Sapling	1							Stand was final harvested in the fall of 2011 'Quarterline RP'. Stand was
	White Oak	8	Sapling	1							trenched in the summer of 2012 and was planted in the spring of 2013. 3 year regen survey took place in 2016 and showed stocking of ~800TPA
	Beech	7	Sapling	1							and no recommendation for release or replant.
36	3102	- Grass		Nons	tocked	0.8	0		No		Jack Pine is naturally regenerating after cut, red pine is planted after harvest also. Hopefully red pine will over take the jack pine over time.



	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
37	4117 - Mixed N	. Hardwood	d - Pine	Sawtimb	er We	II 4.8	98	51-80	N/A		Thinned as Charlie's Hardwoods, 61-021-11-01, Sept 2012 to March 2013.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	2013.
	Sugar Maple	55	Log	12	98	Su	gar Maple	Low	Variable	Sapling	
	Red Pine	25	Log/XLog	16			Beech	Low	Variable	Sapling	
						Bla	ck Cherry	Low	Variable	Sapling	
						Re	ed Maple	Low	Variable	Sapling	
38	42260 - Natural Pi			Poletimb			29	1-50	N/A		Stand has super canopy of red pine. Stand has aspen clone in south a new stand has a lot of oak in understory and in canopy. This stand
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	should be able to be converted over to oak pine in the future. Consider
	White Oak	15	Pole/Sapling	6		W	hite Oak	High	Variable	Sapling	clearcutting in 20-30 years and let oak come back naturally.
	Jack Pine	50	Sapling	3	29		Beech	Low	Variable	Sapling	
	Red Pine	20	Log	16	80						
40	42250 -	Pine, Oak	Po	oletimbe	r Mediu	um 37.8	88	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Oak	20	Log/Pole	13		Qua	king Aspen	Medium	< 5 feet	Sapling	
	White Pine	35	Pole/Log	8	88	W	hite Pine	High	10 - 20 feet	Sapling	
	Red Pine	35	Pole/Log	8		Black/Re	ed (Hybrid) Oak	Medium	5 - 10 feet	Sapling	
	White Oak	10	Pole/Log	8				-			
41	White Oak 4110 - Sugar N			8 Sawtimb	er We	II 58.8	102	81-110	N/A		Thinned as Charlie's Hardwoods, 61-021-11-01, Sept 2012 to March
41		Maple Asso		Sawtimb	er We		102 nopy Species	81-110 <b>Density</b>	N/A Avg. Height	Size	2013. Mostly hard maple with some pockets of beech and some
41	4110 - Sugar N	Maple Asso	ciation	Sawtimb DBH	1	Sub-Ca				<b>Size</b> Sapling	2013. Mostly hard maple with some pockets of beech and some
41	4110 - Sugar N	Maple Asso	ciation :	Sawtimb DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height		2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other
41	4110 - Sugar N	Maple Asso	ciation :	Sawtimb DBH	l Age	Sub-Ca	nopy Species gar Maple	<b>Density</b> Low	Avg. Height < 5 feet	Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other
41	4110 - Sugar N	Maple Asso	ciation :	Sawtimb DBH	l Age	Sub-Ca Su	nopy Species gar Maple Beech	Low Low	Avg. Height < 5 feet 5 - 10 feet	Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.
	4110 - Sugar M Canopy Species Sugar Maple 42110 - Pla	Maple Asso % Cover	ciation : Size Class Log/Pole	Sawtimb  DBH  12	1 Age 102	Sub-Ca Sur Ir Wild R	gar Maple Beech onwood ed Raspberry	Low Low Low	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet	Sapling Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty
	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species	Maple Asso % Cover 92  nted Red F % Cover	ciation : Size Class Log/Pole Pine	Sawtimb  DBH  12  Poletimb  DBH	1 Age 102	Sub-Ca Sun Ir Wild R	gar Maple Beech onwood ed Raspberry  68  Inopy Species	Low Low Low Full  111-140 Density	Avg. Height	Sapling Sapling Sapling Sapling Tall Shrub	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.
	4110 - Sugar M Canopy Species Sugar Maple 42110 - Pla	Maple Asso % Cover	ciation : Size Class Log/Pole	Sawtimb  DBH  12	1 Age 102	Sub-Ca	mopy Species gar Maple Beech onwood ed Raspberry  68 mopy Species Beech	Density Low Low Low Full  111-140 Density Medium	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub Size Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty
	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species	Maple Asso % Cover 92  nted Red F % Cover	ciation : Size Class Log/Pole Pine	Sawtimb  DBH  12  Poletimb  DBH	1 Age 102 per We	Sub-Ca	gar Maple Beech onwood ed Raspberry  68  Inopy Species	Low Low Low Full  111-140 Density	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet N/A  Avg. Height 5 - 10 feet 10 - 20 feet	Sapling Sapling Sapling Sapling Tall Shrub	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty
	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species	Maple Asso % Cover 92  nted Red F % Cover	ciation : Size Class Log/Pole Pine	Sawtimb  DBH  12  Poletimb  DBH	1 Age 102 per We	Sub-Ca Sub-Ca Sub-Ca Sub-Ca	mopy Species gar Maple Beech onwood ed Raspberry  68 mopy Species Beech	Density Low Low Low Full  111-140 Density Medium	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub Size Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty
42	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species Red Pine  42260 - Natural Pi	Maple Asso % Cover 92  nted Red F % Cover 95	Pine I  Size Class  Log/Pole  Pine I  Deciduous	Sawtimb  DBH  12  Poletimb  DBH  10	er We	Sub-Ca Sub-Ca Sub-Ca Sub-Ca Sub-Ca Sub-Ca	gar Maple Beech onwood ed Raspberry  68 anopy Species Beech ack Pine gar Maple	Density Low Low Full  111-140 Density Medium Medium Low  81-110	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet	Sapling Sapling Sapling Tall Shrub Size Sapling Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty Straight but small diameters. Thinned in 03 'Begin Pine 2'  Stand is island in the middle of stand 34. I am assuming this was son
42	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species Red Pine  42260 - Natural Pi Canopy Species	Maple Asso % Cover 92  nted Red F % Cover 95	Pine Incidence Size Class  Log/Pole  Pine Incidence Size Class  Log/Pole  Deciduous Size Class	Sawtimb  DBH  12  Poletimb  DBH  10  Sawtimb	er We	Sub-Ca Sub-Ca Sub-Ca Sub-Ca Sub-Ca Sub-Ca	mopy Species gar Maple Beech onwood ed Raspberry  68 mopy Species Beech ack Pine gar Maple	Density Low Low Full  111-140 Density Medium Medium Low  81-110	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet  N/A  Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet	Sapling Sapling Sapling Tall Shrub Size Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty
42	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species Red Pine  42260 - Natural Pi Canopy Species Red Pine	Maple Asso % Cover 92  nted Red F % Cover 95	Pine I  Size Class  Log/Pole  Pine I  Deciduous	Sawtimb  DBH  12  Poletimb  DBH  10  Sawtimb	er We	Sub-Ca   S	gar Maple Beech onwood ed Raspberry  68 anopy Species Beech ack Pine gar Maple	Density Low Low Full  111-140 Density Medium Medium Low  81-110	Avg. Height < 5 feet 5 - 10 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet	Sapling Sapling Sapling Tall Shrub Size Sapling Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty Straight but small diameters. Thinned in 03 'Begin Pine 2'  Stand is island in the middle of stand 34. I am assuming this was son
42	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species Red Pine  42260 - Natural Pi Canopy Species	Maple Asso % Cover 92  nted Red F % Cover 95  ne, Mixed I % Cover	Pine I  Size Class Log/Pole  Pine I  Size Class Log/Pole  Deciduous  Size Class Log/XLog/Pole  Log/Pole	Sawtimb  DBH  10  Sawtimb  DBH  e 16  10	oer We l Age 68	Sub-Ca   S	gar Maple Beech onwood ed Raspberry  68 Inopy Species Beech ack Pine gar Maple  80 Inopy Species	Density Low Low Low Full  111-140 Density Medium Medium Low  81-110 Density	Avg. Height	Sapling Sapling Sapling Tall Shrub Size Sapling Sapling Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty Straight but small diameters. Thinned in 03 'Begin Pine 2'  Stand is island in the middle of stand 34. I am assuming this was son
42	4110 - Sugar M Canopy Species Sugar Maple  42110 - Pla Canopy Species Red Pine  42260 - Natural Pi Canopy Species Red Pine	Maple Asso % Cover 92  nted Red F % Cover 95  ne, Mixed I % Cover 40	Pine I  Size Class Log/Pole  Pine I  Size Class Log/Pole  Deciduous  Size Class Log/XLog/Pol	Sawtimb  DBH  10  Sawtimb  DBH  e 16  10	oer We l Age 68	Sub-Ca   S	gar Maple Beech onwood ed Raspberry  68 Inopy Species Beech ack Pine gar Maple  80 Inopy Species	Density Low Low Low Full  111-140 Density Medium Medium Low  81-110 Density	Avg. Height	Sapling Sapling Sapling Tall Shrub Size Sapling Sapling Sapling Sapling	2013. Mostly hard maple with some pockets of beech and some scattered hemlock. East part of stand was salvage cut in 2004. Other was thinned regularly in 2004 'South Boardman Hwd'.  Stand contains several openings filling in with jack pine. timber is pretty Straight but small diameters. Thinned in 03 'Begin Pine 2'  Stand is island in the middle of stand 34. I am assuming this was son



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
46	4110 - Sugar M	Maple Assoc	ciation	Sawtimb	er Well	0.9	90	81-110	N/A		Stand was thinned in the fall of 2011. Small timber sale reciept issued to Pete Wood Firewood.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	rete wood riiewood.
	Sugar Maple	100	Log/Pole	10	90	Iro	onwood	Medium	10 - 20 feet	Sapling	
48	42210 - Nat	tural Red Pi	ine	Sawtimb	er Well	3.9	142	81-110	N/A		
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	20	Log/Pole	10		Re	ed Maple	Low	10 - 20 feet	Sapling	
	White Pine	10	Log	16		WI	nite Pine	Medium	5 - 10 feet	Sapling	
	Red Pine	70	Log	16	142						
49	42201 - Natural Dec	White Pine	, Mixed	Poletimb	er Well	2.1	77	51-80	N/A		nice st. Save for Creek buffer. Let stand convert to pine.
	Canopy Species	% Cover	Size Class	s DBH	Age						
	Quaking Aspen	30	Pole/Log	10							
	White Pine	60	Pole	10	77						
	Red Pine	10	Pole	8							
50	622 - Lov	vland Shrub	)	Nonsto	ocked	10.0			No		
51	4110 - Sugar M			Poletimb		12.7	89	111-140	N/A		
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	
	Sugar Maple	90	Pole/Log	9	89		gar Maple	Low	< 5 feet	Sapling	
							onwood	High	5 - 10 feet	Sapling	
						l	Beech	Medium	5 - 10 feet	Sapling	
52	4110 - Sugar M	Maple Assoc	ciation	Poletimb	er Well	1.1	89	51-80	N/A		Stand was cut in the fall of 2011 as a part of a small firewood sale.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Timber sale receipt to Pete Wood Firewood.
	Sugar Maple	100	Pole/Log		89		Beech	Medium	5 - 10 feet	Sapling	
53	42210 - Nat	tural Red P	ine	Sawtimb	er Well	14.6	87	81-110	N/A		nice RP poles. Part of stand has evidence of a fire 2-3 yrs ago.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	30	Log	12		R	ed Oak	Low	< 5 feet	Sapling	
	Red Pine	60	Log	12	87	WI	nite Pine	Low	5 - 10 feet	Sapling	
54		spen, Oak		Poletimb		13.0	43	111-140	N/A		Old oak with young aspen mixed in.
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Oak	40	Log	12	108		oth Aspen	Medium	10 - 20 feet	Sapling	
	Bigtooth Aspen	45	Pole/Log		43		nite Pine	Low	5 - 10 feet	Sapling	
	White Pine	10	Pole/Log	j 8		Re	ed Maple	Medium	Variable	Sapling	



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age B	BA Range	Managed S	ite	General Comments
55	42260 - Natural Pir	ne, Mixed	Deciduous P	oletimb	er Well	18.7	76	111-140	N/A		Real mixed stand. Mostly mixed pine with pockets of younger aspen
	Canopy Species	% Cove	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	some oak present probably hold for ten yrs.
	Red Oak	10	Log	12		Wh	nite Pine	Medium	5 - 10 feet	Sapling	
	Quaking Aspen	25	Pole	8		Hazelnu	ut (American)	Medium	5 - 10 feet	Tall Shrub	
	White Pine	50	Log/Pole/XLog	10	76						
	Red Pine	15	Pole	8							
56	42110 - Plar	nted Red F	Pine S	awtimb	er Well	112.1	68	141-170	N/A		Nice stand. Some JP regen along roads and fire breaks. Thinned in 03
	Canopy Species	% Cove	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	'Vacation Red Pine'
	Red Pine	98	Log	14	68	Sug	gar Maple	Low	< 5 feet	Sapling	
						E	Beech	High	5 - 10 feet	Sapling	
						Ja	ick Pine	Low	10 - 20 feet	Sapling	
						Iro	onwood	Medium	5 - 10 feet	Sapling	
57	790 - Other Bare/	Sparsely \	/egetated	Nonsto	ocked	10.4			Managed Op	ening	
58	622 - Low	land Shru	ıb	Nonsto	ocked	1.0			No		
59	42100 - Plan	ted White	Pine S	awtimb	er Well	8.1	64	81-110	N/A		Poor quality
	Canopy Species	% Cove	r Size Class	DBH	l Age						
	White Pine	100	Log/Pole	10	64						
61	310 - Herbac	eous Ope	nland	Nonsto	ocked	16.3			No		
62	4319 - Mixed				er Well	13.8	71	81-110	N/A		Natural white pine with mixed aspen and soft maple.
	Canopy Species		r Size Class		l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	35	Log	10	71	Wh	nite Pine	Low	10 - 20 feet	Sapling	
	Quaking Aspen	15	Pole	8							
	White Pine	45	Log/Pole/XLog	12	71						
63	6132 - Mixed Lo Ce	wland Fore	est with Pol	etimbe	r Mediur	m 3.0	77	51-80	N/A		Has Creek running through it. Lots of deer use.
	Canopy Species	% Cove	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	50	Pole	8	77	Re	ed Maple	Low	< 5 feet	Sapling	
No	rthern White Cedar	30	Pole	8		Та	ag Alder	Medium	5 - 10 feet	Tall Shrub	
	White Pine	15	Log/XLog/Pole	14							



Stan	d Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
64	6128 - Lowland ( Dec	Coniferous iduous	, Mixed F	Poletimb	er Well	8.7	99		N/A		mixed species in stand. decent quality tam. ground is soft. not much deer Sign.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Paper Birch	15	Pole	7		Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Balsam Poplar	20	Pole	8							•
No	orthern White Cedar	45	Pole	8	99						
	Tamarack	20	Pole	6							
65	4133 - Aspe	en, Mixed P	ine f	Poletimb	er Well	15.0	43	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole/Sapling	5		Re	ed Maple	Medium	10 - 20 feet	Sapling	
	Bigtooth Aspen	55	Pole	6	43	W	hite Pine	Low	10 - 20 feet	Sapling	
	White Pine	30	Pole/Log	8							
67	4130	- Aspen	ı	Poletimb	er Well	26.0	37	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age						
	Quaking Aspen	30	Pole/Sapling	j 6	37						
	Bigtooth Aspen	50	Pole	8	37						
	Bigtooth Aspen Red Maple	50 15	Pole Sapling	8	37						
68	Red Maple 6132 - Mixed Lo	15	Sapling			n 39.8	86		N/A		Lots of windthrow. Where wind throw is heavy stand is regenerating to Balsam Poplar and white birch. Stand is very wet.
68	Red Maple 6132 - Mixed Lo	15 wland Fore	Sapling	4 oletimber			86 anopy Species	Density	N/A Avg. Height	Size	
68	Red Maple 6132 - Mixed Lo	15 wland Fore	Sapling est with Po	4 oletimber	· Mediun	Sub-Ca		Density  Medium		Sapling	
68	Red Maple 6132 - Mixed Lo Co Canopy Species	uland Foreedar	Sapling est with Po	4 Dletimber	Mediun	Sub-Ca	anopy Species		Avg. Height		
68	Red Maple 6132 - Mixed Lo Co Canopy Species Red Maple	wland Foreedar  Cover 40	Sapling est with Po	d d d d d d d d d d d d d d d d d d d	Mediun	Sub-Ca Pa Bals	anopy Species	Medium	Avg. Height 5 - 10 feet	Sapling	
68	Red Maple 6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch	wland Foreedar  Cover  40 10	Sapling est with Po Size Class Pole Pole	DBH 8 7	Mediun	Sub-Ca Pa Bals	anopy Species per Birch sam Poplar	Medium Medium	<b>Avg. Height</b> 5 - 10 feet 5 - 10 feet	Sapling Sapling	Balsam Poplar and white birch. Stand is very wet.
	Red Maple 6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir	wland Foreedar  **Cover* 40 10 10	Sapling est with Po Size Class Pole Pole Pole	DBH 8 7 6	Mediun	Sub-Ca Pa Bals	anopy Species uper Birch sam Poplar alsam Fir	Medium Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet	Sapling Sapling Sapling	Balsam Poplar and white birch. Stand is very wet.
	Red Maple 6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar	15 wland Fore edar % Cover 40 10 10 30	Sapling  est with Po  Size Class  Pole  Pole  Pole  Pole  Pole  Pole	4 bletimber 8 7 6 6 6	Medium	Sub-Ca Pa Bals Ba	anopy Species uper Birch sam Poplar alsam Fir	Medium Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet	Sapling Sapling Sapling	Balsam Poplar and white birch. Stand is very wet.
No	Red Maple 6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar	wland Foreedar  % Cover 40 10 10 10 30  White Pine iduous	Sapling  est with Po  Size Class  Pole  Pole  Pole  Pole  Pole  Pole	4	Medium	Sub-Ca Pa Bals Ba Ta	anopy Species iper Birch sam Poplar alsam Fir ag Alder	Medium Medium Low Medium  81-110	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet < 5 feet 5 - 10 feet	Sapling Sapling Sapling	Balsam Poplar and white birch. Stand is very wet.
No	Red Maple  6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar  42201 - Natural Deci	wland Foreedar  % Cover 40 10 10 10 30  White Pine iduous	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Pole Pole Size Class	4	Medium	Sub-Ca Pa Bals Ba Ta  n 4.9  Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder	Medium Medium Low Medium  81-110	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet N/A	Sapling Sapling Sapling Tall Shrub	Balsam Poplar and white birch. Stand is very wet.
No	Red Maple  6132 - Mixed Lo Co Canopy Species  Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar  42201 - Natural V Deci Canopy Species	wland Foreedar  Cover  40  10  10  30  White Pineiduous  Cover	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Size Class Size Class	DBH  8 7 6 6 6 6 mawtimber	Medium  Age 86 86 Medium  Medium	Sub-Ca Pa Bals Ba Ta  n 4.9  Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder 64 anopy Species	Medium  Medium  Low  Medium  81-110  Density	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet  N/A  Avg. Height	Sapling Sapling Sapling Tall Shrub	Balsam Poplar and white birch. Stand is very wet.
No	Red Maple 6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar 42201 - Natural V Deci Canopy Species White Pine	15   wland Fore edar	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Size Class Class Log Pole/Log	4	Medium  Age 86  Medium  Medium  Age 64	Sub-Ca Pa Bals Ba Ta  n 4.9  Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder 64 anopy Species	Medium  Medium  Low  Medium  81-110  Density	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet  N/A  Avg. Height	Sapling Sapling Sapling Tall Shrub	Decent pole timber mix of red maple, birch, cedar. Lots of deer browse.
69	Red Maple  6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar  42201 - Natural V Deci Canopy Species White Pine Red Maple  6112 - Lov Canopy Species	wland Foreedar  Cover  40  10  10  10  30  White Pineiduous  Cover  60  40  wland Aspe	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Pole Pole Pole	DBH  8 7 6 6 6 6  awtimber  DBH  12 8  Sapling N  DBH	Medium  Age 86  Medium  Medium  Age 64	Sub-Ca Pa Bals Ba Ta  1 4.9 Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder  64 anopy Species hite Pine	Medium  Medium  Low  Medium  81-110  Density  Low	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet  N/A  Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub	Balsam Poplar and white birch. Stand is very wet.
69	Red Maple  6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar  42201 - Natural V Deci Canopy Species White Pine Red Maple  6112 - Lov Canopy Species Paper Birch	15   wland Fore edar	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Pole Pole Size Class Log Pole/Log  Size Class Pole/Log	DBH  8 7 6 6 6 6  DBH  12 8  Sapling N  DBH  8	Medium  Medium	Sub-Ca Pa Bals Ba Ta  1 4.9 Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder  64 anopy Species hite Pine	Medium  Medium  Low  Medium  81-110  Density  Low	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet  N/A  Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub	Decent pole timber mix of red maple, birch, cedar. Lots of deer browse.  Mortality in the birch. Stocking is less to the northwest part of the stand.  Stand was cut in Feb of 2014 'Taylor Creek Mix' 61-035-11-01. All trees
69	Red Maple  6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar  42201 - Natural V Deci Canopy Species White Pine Red Maple  6112 - Lov Canopy Species	15   wland Fore edar	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Pole Pole Pole	4	Medium  Medium	Sub-Ca Pa Bals Ba Ta  1 4.9 Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder  64 anopy Species hite Pine	Medium  Medium  Low  Medium  81-110  Density  Low	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet  N/A  Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub	Decent pole timber mix of red maple, birch, cedar. Lots of deer browse.  Mortality in the birch. Stocking is less to the northwest part of the stand.  Stand was cut in Feb of 2014 'Taylor Creek Mix' 61-035-11-01. All trees were cut except, white pine, hemlock, cedar and balsam fir less than 6".
69	Red Maple  6132 - Mixed Lo Co Canopy Species Red Maple Paper Birch Balsam Fir Black Spruce orthern White Cedar  42201 - Natural V Deci Canopy Species White Pine Red Maple  6112 - Lov Canopy Species Paper Birch	15   wland Fore edar	Sapling  est with Po  Size Class Pole Pole Pole Pole Pole Pole Pole Size Class Log Pole/Log  Size Class Pole/Log	DBH  8 7 6 6 6 6  DBH  12 8  Sapling N  DBH  8	Medium  Medium	Sub-Ca Pa Bals Ba Ta  1 4.9 Sub-Ca	anopy Species aper Birch sam Poplar alsam Fir ag Alder  64 anopy Species hite Pine	Medium  Medium  Low  Medium  81-110  Density  Low	Avg. Height 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet  N/A  Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub	Decent pole timber mix of red maple, birch, cedar. Lots of deer browse.  Mortality in the birch. Stocking is less to the northwest part of the stand.  Stand was cut in Feb of 2014 'Taylor Creek Mix' 61-035-11-01. All trees



Stand	d Level 4 Cover Type			Size De	ensity	Acres	Acres Stand Age BA Range			Site	General Comments
71	6111 - Lowland Balsam Poplar			Poletimber Poor		46.2	46.2 40		N/A		Big area of blow down filling in with cat tail, mixed scattered pole timber
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	with tag alder underneath. very wet.
	Red Maple	20	Pole/Sapling	g 5		Re	d Maple	Low	< 5 feet	Sapling	
	Quaking Aspen	10	Pole/Sapling	g 5		Bals	am Poplar	Low	< 5 feet	Sapling	
	Balsam Poplar	40	Pole/Sapling	g 4	40	Ta	ag Alder	Full	5 - 10 feet	Tall Shrub	
	Balsam Fir	20	Pole/Sapling	g 4							
72	3301 - Low Densit	y Deciduo	us Trees	Nonst	ocked	1.6			No		
73	4112 - Maple, Beech, Cherry Association			Poletimber Well		2.4	2.4 88 51-80		N/A		pocket of higher ground. mostly red maple. Stand drops off to the north to lower ground. Kelly's stand
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	85	Pole/Log	10	88	Ва	lsam Fir	Low	< 5 feet	Sapling	
	Paper Birch	10	Pole/Log	10		WI	nite Pine	Low	< 5 feet	Sapling	
74	6121 - T	6121 - Tamarack			er Well	3.9	97	51-80	N/A		Stand is very wet. and inaccessible.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Tamarack	95	Pole	6	97	Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
75	6120 - Lowland Cedar			Poletimber Poor		28.1	28.1 91 1-		N/A		mixed stand. Some pockets of C6. St is fairly wet some pockets of
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	hemlock St has some higher ground where RM and birch are present.
No	thern White Cedar	55	Pole	8	91	Ва	lsam Fir	Medium	< 5 feet	Sapling	Stand was shelterwood harvested in the winter of 2014 'Boardman
	White Pine	18	Log	12		Re	ed Maple	Medium	< 5 feet	Sapling	Swamp Mix' 61-064-11-01. We got temporary access into the stand from
	Hemlock	20	Log/Pole	10		Qual	king Aspen	Medium	< 5 feet	Sapling	the private property to the south. All cedar, hemlock, yellow birch, and red pine. There was also red maple, birch and white pine that were marked to leave with green paint.
76	6132 - Mixed Lov Ce	wland Fore edar	est with Po	oletimbe	r Mediu	m 25.3	86	81-110	N/A		Lots of old and new windthrow Some evidence of cedar regen where wndthrow is thick. Stand is regenerating to balsam poplar and birch.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Paper Birch	30	Pole	6		Pa	per Birch	Low	5 - 10 feet	Sapling	
	Balsam Poplar	20	Pole	6		Bals	am Poplar	Low	5 - 10 feet	Sapling	
No	thern White Cedar	30	Pole	6	86	Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
	Tamarack	10	Pole	8				,			•
	Hemlock	10	Log/Pole	10							
77	42220 - Natu	tural Jack Pine		Sapling Well		5.4	21	Unspecified	N/A		Natural jack pine filling in nice and thick on real sandy soil. Stand burned in 88 Kalkaska fire 15 & 11.
• •											III OO NAIMASKA IIIC IJ & II.
	Canopy Species	% Cover	Size Class	DBI	l Age						



Stand	d Level 4 Cover Type		Size D	ensity	Acres	Stand Age	Stand Age BA Range		ite	General Comments	
78	6117 - Lowland Deciduous, Mixed Coniferous			Poletimber Well		6.9	82	51-80	N/A		Lots of deer sign. Fair amount of regen and browse. Stand has Taylor Cr. running through it. Nice pole timber
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	52	Pole	8	82	Re	ed Maple	Medium	< 5 feet	Sapling	
	Paper Birch	8	Pole	8		Pa	per Birch	Medium	< 5 feet	Sapling	
	Quaking Aspen	15	Pole	8							-
	Balsam Fir	20	Pole	6							
79	42220 - Nat	tural Jack Pine		Sapling Well		16.7	5 1	Immature	N/A		Stand was final harvested in winter of 2014 (cut to length). 'Boardman
	Canopy Species	% Cover	Size Class	DBI	H Age						Swamp Mix' 61-064-11-01. We gained temporary access through the private property to the south.
	Jack Pine	70	Sapling	1	5						private property to the south.
	Red Maple	10	Sapling	2							
	Balsam Fir	10	Sapling	2							
	Quaking Aspen	10	Sapling	2							
80	4133 - Aspe	en, Mixed P	ine	Poletim	oer Well	3.3	58	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBI	H Age						
	Bigtooth Aspen	80	Pole	8	58						
	White Pine	10	Log	12							
	Red Pine	10	Pole/Log	10							
81	429 - Mixed l	Jpland Con	ifers	Saplin	g Well	11.6	21	Immature	N/A		stand is mostly wind throw. lots of slash
	Canopy Species		Size Class	DBI	H Age						
	Balsam Fir	20	Sapling	4							
	Jack Pine	15	Pole	8							
	Jack Pine	35	Sapling	3	21						
	Black Cherry	25	Sapling	1	21						
82	42290 - Natu	ural Mixed Pine		Poletimber Well		4.0	56	81-110	N/A		west part of stand is a mix of WP, JP, RP, Scotch pine. poor quality stand
	Canopy Species	% Cover			H Age		nopy Species		Avg. Height	Size	- Court
	White Pine	10	Sapling/Po			Já	ack Pine	Medium	Variable	Sapling	
	Red Pine	40	Pole	8	56						
	Jack Pine	40	Pole	6	56						
	Scotch Pine	10	Sapling/Po	le 4							
83	4130	- Aspen		Sapling Well		52.4	7	Immature	N/A		Stand was harvested in the summer of 2012 'Age Class Aspen.' Stand is regenerating nicely and is about 2-3' tall. WP greater tha 24" was left
	Canopy Species		Size Class		H Age						along with oak and hemlock.
	Red Maple	10	Sapling	1							-
	Bigtooth Aspen	85	Sapling	2	7						



Stand	d Level 4 C		Size De	ize Density		Stand Age B	A Range	Managed Site		General Comments	
84	42220 - Natural Jack Pine			Sawtimber Well		3.9	68	81-110	N/A		
	Canopy Species % Cover		Size Class	s DBH Age		Sub-Canopy Species		Density	Avg. Height	Size	
	Jack Pine 60 Pole/Log 8 68		White Oak		Low	10 - 20 feet	Sapling				
	White Pine	10	Log/Pole	12		White Pine		Low	10 - 20 feet	Sapling	
	Red Pine	30	Log/Pole	12		Ja	ck Pine	Medium	Variable	Sapling	
85	42210 - Natural Red Pine			Sawtimber Well		37.9	73	81-110	N/A		mixed pine stand. Quite a few red pine poles. Stand should be managed
	Canopy Species % Cover Size Cla		Size Class	ss DBH Age		Sub-Canopy Species		Density	Avg. Height	Size	next YOE. Leave for age class diversity.
	White Pine	30	Log	12		Wh	nite Pine	Low	5 - 10 feet	Sapling	
	Red Pine	60	Log	10	73	Re	ed Pine	Low	5 - 10 feet	Sapling	
86	42250 - Pine, Oak			Sawtimber Poor		18.5	18.5 68 1		N/A		Stand was seed tree/shelterwood harvested in the summer of 2015, uni
	Canopy Species % Cover Size Cla		Size Class	s DBH Age		Sub-Canopy Species		Density	Avg. Height	Size	oak to leave. Some jack pine is starting to seed in.
	White Pine	20	Log/Pole	12		Ja	ck Pine	Low	< 5 feet	Sapling	3
	Red Pine	50	Log/Pole	10	68	Bigto	oth Aspen	Medium	5 - 10 feet	Sapling	
	Red Oak 30		Log	og 12		Red Maple		Low	5 - 10 feet	Sapling	
87	622 - Lowland Shrub Nonstocked		1.6			No					
89	<b>9</b> 42250 - Pine, Oal				timber Medium		5.9 88		N/A		Mixed stand. Log sized oak with a mix of aspen and pine. Stocking isn't too thick lots of white pine regen. Originally part of stand 40 good
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	retention for overstory removal of 40.
	Red Oak	30	Log	14		Wh	nite Pine	High	10 - 20 feet	Sapling	,
	White Pine	30	Pole/Log	8	88						
	Red Pine	30	Pole/Log	8							
	Bigtooth Aspen	10	Pole/Log	8							