

Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61135
Entry Year 2021
Acreage: 2,281
County Kalkaska

Management Area: High Sand Plains

Stand Examiner: Steve Crigier

Legal Description:

T25N R06W Sections 6-8, 17 & 18

Identified Planning Goals:

The following sections contain information on vegetation management direction in the form of Desired Future Conditions, 10-Year Management Objectives and Long-Term Management Objectives for each of the major cover types or forest communities within the management area. This information applies to those portions of the forest where active management (e.g., timber harvest, prescribed fire, planting or mowing) will be conducted. In other portions of the state forest, natural succession will achieve ecological objectives. While most stands have a variety of trees species and other vegetation, they are classified by the predominant species.

Soil and topography:

This compartment comprises primarily Rubicon Sand with traces of Saugatuck Sand and Newton Loamy Sand. The only significant elevation changes are along the riparian corridors. The western portion has some larger Spruce, Q-Type, and E- Type stands that are relatively wet. The remainder is dry and flat with either planted red pine or jack pine.

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

Private land to the north and west with a subdivision the east. The south edge is state land that is managed out of the Manton office. There are a few small private in holdings.

Unique Natural Features:

Special Conservation Area in the southwest part of the comparment.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

KW management area.

Watershed and Fisheries Considerations:

The Manistee River, Big Cannon Creek, and several unnamed tributaries flow through Compartment 135. All streams in Compartment 135 are Designated Trout Streams. The Manistee River and Big Cannon Creek are also protected by the Manistee River Natural Rivers Designation. The Manistee River and Big Cannon Creek host naturally reproducing populations of brook, brown, and rainbow trout. For timber operations near the Manistee River and Big Cannon Creek, Natural Rivers buffers should be followed. The SWSW of section 6 is the location of the "West Sharon Access Site" which is primarily for loading and unloading canoes into the Manistee River.

Wildlife Habitat Considerations:

This compartment falls within the Sharon Kirtland's Warbler (KW) Management Unit. The Kirtland's Warbler Management Plan outlines harvest and planting regimes for KW habitat. However, forest treatments should maintain a variety of successional stages of pine-oak-aspen forest and grass-shrub openings, with some mid to late successional forest in places, which is typical of a fire driven landscape. Big Cannon Creek and the Manistee River flow through parts of this compartment and several scattered lowland communities are also located here.

Maintaining a component or deciduous browse in and near deer yards is important. Aspen harvests should be designed to mimic wildfires of various intensities. This creates a mosaic of age classes and increases structural diversity within an area. The creation of dead and downed logs should be incorporated into timber prescriptions to provide habitat for various wildlife species. Standing dead timber is usually left during harvest operations unless deemed a safety hazard. Species associated with pine, oak, and aspen mixed upland forests and openland habitats, such as deer, badger, wild turkey, scarlet tanager, hog-nosed snake, ruffed grouse, Cooper's hawk, red-backed salamander, Kirtland's warbler, and gray squirrel will benefit from management here.

Compartment 135 falls within the Kirtland's Warbler Management Area of the Regional State Forest Management Plan.

Featured wildlife species for this MA include KW, pileated woodpecker, ruffed grouse, snowshoe hare, turkey, and deer.

Mineral Resource and Development Concerns and/or Restrictions

The nearest active sand/gravel production is occurring roughly three miles to the southeast. There appears to be some sand & gravel potential within the compartment, but the water table is shallow here on the outwash plain, which could limit development. The nearest oil & gas production, past or present, is located approximately two miles away, primarily from Devonian carbonates. There has been no exploration and there is no active mineral leasing within the compartment. Oil & gas potential is considered low at this time. 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:

Good access throughout most of the compartment with either county roads or forest two tracks.

Survey Needs:

Existing survey markers should be sufficient for this year of entry treatments.

Recreational Facilities and Opportunities:

West Sharon Access Site.

Fire Protection:

Fire Protection is from the Kalkaska DNR Field Office. Sections 8 and 18 are within Zone 5 dispatch which means additional units from Manton, Grayling, and Houghton Lake respond on a high fire day or above. VFD Fire Protection is from the Garfield Twp. Fire Department. Urban Interface can be an issue in sections 6, 7, and 8 with many private parcels and cabins or homes along the river. Access is not a problem in most of this compartment.

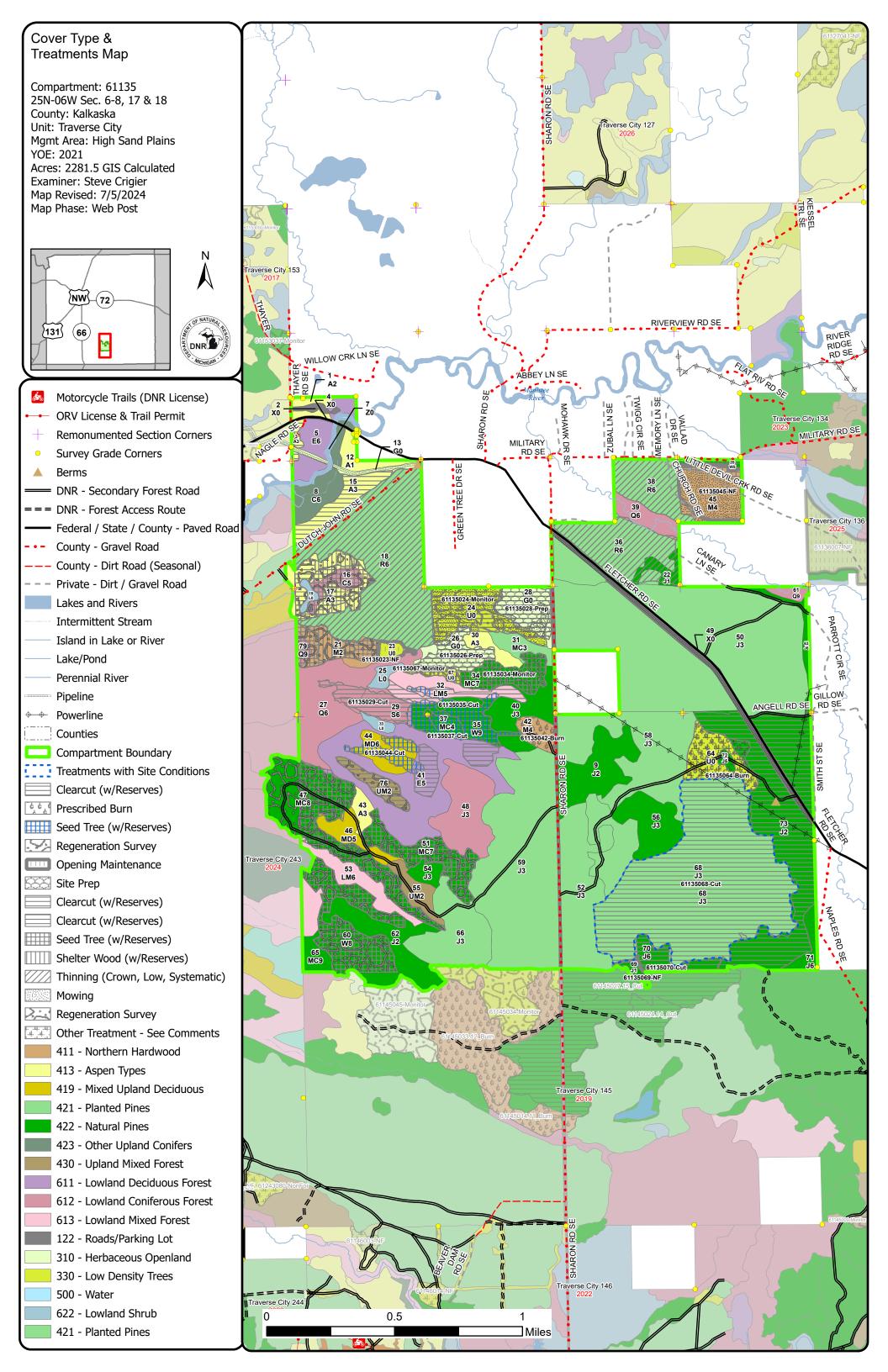
Additional Compartment Information:

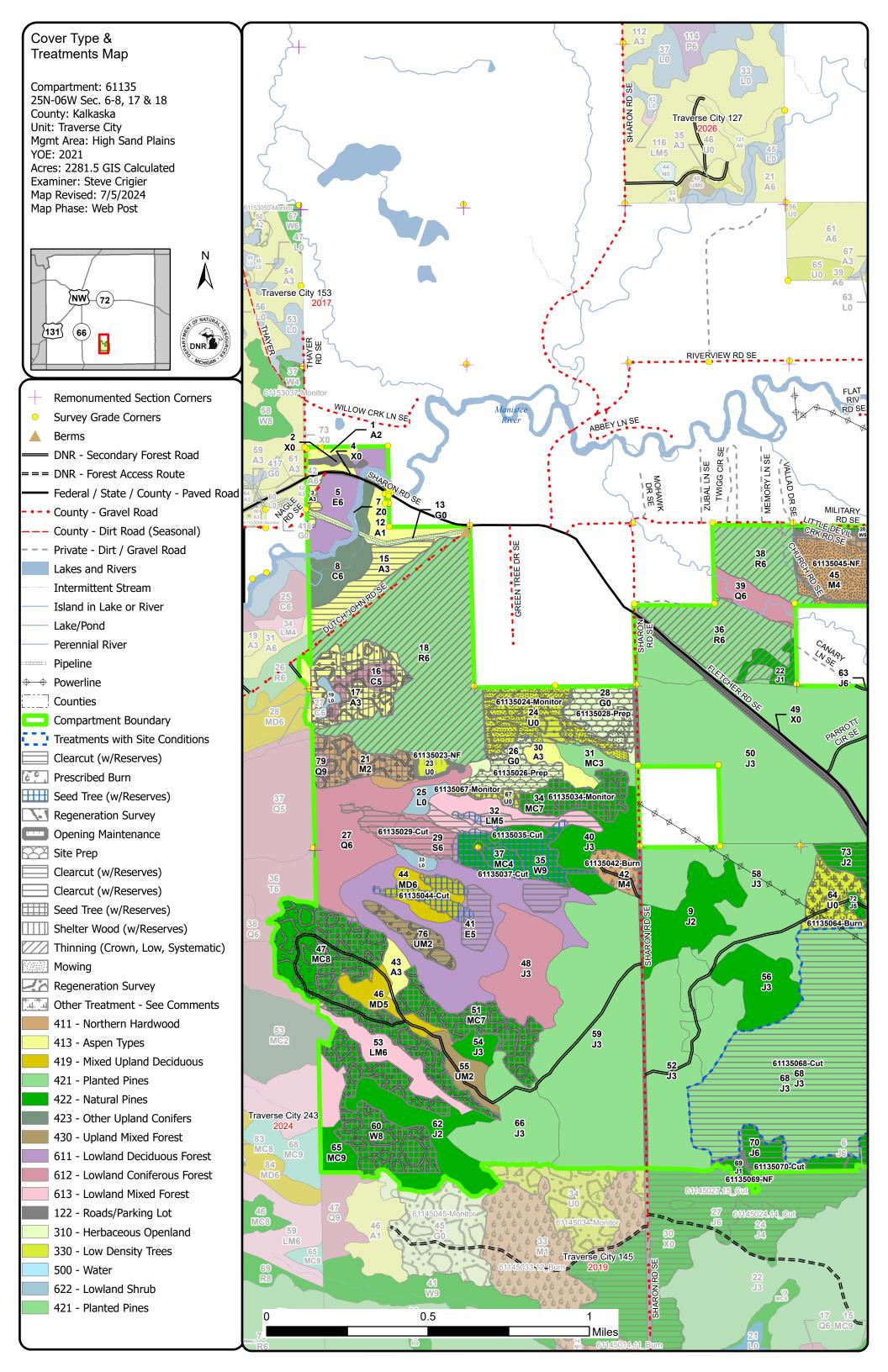
The following reports from the Inventory are attached:

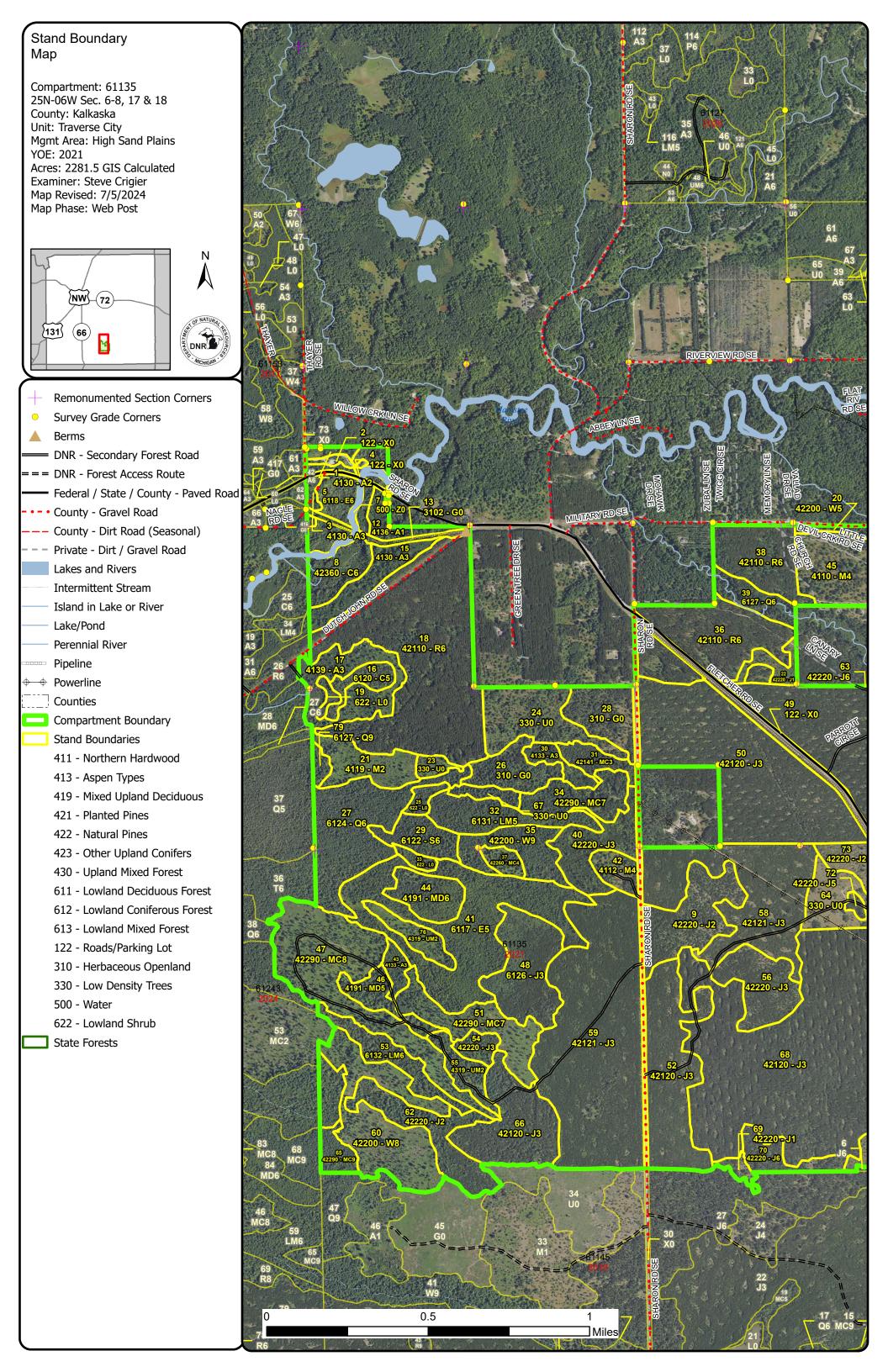
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

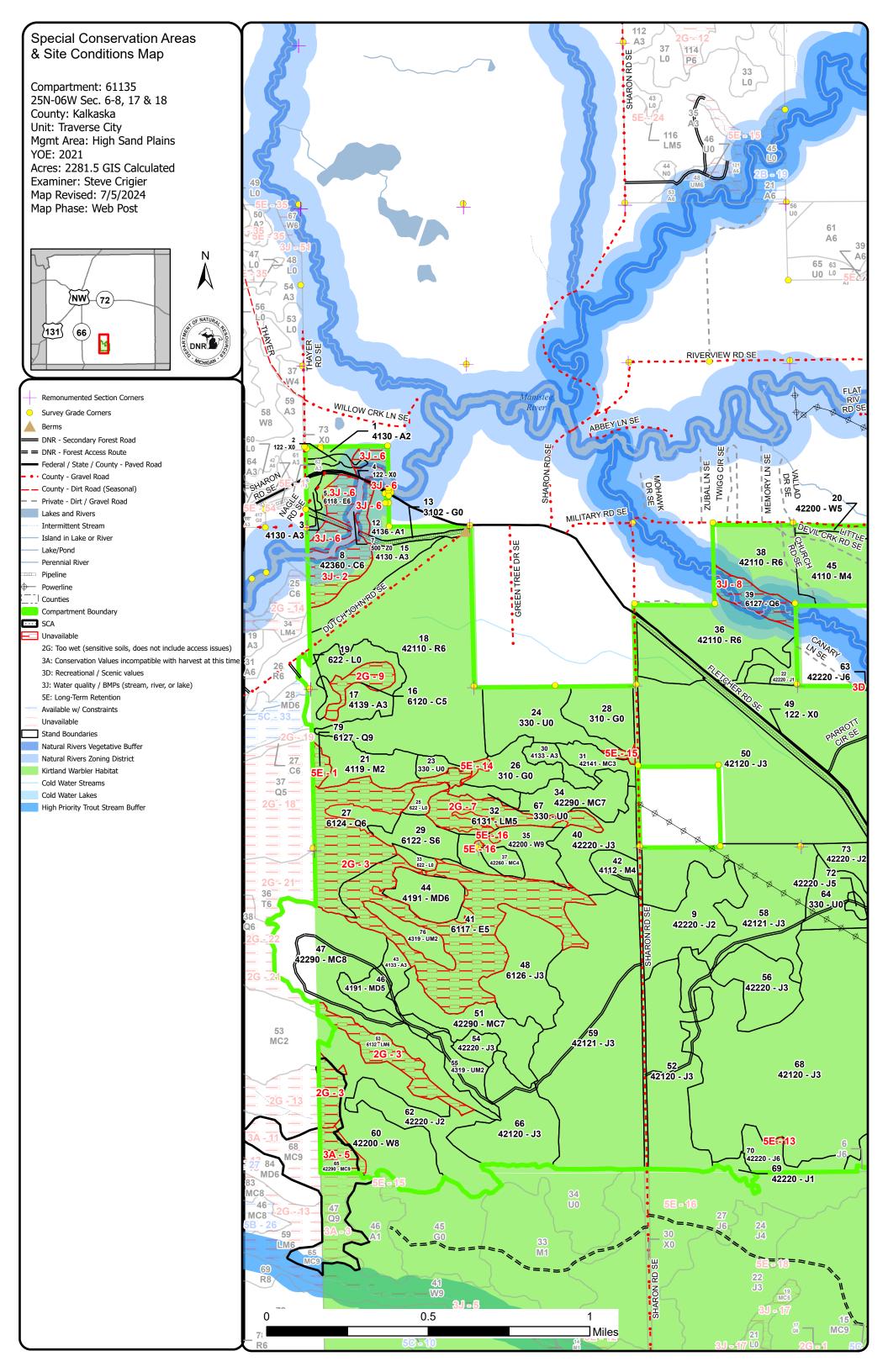
The following information is displayed, where pertinent, on the attached compartment maps:

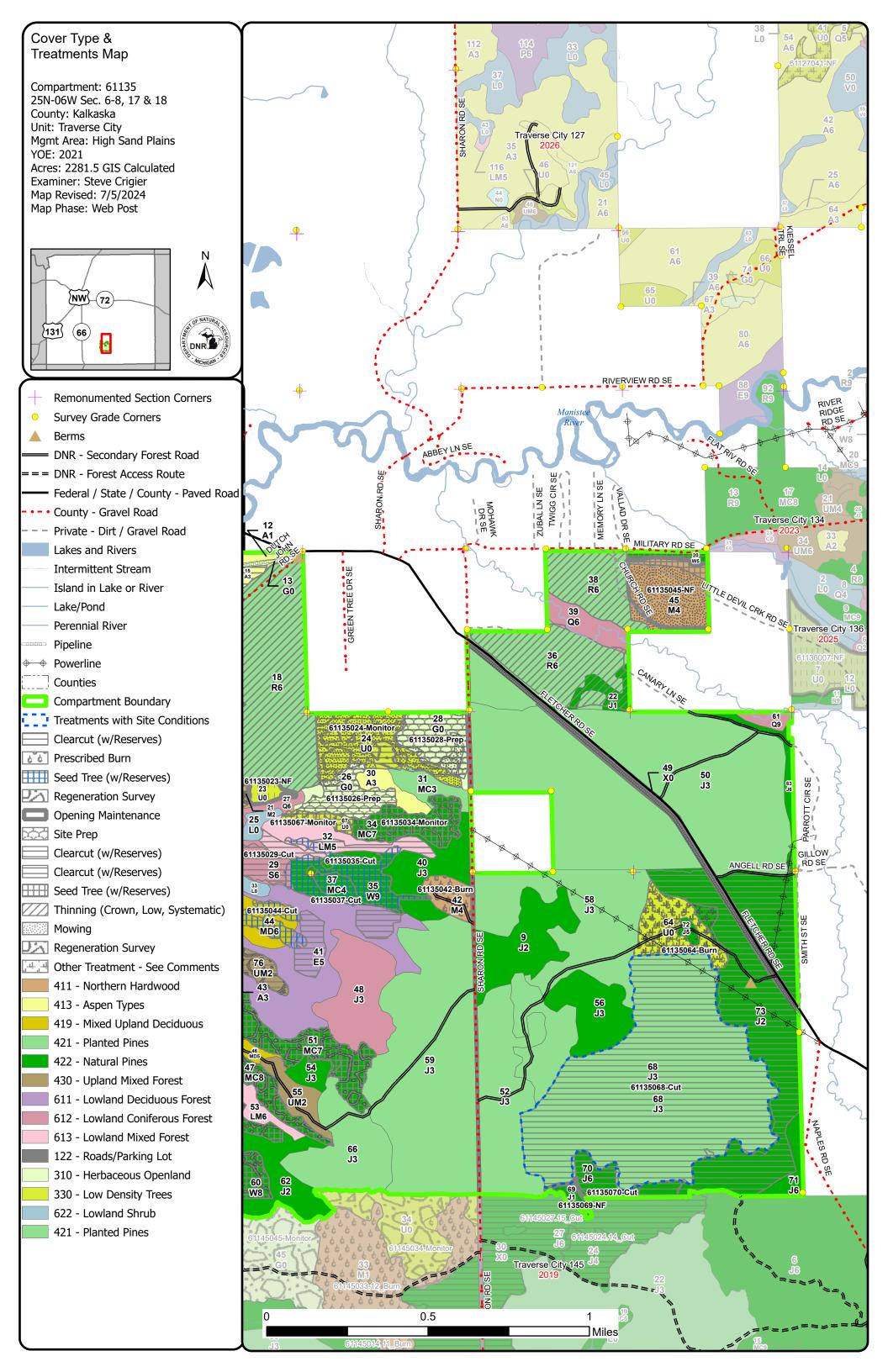
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

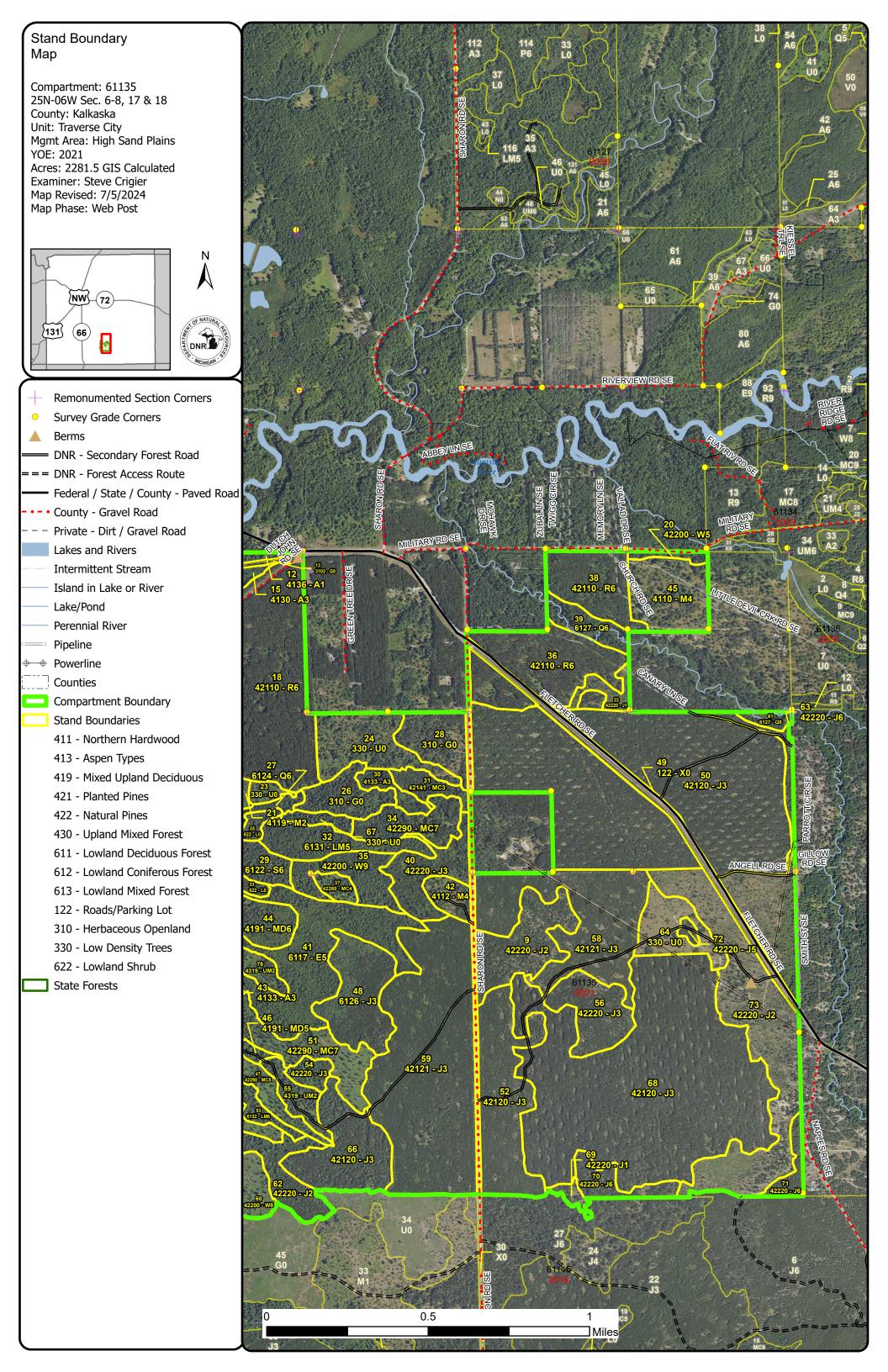


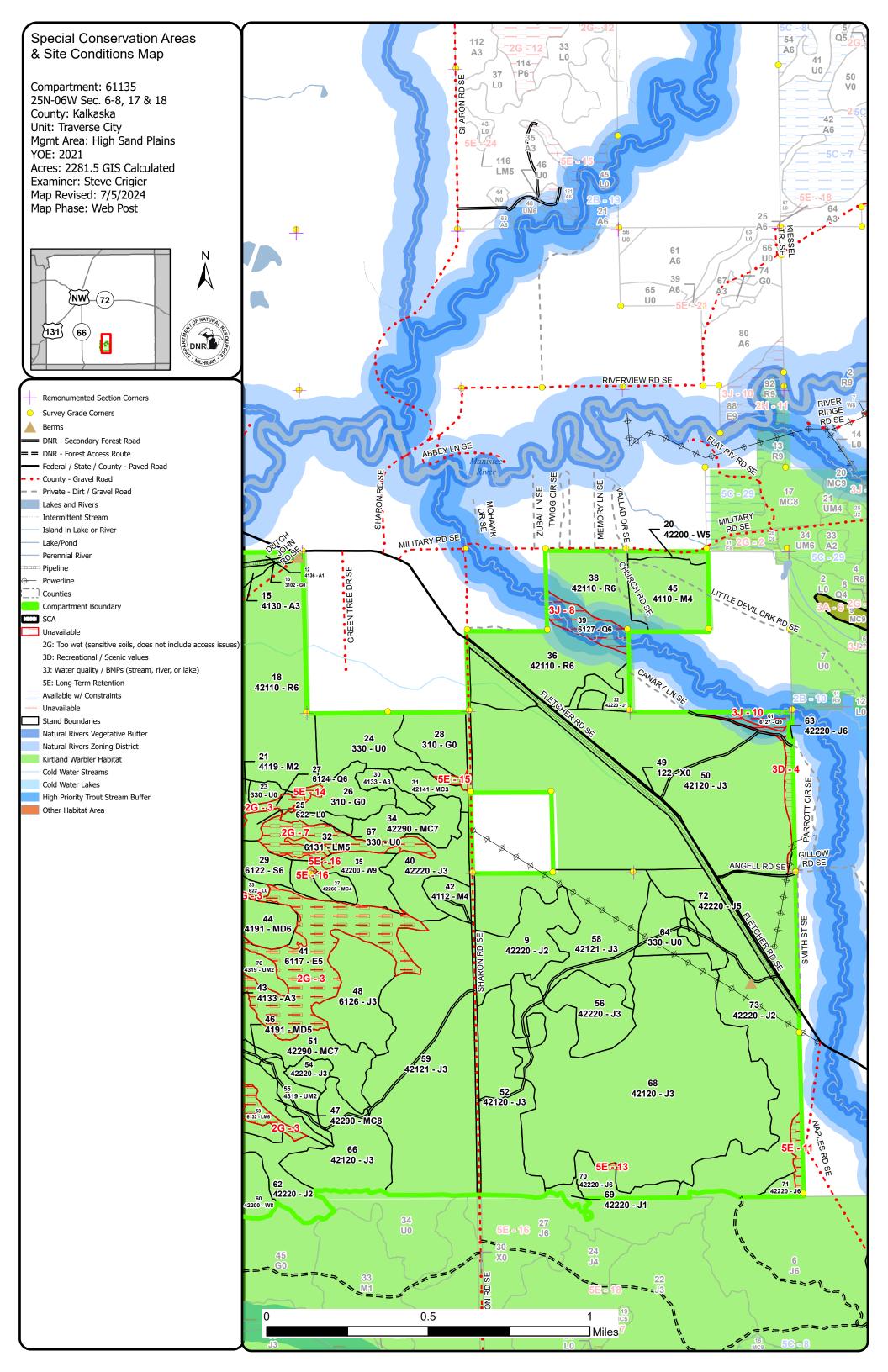












Compartment 135 Year of Entry 2021

Traverse City Mgt. Unit
Steve Crigier: Examiner



Age Class

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Aspen	0	0	51	15	8	6	0	0	0	0	0	0	0	0	0	0	0	0	80
Cedar	0	0	0	0	0	0	0	0	0	0	9	0	21	0	0	0	0	0	30
Herbaceous Openland	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Jack Pine	0	0	139	456	253	296	0	0	8	22	0	0	0	0	0	0	0	0	1173
Low-Density Trees	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Lowland Conifers	0	0	0	0	0	0	0	0	0	18	58	0	0	0	0	0	0	0	76
Lowland Deciduous	0	0	0	0	0	0	0	0	90	0	0	0	20	0	0	0	0	0	110
Lowland Mixed Forest	0	0	0	0	0	0	0	24	0	0	0	0	27	0	0	0	0	0	51
Lowland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	31
Natural Mixed Pines	0	0	0	0	0	0	0	0	21	6	102	0	8	0	0	0	0	0	137
Northern Hardwood	0	0	21	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	64
Planted Mixed Pines	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Red Pine	0	0	0	0	0	0	60	170	0	0	0	0	0	0	0	0	0	0	230
Upland Mixed Forest	0	0	11	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	23
Urban	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
White Pine	0	0	0	0	0	0	0	0	0	27	55	0	0	0	0	0	0	0	82
Total	166	0	222	481	261	357	60	194	150	73	239	0	76	0	0	0	0	0	2278



Report 2 - Treatment Summary

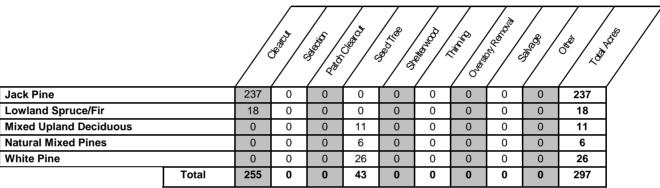
Traverse City Mgt. Unit Year of Entry: 2021

Acres of Harvest

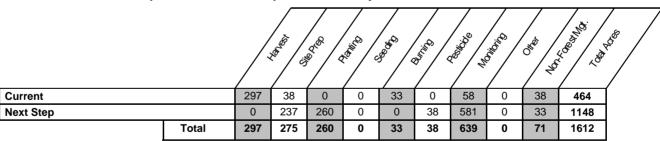
Compartment 135
Total Compartment Acres: 2,281

Commercial Harvest - 297 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

Report 3 -- Treatments

Compartment: 135 Year of Entry: 2021

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

Proposed Treatments:

68 61135068-Cut 222.7 42120 - Planted Sapling 43 1-50 Harvest Clearcut 4222 - Natural Even-Aged No Jack Pine

<u>Prescription</u> Cut all trees 1 inches and larger. Require chipping and low stumps to facilitate planting operations. Biomass harvest

Specs:

S

t

Next Step SitePrep, Trenching; Planting, KW Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable KW planted jack pine

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Approved Treatments:

23 61135023-NF 4.3 330 - Low-Density Nonstocked 0 Unspec NonForestMgt Brush Cutting 3205 - Mixed No Trees ified Upland Shrub

<u>Prescription</u> Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and <u>Specs:</u> shrubs and/or conifers for wildlife food and cover. Plant site appropriate native shrubs and/or mast producing trees for wildlife food and

cover. May need to fertilize plantings and protect with wire cages or tubex.

Next Step

Treatments:

<u>Acceptable</u>

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

24 61135024- 31.7 330 - Low-Density Nonstocked 0 Unspec Monitoring Natural Regen (Re-Inventory) Herbaceous Openland

Prescription

Specs:

Next Step Treatments:

Acceptable grass

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 4/3/2024

Compartment: 135

Year of Entry: 2021

S t

d N	atment lame 135026- Prep	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
Prescripti		16.6							=		Cut
	Р	10.0	310 - Herbaceous Openland	Nonstocke	ed 0	Unspec ified	SitePrep	Trenching	4211 - Planted Red Pine	Even-Aged	No
<u> </u>	<u>on</u>										
Next Step Treatmen		sticide, S	Skidder - Site Prep;	Planting, I	nitial P	lant; Mon	itoring, Artificial	Regen(1yr); Mon	itoring, Artificial R	egen(3yr)	
Acceptab Regen:	e red pine										
Other Comment	Percent	to Treat	= 100%								
Site Cond	<u>ition</u>										
Proposed	Start Date:	10/1 /20	023								
28 61	135028- Prep	20.9	310 - Herbaceous Openland	Nonstocke	ed 0	Unspec ified	SitePrep	Trenching	4211 - Planted Red Pine	Even-Aged	No
Prescripti Specs:	<u>on</u>										
Next Step Treatmen		sticide, S	Skidder - Site Prep;	Planting, I	nitial P	lant; Mon	itoring, Artificial	Regen(1yr); Mon	itoring, Artificial R	egen(3yr)	
Acceptab Regen:	e red pine										
Other Comment	Percent	to Treat	= 100%								
Site Cond	ition										
	Start Date:	10/1 /20	023								
29 611	35029-Cut	17.6	6122 - Black Spruce	e Poletimbe Well	r 90	51-80	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	No
Prescripti Specs:	on Clearcut much as seed/div	possible	Try to save as mucle into st 27. There	h of the sma are some di	aller dia ainage	ameter sproes out there	uce as possible e so heads up fo	during the harvest or those. Could ma	Try to extend the	e sale area wo ne to leave for	est as
Next Step Treatmen	_	ng, Natu	ral Regen (Re-Inver	ntory)							
Acceptabl Regen:	e spruce,	ir, maple	е								
Other Comment			e spruce 4-6 sticks t nent. Some mortali				small diameter s	spruce. Eastern pa	art is more of trans	sition ground v	vith a red
Site Cond	<u>ition</u>										
<u>Proposed</u>	Start Date:	10/1 /20	020								
-	135034- Monitor	21.1	42290 - Natural Mixed Pine	Sawtimbe Poor	r 75	1-50	Monitoring	Natural Regen (Re-Inventory)	429 - Mixed Upland Conifers	Even-Aged	No
Prescripti Specs:								(= = = 3,	.,		
Next Step Treatmen											
Acceptabl Regen:	e White pi	ne, red p	oine, jack pine, oak,	spruce, che	erry, re	d maple, a	spen.				
Other	Percent :	to Treat	= 100%								
Comment	-										

/lgt. Unit

Report 3 -- Treatments

Compartment: 135



S Year of Entry: 2021 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Density Method Objective Name CoverType Age Range **Type** Structure Cut d 35 61135035-Cut 25.5 42200 - Natural Sawtimber 81-110 Harvest Seed Tree 429 - Mixed Even-Aged Nο White Pine Well **Upland Conifers** Shelterwood harvest with variable residual BA, 0-30 sf/acre. Cut all jack pine, tamarack and spruce. Mark other species to leave either Prescription individually or in clumps, especially in wetter, western end. Maybe leave fir < ~4" dbh. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable White pine, red pine, jack pine, balsam fir, tamarack, black spruce. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2020 Even-Aged 61135037-Cut 5.8 42260 - Natural Poletimber 80 1-50 Harvest Seed Tree 429 - Mixed No Pine, Mixed Poor **Upland Conifers** Deciduous Prescription Remove some volume while we are working in the adjacent stand. Mark some representative species to leave. BA Range from 0-30sqft/ac. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable White pine, red pine, oak, aspen etc. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2020 42 61135042-9.4 4112 - Maple, Poletimber 40 1-50 Burn Opening 31022 - Warm No Beech, Cherry Poor Season Grass Burn Association Prescription 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 Specs: needed by herbiciding or other methods. Maintain as needed with mowing, seeding of native grasses and forbs, burning, or removal of woody encroachment. Next Step NonForestMgt, Other - Specify **Treatments:**

Acceptable Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

Stand

Acres

Report 3 -- Treatments

Treatment

Method

BA

Compartment: 135

Cut

S t а

n

Treatment

Name

Year of Entry: 2021 **Treatment Cover Type** Age Habitat

Range Objective CoverType Density Age **Type** Structure d 61135044-Cut 11.3 4191 - Mixed Poletimber 81-110 Harvest Seed Tree 4319 - Mixed Even-Aged **Upland Deciduous Upland Forest** Well with Conifer

Stand

Prescription more of a habitat improvement cut but should be doable commercially as there is mostly upland with a few ephemeral drains, green tree some seed trees in clumps while marking, probably save all fir under 3" dbh and ok to save a mix bag of all current overstory species. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory) Treatments:

Acceptable any mix of current overstory, will likely mush to maple and fir and aspen in a few areas and conifer in pine areas.

Size

Regen:

Other Comment: Site Condition

Proposed Start Date: 10/1 /2020

31022 - Warm 61135045-NF 30.9 4110 - Sugar Maple Poletimber 40 1-50 NonForestMat **Brush Cutting** No Association Season Grass

Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Plant site appropriate native shrubs and/or mast producing trees for wildlife food and Specs: cover. May need to fertilize plantings and protect with wire cages or tubex.

Next Step Treatments:

Acceptable Regen:

Eventually should burn this stand to stimulate native herbaceous vegetation and set back woody encroachment. Maintain as needed with Other Comment: mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Site Condition

Proposed Start Date: 10/1 /2020

64 61135064-23.1 330 - Low-Density Nonstocked Unspec Burn Opening 31022 - Warm No ified Season Grass Burn Trees

Prescription The goal of prescribed burning is to restore and/or maintain a grassland/barrens ecosystem. The timing and frequency of the burns will be Specs: 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, burning, or removal of woody encroachment.

Next Step NonForestMgt, Other - Specify

Treatments:

Acceptable Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2020

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 135 S Year of Entry: 2021 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Range Objective Name CoverType Density Age **Type** Structure Cut d 67 61135067-5.5 330 - Low-Density Nonstocked Unspec Monitoring Natural Regen 6130 - Fir, Two-Aged No Monitor Trees ified (Re-Inventory) Aspen, Maple Prescription Specs: Next Step Treatments: Acceptable fir, spruce, pine, maple, aspen Regen: Percent to Treat = 100% **Other** Comment: Site Condition Proposed Start Date: 4/3/2024 22 Immatu NonForestMgt Herbaceous/Crop 69 61135069-NF 42220 - Natural Sapling 3105 - Mixed No 3 1 Jack Pine Poor /Grass Planting Upland Herbaceous Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Specs: Next Step **Treatments: Acceptable** Regen: Possibly seed in some additional native grasses and forbs that have forage value and that will attract insects for bugging. Ideally it would be Other nice to burn this stand but size and location make burning unlikely. Comment: Site Condition Proposed Start Date: 10/1 /2010 61135070-Cut 14.3 42220 - Natural Poletimber 80 51-80 Harvest Clearcut with 4222 - Natural Even-Aged No Jack Pine Well Retention Jack Pine Prescription Clearcut with stand to the south, including specs to facilitate natural regeneration, e.g. leaving tops/limbs scattered throughout the stand.

Specs:

Next Step ; ; SitePrep, Scarification

Treatments:

Acceptable Natural JP for KW habitat.

Regen:

Decided to change MO from planted to natural jack pine at Comp 145 compartment review on 8/3/2017, per Jason Hartman. Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

Total Treatment 463.8 Acreage Proposed:

Traverse City Mgt. Unit

Steve Crigier: Examiner

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	dition	S
Acres	Available	With Condition	Not Available		2G	ЗА	3D	3J	5E
80	80	0	0	Aspen				0	
30	0	0	30	Cedar	9			21	
46	44	0	2	Herbaceous Openland	0			0	2
1174	1160	0	14	Jack Pine			9		5
67	66	0	1	Low-Density Trees	0				1
75	7	0	68	Lowland Conifers	47		0	18	3
110	6	0	104	Lowland Deciduous	87			17	
51	3	0	48	Lowland Mixed Forest	48				
10	10	0	0	Lowland Shrub	0				
15	15	0	0	Lowland Spruce/Fir	0				
31	31	0	0	Mixed Upland Deciduous	0				
137	129	0	8	Natural Mixed Pines	0	8			0
65	65	0	0	Northern Hardwood					
10	10	0	0	Planted Mixed Pines					
230	230	0	0	Red Pine	0				
23	23	0	0	Upland Mixed Forest					
39	39	0	0	Urban				0	
5	5	0	0	Water				0	
83	80	0	2	White Pine	0	1			1
2,281	2,003		278	Total Forested Acres	191	9	9	56	12
	88%		12%	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.

Site Dominant Site No. Cond Availability	y Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						

Report 4 – Site Conditions

Traverse City Mgt. Unit
Steve Crigier: Examiner

2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	17	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	162	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3D: Recreational / Scenic values	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3A: Conservation Values incompatible with harvest at this time	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: SCA for Other Hab	itat Area.					
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	22	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Traverse City Mgt. Unit
Steve Crigier: Examiner

8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4				
(Comments:						
11	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
13	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
14	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This is retention for	r the harvest directly to the SE					
15	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This is retention for	r the harvest directly to the North	n.				

Report 4 – Site Conditions

Traverse City Mgt. Unit

Steve Crigier : Examiner Year of Ent

Compartment: 135 Year of Entry: 2021

16	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
		ocket is protecting survey corner.					

7/5/2024 3:26:21 PM - Page 4 of 4 SAJJ

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: 135





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	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish speci conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable by are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci 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.	es (e.g., slimy sculpin) to persist from se 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 effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources at PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two ex Plover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10	Zoning District is a 400 foot buffer for



Stand	d Level 4 Co	over Type							Managed Si		
1		- Aspen		Sapling M		5.4	21	Immature	N/A		north area of stand has large GO where they put some of the fill from access site construction, some A3 and some more open
	Canopy Species	% Cover	Size Class	DBH	_						added die construction, some no and some more open
	Quaking Aspen	90	Sapling	1	21						
	Red Oak	5	Log/XLog	14	85						
	White Pine	5	Pole/Log	12	85						
2	122 - Road	I/Parking Lo	ot	Nonstoo	cked	2.7			No		Access Site road n parking lot
3	4130 -	- Aspen		Sapling	Well	3.1	11	Immature	N/A		Part of Puzzle Piece Popple, 61-007-11-01, completed February 2013,
	Canopy Species	% Cover	Size Class	DBH	Age						some larger white pine along road and southeast end has some red pir residual, manage for regenerating A3.
	White Pine	5	Pole/Log	10							Tooladal, Manago for regenerating to.
	Red Oak	2	Log/XLog	13							
	Quaking Aspen	88	Sapling	1	11						
	Red Pine	5	Pole/Log	8	54						
4	177 - 12020	I/Darking L	nt .	Nonetoc	skod	1.6			No		
4 — 5	122 - Road 6118 - Lowland De	I/Parking Lo		Nonstoo		20.4	115		No N/A		
		eciduous wi	ith Cedar	Poletimbe	er Well	20.4		es Density	N/A	Size	
	6118 - Lowland De	eciduous wi		Poletimbe DBH	er Well	20.4 Sub-Ca	115 nopy Specie	es Density Medium	N/A Avg. Height	Size Tall Shrub	
	6118 - Lowland De	eciduous wi	ith Cedar Size Class	Poletimbe	er Well	20.4 Sub-Ca	nopy Specie		N/A Avg. Height		
	6118 - Lowland De Canopy Species Black Ash	eciduous wi	ith Cedar Size Class Pole	Poletimbe DBH 7	er Well	20.4 Sub-Ca	nopy Specie		N/A Avg. Height		
5	6118 - Lowland De Canopy Species Black Ash Red Maple	eciduous wi % Cover 60 10	ith Cedar Size Class Pole Pole	Poletimbe DBH 7	er Well	20.4 Sub-Ca	nopy Specie		N/A Avg. Height		
5	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar	% Cover 60 10	sith Cedar Size Class Pole Pole Pole	Poletimbe DBH 7 7 7	Age 115	20.4 Sub-Ca	nopy Specie		N/A Avg. Height		Manistee River
5 No	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 -	% Cover 60 10 10 20	size Class Pole Pole Pole Pole Pole	Poletimbe DBH 7 7 7 7	Age 115	20.4 Sub-Ca	nopy Specie		N/A Avg. Height 5 - 10 feet		
5 No	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 -	% Cover 60 10 10 20 Water	size Class Pole Pole Pole Pole Pole	Poletimbe DBH 7 7 7 7 Nonstoo	Age 115 cked	20.4 Sub-Ca Ta	nopy Specie ag Alder		N/A Avg. Height 5 - 10 feet No		
5 No	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 -	% Cover 60 10 10 20 Water	sith Cedar Size Class Pole Pole Pole Pole Size Class	Poletimbe DBH 7 7 7 7 Nonstoo	Age 115 cked	20.4 Sub-Ca Ta	nopy Specie ag Alder		N/A Avg. Height 5 - 10 feet No		
5 No 7	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 - 42360 - Up	% Cover 60 10 10 20 Water Pland Ceda % Cover	sith Cedar Size Class Pole Pole Pole Pole	Poletimbe DBH 7 7 7 7 7 Nonstoo	Age 115 cked	20.4 Sub-Ca Ta	nopy Specie ag Alder		N/A Avg. Height 5 - 10 feet No		
5 No 7	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 - 42360 - Up Canopy Species Balsam Fir	Water Cover 60 10 10 20 Water	Size Class Pole Pole Pole Pole Size Class	Poletimbe DBH 7 7 7 7 7 Nonstoo Poletimbe DBH 19 6 8	Age 115 Cked er Well Age	20.4 Sub-Ca Ta	nopy Specie ag Alder		N/A Avg. Height 5 - 10 feet No		
5 No 7	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 - 42360 - Up Canopy Species Balsam Fir orthern White Cedar	## Cover 60 10 10 20	Size Class Pole Pole Pole Pole Pole Pole Pole	Poletimbe DBH 7 7 7 7 7 Nonstoo Poletimbe DBH 19 6 8	er Well Age 115 cked er Well Age 115	20.4 Sub-Ca Ta	nopy Specie ag Alder		N/A Avg. Height 5 - 10 feet No		Manistee River east end of the stand has sparse stocking with a decent component of
5 No 7 8	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 - 42360 - Ut Canopy Species Balsam Fir orthern White Cedar Black Ash	Water Poland Ceda Cover 10 20 Water Poland Ceda Cover 10 80 10 ural Jack Poland Ceda	Size Class Pole Pole Pole Pole Pole Pole Pole	Poletimbe 7 7 7 7 7 Nonstoc Poletimbe BH 9 6 8 9 5 Sapling M	er Well Age 115 cked er Well Age 115	20.4 Sub-Ca Ta 5.0 21.0	nopy Specie ag Alder	Medium	N/A Avg. Height 5 - 10 feet No N/A		Manistee River
5 No 7 8 No	6118 - Lowland De Canopy Species Black Ash Red Maple Balsam Poplar orthern White Cedar 500 - 42360 - Up Canopy Species Balsam Fir orthern White Cedar Black Ash	Water Poland Ceda Cover 10 20 Water Poland Ceda Cover 10 80 10 ural Jack Poland Ceda	Size Class Pole Pole Pole Pole Pole Pole Pole Pole	Poletimbe 7 7 7 7 7 Nonstoc Poletimbe BH 9 6 8 9 5 Sapling M	er Well Age 115 cked er Well Age 115	20.4 Sub-Ca Ta 5.0 21.0	nopy Specie ag Alder	Medium	N/A Avg. Height 5 - 10 feet No N/A		Manistee River east end of the stand has sparse stocking with a decent component of



Stand	d Level 4 C	over Type	;	Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
12	4136 - Asper	, Mixed Co	nifer	Sapling Poor	9.6	22	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH Age						
	Red Oak	15	Pole/Log	10						
	Paper Birch	5	Pole	6						
	Balsam Fir	5	Sapling/Pole	3						
	White Pine	15	Pole/Log	10						
	Bigtooth Aspen	60	Sapling	1 22						
13	3102	3102 - Grass		Nonstocked	5.3			Managed Op	ening	underground gas pipeline ROW
15	4130	- Aspen		Sapling Well	18.8	11	Immature	N/A		Part of Puzzle Piece Popple, 61-007-11-01, completed February 2013.
	Canopy Species	% Cover	Size Class	DBH Age						north end has thicker oak pocket, scattered pine and oak thoughout. nice
	Balsam Fir	2	Sapling/Pole	_						aspen regen for the most part. manage for understory.
	Red Oak	5	Pole/Log	10						
	Bigtooth Aspen	80	Sapling	1 11						
	Red Maple	13	Sapling	1						
			, ,							
16		wland Ceda		letimber Medium		90	51-80	N/A		Most of this stand was left as retention from the New Dude Mix sale as it is pretty wet and mostly cedar. Some spruce, for and red maple were
	Canopy Species		Size Class	DBH Age		nopy Specie		Avg. Height	Size	cut from its edges.
	Balsam Fir	5	Pole	6		Isam Fir	Low	< 5 feet	Sapling	
NI.	Black Spruce	5	Pole	7	Blac	ck Spruce	Low	< 5 feet	Sapling	
INC	orthern White Cedar White Pine	85	Pole Pole/YL or	7 90						
	vvnite Pine	5	Log/Pole/XLog] 10 10						
17	4139 - Aspen,	Mixed Deci	duous	Sapling Well	29.4	10	Immature	N/A		Stand was recently harvested. coming back to mostly A span, maple and
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	cherry. Tress are about 10` tall. Stand is also on some transition ground so there are some wetter areas, stocking is a bit less in these spots.
	Red Maple	20	Sapling	1	W	nite Pine	Trace	< 5 feet	Sapling	Scattered pine and spruce were left for a seed source. South and east
	Balsam Fir	10	Sapling	1	Blad	ck Spruce	Trace	< 5 feet	Sapling	part has a bit more red maple and isn't filling in quite as nice. Also a good amount of deer browse.
	Black Cherry	13	Sapling	1						good amount of deer browse.
	White Pine	5	Log/Pole	10						
	Quaking Aspen	50	Sapling	1 10						
	Red Oak	2	Log	14						
18	42110 - Pla			oletimber Well	137.9	63	111-140	N/A		Third row thinned, 61-016-11-01, 135 Dutch Resinosa, completed November 2013. should be ready for another thin next YOE, still a decent
	Canopy Species		Size Class	DBH Age						amount of crown space availabel for the most part. or if needed to thin as
	Black Cherry	2	Pole/Sapling							directed by the MA plan coudl lightly thin now.
	Red Oak	2	Log/Pole	10						
	Red Pine	96	Pole	8 63						
19	622 - Lov	land Shrub)	Nonstocked	2.7			No		LO

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Stand	Level 4 Co	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments
20	42200 - Natu	ral White P	Pine Po	oletimber Medium	n 4.0	80	51-80	N/A		Looks like the stand had the aspen and red maple cut out of it last year of
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Specie	s Density	Avg. Height	Size	entry. Stand is a mix of pole and log sized pine with aspen and red maple in the under story. Stand is a on a bit of a slope down to Military
	Red Oak	20	Log/Pole	12	Quaki	ng Aspen	Low	5 - 10 feet	Sapling	Rd.
	White Pine	60	Pole/Log	9 80	Red	l Maple	Medium	5 - 10 feet	Sapling	
	Red Pine	20	Log/Pole	11	Whi	te Pine	Low	< 5 feet	Sapling	
21	4119 - Mixed No	rthern Hard	dwoods S	Sapling Medium	21.4	10	Immature	N/A		Stand was cut in 2014 'New Dude Mix'. Scattered pine and spruce was left as seed trees. Stand is mostly filling in with red maple and cherry.
	Canopy Species	% Cover	Size Class	DBH Age		opy Specie	s Density	Avg. Height	Size	There are some jack pine and spruce coming along as well. There is a
	Black Spruce	2	Pole	8 80	Black	Spruce	Low	5 - 10 feet	Sapling	seasonal drain running through the stand. Deer are browsing the maple
	Quaking Aspen	9	Sapling	1	Bals	sam Fir	Low	5 - 10 feet	Sapling	and cherry.
	White Pine	2	Log/Pole	12						
	Red Pine	2	Log	10						
	Jack Pine	15	Sapling	1						
	Red Maple	40	Sapling	1 10						
	Black Cherry	30	Sapling	1						
22	42220 - Natu	ural Jack Pi	ine	Sapling Poor	8.1	10	Immature	N/A		Pocket of jack pine that was cut with 135 canary red 61-013-11-01. Stand is starting to fill in with Jack pine seedlings. Trees are kinda visib
	Canopy Species	% Cover	Size Class	DBH Age						through the snow.
	Jack Pine	90	Sapling	1 10						
	Black Cherry	10	Sapling	1						
23	330 - Low-D	Density Tree	es	Nonstocked	4.3	0	Unspecified	No		Opening filling in with a mix of species.
24	330 - Low-D	Density Tree	es	Nonstocked	34.2	0	Unspecified	Managed Op	pening	4/3/2024 - Stand was harvested under sale More Admin Mix (61-111-21) to reduce woody encroachment and maintain as wild life opening.
25	622 - Low	land Shrub		Nonstocked	4.4			No		
26	310 - Herbace	eous Openl	and	Nonstocked	18.6	0	Unspecified	42110 - Planted	Red Pine	2024 - Stand was final harvested under sale More Admin Mix (61-111-21
27	6124 - Lowla	ınd Spruce-	-Fir F	Poletimber Well	54.2	90	51-80	N/A		Stand is mostly a black spruce and tamarack mix. Wet for the most part
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Specie	s Density	Avg. Height	Size	but there appears to be some operable areas. There are a few tag alder drains in the stand, some of them show up on the imagery. Some areas
	Paper Birch	5	Pole	8		g Alder	Medium	< 5 feet	Tall Shrub	with pretty nice Tamarack and spruce and bounces between fully and
	White Pine	5	Pole/Log	11		sam Fir	Low	Variable	Sapling	moderately stocked.
	Balsam Fir	5	Pole/Sapling	9 6	Black	Spruce	Low	Variable	Sapling	
	Tamarack	40	Pole	7		•	1	1		1
	Black Spruce	45	Pole	7 90						

Compartment: 135 Year of Entry: 2021 DNR MICHIGAN

Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	iite	General Comments
29	6122 - Bl	ack Spruce	•	Poletimbe	er Well	15.0	90	51-80	N/A		quite a bit of nice spruce 4-6 sticks tall. West finger has a lot of small diameter spruce. Eastern part is more of transition ground with a red
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maple/fir component. Some mortality in the spruce and fir.
	White Pine	10	Log/XLog	13		Ва	llsam Fir	Low	Variable	Sapling	, i
	Red Maple	10	Pole	7		Re	ed Maple	Low	Variable	Sapling	
	Tamarack	10	Pole	8							
	Balsam Fir	10	Sapling/Pole	e 7							
	Black Spruce	60	Pole	8	90						
30	4133 - Aspe	en, Mixed P	ine	Sapling	Well	7.7	32	mmature	N/A		Mostly aspen and red maple mix with scattered large red pine over top. Some jack pine mixed in too.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Some Jack pine mixed in too.
	Quaking Aspen	55	Sapling	4	32	Ja	ick Pine	Low	< 5 feet	Sapling	
	Red Pine	10	Log/Pole	12	85						•
	Red Maple	20	Sapling	2							
	Jack Pine	15	Sapling	2							
31	42141 - Planted Dec	Mixed Pine	, Mixed	Sapling	Well	9.8	22	1-50	N/A		This is one of those two-aged stands that Mifi does not let us describe properly. Canopy is combination of overstory red and white pine with
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	understory seeded jack pine and mixed deciduous. Log canopy ~25% and sapling/pole ~75%. Jack pine seeded 2002 (FTP C62-666) with
	Red Maple	10	Sapling	1		Ja	ick Pine	Medium	< 5 feet	Sapling	variable residual overstory. JP density is greater in areas with less
	Black Cherry	5	Sapling	1		Re	ed Maple	Medium	10 - 20 feet	Sapling	canopy, especially west end. Overstory is clumpy, mostly red pine with a
	Red Pine	25	Log/Pole	12	73	Bla	ck Cherry	Low	10 - 20 feet	Sapling	little white pine. Fair amount of RM in understory too.
	Quaking Aspen	5	Sapling	2		R	ed Oak	Low	10 - 20 feet	Sapling	
	Jack Pine	50	Sapling/Pole	e 4	22	R	ed Pine	Trace	< 5 feet	Sapling	
32		irch	•	oletimber			65	51-80	N/A		Wet mixed conifer/deciduous. Didn't really look at east end but it looks even wetter and poorly stocked. Drain might run through center (eastwest).
	Canopy Species		Size Class	DBH			nopy Species	Density	Avg. Height	Size	WOO().
	Red Maple	49	Pole/Log	9	65		ed Maple	Low	Variable	Sapling	
	Paper Birch	5	Pole	6			nite Pine	Medium	Variable	Sapling	
	Black Spruce	23	Pole	6			llsam Fir	Medium	>20 feet	Pole	
	Balsam Fir	10	Pole/Log	9		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
No	orthern White Cedar	3	Pole	8							
	White Pine	10	Log/Pole/XLo	og 12							
33	622 - Lov	vland Shrub)	Nonsto	cked	3.3			No		
34	42290 - Natu	ıral Mixed F		Sawtimbe	-	21.3	75	1-50	N/A		2024 - Stand was shelterwood harvested under sale More Admin Mix (61 111-21)
	Canopy Species	% Cover		DBH	Age						111 211
	Red Oak	2	XLog/Log	18							
	Red Pine	55	Log/Pole/XLo	-	75						
	White Pine	43	Log/Pole/XLo	og 12	75						

Compartment: 135

	Havei							Year of Entry: 2021					
Stand	Level 4 C	over Type	•	Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments		
35	42200 - Nati	ural White	Pine S	awtimb	er Well	23.3	80	81-110	N/A		Variable stand. Some parts are pure WP and others are more mixed WP/RP with BS/tam in wetter parts. Average BA ~95 sf/acre. A couple		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	ridges with wetter areas of tag alder or RM saplings between. Relatively		
	Balsam Fir	10	Sapling/Pole	6		Ва	lsam Fir	Medium	Variable	Sapling	dense understory with some WP and BS poles. Should be manageable.		
	White Pine	68	Log/XLog/Pole	14	80	Wh	nite Pine	Low	Variable	Sapling			
	Red Pine	15	Log/XLog	16		Re	d Maple	Medium	>20 feet	Sapling			
	Jack Pine	3	Pole/Log	8		Blac	k Spruce	Low	>20 feet	Pole			
	Tamarack	4	Log/Pole	10		Ta	ag Alder	Low	5 - 10 feet	Tall Shruk			
36	42110 - Pla			oletimb	er Well	60.4	59	111-140	N/A		- row thinned with 135 canary red 61-013-11-01. jack pine all cut and 1/3rd row thinned Trees are mostly 4 sticks tall. Looks like the		
	Canopy Species	% Cover	Size Class	DBH	l Age						canopies have room to expand for now. Stocking is patchy from where		
	Red Pine	90	Pole	8	59						the jack pine pockets were cut out. BA: 120, 100, 120.		
	Black Cherry	5	Pole	7									
	White Pine	5	Log/Pole	10									
37	42260 - Natural Pi	ine, Mixed I	Deciduous P	oletimb	er Poor	5.7	80	1-50	N/A		more open filling in with white pine and some maple mixed in. W5ish		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Red Pine	10	Log/Pole	10		Wh	nite Pine	Low	Variable	Sapling			
	Black Cherry	20	Pole/Log	8		Re	d Maple	Low	10 - 20 feet	Sapling			
	White Pine	50	Log/Pole	10	80	Blac	ck Cherry	Low	10 - 20 feet	Sapling			
	Red Maple	20	Pole/Log	8		Ва	lsam Fir	Low	< 5 feet	Sapling			
38	42110 - Pla	inted Red F	Pine P	oletimb	er Well	32.0	61	81-110	N/A		row thinned with 135 canary red 61-013-11-01, likely ready for another thin next YOE		
	Canopy Species	% Cover	Size Class	DBH	l Age						UNIT HEXT FOE		
	Red Pine	85	Pole	6	61								
	Jack Pine	10	Pole	6									
	Quaking Aspen	5	Pole	7									
39	6127 - Lo	owland Pine			er Well	13.3	85	51-80	N/A		mixed ash n maple along creek, along with some bigger red pine and white pine. save for riparian corridor, no cut.		
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size			
	Red Maple	35	Pole	7	85	Ta	ng Alder	Low	5 - 10 feet	Tall Shrub			
	White Pine	35	Log/Pole	12	85								
	Red Pine	30	Log/Pole	12									
40	42220 - Nat	tural Jack F	Pine	Saplino	y Well	25.8	22	1-50	N/A		Cut ~2002 as part of Sharon Warbler, 61-032-01-01. 2" spec except left		
	Canopy Species	% Cover	Size Class	DBH	l Age						red and white pine. Fairly dense jack pine regen with scattered spruce and deciduous pockets. Hard to walk through this stand so this was an		
	Black Cherry	5	Sapling	1							edge call.		
	Jack Pine	60	Sapling	2	22								
	Red Maple	10	Sapling	1									
	Red Pine	10	Log	10	75								
	White Pine	10	Log	10	75								
	DI 1 0	_	0 "										

5

Sapling

Black Spruce



Stand	Level 4 Co	Si	Size Density		Acres Stand Age BA Range		A Range	Managed Site		General Comments	
41	6117 - Lowland I Coni	Deciduous, iferous	, Mixed Pole	timbe	r Medium	89.8	70	81-110	N/A		10ish acre pocket cut at south end with adjacent timber sale for habitat work left brush piles and tops throughout for deer browse and hare
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	habitat. turned out great, should fill in nicely to mixed fir deciduous and conifer.
	Balsam Fir	25	Pole	6	70	Та	g Alder	Medium	5 - 10 feet	Tall Shrub	Conner.
	Paper Birch	5	Pole	8	70	Bal	sam Fir	High	10 - 20 feet	Sapling	
	Black Spruce	5	Pole/Sapling	6	70	Wh	ite Pine	Low	5 - 10 feet	Sapling	
	Red Maple	55	Pole	8	70						
42	4112 - Maple, Beec	h, Cherry A	Association Po	letimb	er Poor	9.4	40	1-50	N/A		opening filling in with a mix of species.
	Canopy Species	% Cover	Size Class	DBH	I Age						
	Red Maple	30	Sapling/Pole	4							
	Black Cherry	50	Pole/Sapling	5	40						
	Jack Pine	10	Sapling/Pole	3							
1	Northern Pin Oak	10	Sapling/Pole	4							
43	4133 - Aspe	n, Mixed P	rine S	apling	g Well	6.0	40	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	White Pine	20	Pole	7	65	Re	d Maple	Low	5 - 10 feet	Sapling	
	White Pine Quaking Aspen	20 60	Pole Sapling	7	65 40	Re	d Maple	Low	5 - 10 feet	Sapling	
						Re	d Maple	Low	5 - 10 feet	Sapling	
44	Quaking Aspen Red Maple 4191 - Mixed Upla	60 20	Sapling Pole	3	40	17.6		Low 81-110	5 - 10 feet	Sapling	this is an area in the larger E type that has alot more upland on ridges, maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla	60 20 and Decidu	Sapling Pole	3 6 letimb	40 65	17.6	'			Sapling	this is an area in the larger E type that has alot more upland on ridges, maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla	60 20 and Decidu	Sapling Pole ous with Po	3 6 letimb	40 65 er Well	17.6 Sub-Car	70	81-110	N/A		this is an area in the larger E type that has alot more upland on ridges, maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species	60 20 and Deciduonifer % Cover	Sapling Pole ous with Po	3 6 letimb	40 65 er Well	17.6 Sub-Car	70	81-110 Density	N/A	Size	maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species Paper Birch	60 20 and Deciduonifer % Cover	Sapling Pole ous with Po Size Class Pole	3 6 letimb	40 65 er Well 1 Age	17.6 Sub-Cai Bal Ta	70 nopy Species sam Fir	81-110 Density High	N/A Avg. Height 10 - 20 feet	Size Sapling	maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species Paper Birch Red Maple	60 20 and Decidu nifer % Cover 5 55	Sapling Pole ous with Po Size Class Pole Pole	3 6 letimb	40 65 eer Well 1 Age 70 70	17.6 Sub-Cai Bal Ta	70 nopy Species sam Fir g Alder	81-110 Density High Medium	N/A Avg. Height 10 - 20 feet 5 - 10 feet	Size Sapling Tall Shrub	maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species Paper Birch Red Maple Tamarack	60 20 and Decidu nifer % Cover 5 55 10	Sapling Pole ous with Po Size Class Pole Pole Pole/Sapling	3 6 letimb	40 65 eer Well 1 Age 70 70 70	17.6 Sub-Cai Bal Ta	70 nopy Species sam Fir g Alder	81-110 Density High Medium	N/A Avg. Height 10 - 20 feet 5 - 10 feet	Size Sapling Tall Shrub	maple, fir and some aspen mixed in as well as some white pine.
	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species Paper Birch Red Maple Tamarack Balsam Fir	60 20 and Deciduranifer % Cover 5 55 10 25 5	Sapling Pole Size Class Pole Pole Pole Pole/Sapling Pole/Sapling	3 6 letimb	40 65 er Well 1 Age 70 70 70	17.6 Sub-Cai Bal Ta	70 nopy Species sam Fir g Alder	81-110 Density High Medium	N/A Avg. Height 10 - 20 feet 5 - 10 feet	Size Sapling Tall Shrub	maple, fir and some aspen mixed in as well as some white pine. opening that is filling in with mostly cherry along with some white pine.
44	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species Paper Birch Red Maple Tamarack Balsam Fir Black Spruce	60 20 and Deciduinifer % Cover 5 55 10 25 5	Sapling Pole Size Class Pole Pole Pole Pole/Sapling Pole/Sapling	3 6 8 8 7 6 6 6	40 65 er Well 1 Age 70 70 70 70	17.6 Sub-Car Bar Tar Wh	70 nopy Species sam Fir g Alder iite Pine	81-110 Density High Medium Low	N/A Avg. Height 10 - 20 feet 5 - 10 feet 5 - 10 feet	Size Sapling Tall Shrub	maple, fir and some aspen mixed in as well as some white pine.
44	Quaking Aspen Red Maple 4191 - Mixed Upla Co Canopy Species Paper Birch Red Maple Tamarack Balsam Fir Black Spruce 4110 - Sugar M	60 20 and Deciduinifer % Cover 5 55 10 25 5	Sapling Pole ous with Po Size Class Pole Pole Pole/Sapling Pole Pole/Sapling Ciation Po	3 6 8 8 7 6 6 6	40 65 er Well 1 Age 70 70 70 70 70	17.6 Sub-Car Bar Tar Wh	70 nopy Species sam Fir g Alder iite Pine	81-110 Density High Medium Low	N/A Avg. Height 10 - 20 feet 5 - 10 feet 5 - 10 feet	Size Sapling Tall Shrub	maple, fir and some aspen mixed in as well as some white pine. opening that is filling in with mostly cherry along with some white pine.



Stand	Level 4 Cover Type			Size Density		Acres Stand Age BA Range		BA Range	Managed Site		General Comments
46	4191 - Mixed Upl C	and Decidu	ous with Po	oletimber	Medium	n 13.1	74	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	50	Pole	6	74		hite Pine	Medium	5 - 10 feet	Sapling	
	Red Oak	5	Log/XLog	13		Ja	ack Pine	Low	5 - 10 feet	Sapling	
	Paper Birch	5	Pole	7						-	
	White Pine	25	Log/Pole	10							
	Red Pine	10	Log/Pole	10							
	Balsam Fir	5	Pole	6							
47	42290 - Nat	ural Mixed	Pine Sa	awtimber	Medium	71.2	90	1-50	N/A		Some areas have regenerated awesome, some taking their time. Swamp
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	edge nice spruce fir tamarack regen, middle upland area nice red on skid trails but most pushing to white pine and red maple. Let go another 10-20
	White Pine	38	Log/XLog	14		Ta	amarack	Low	< 5 feet	Sapling	and take top off impresses with the amount of red pine in areas! seed
	Red Pine	55	Log/XLog	14	90	R	ed Pine	Low	< 5 feet	Sapling	tree/shelterwooded. expect skid trails and scuffed up areas to push to
	Red Maple	5	Pole	8		WI	hite Pine	Medium	5 - 10 feet	Sapling	mixed pine, mostly white as well as mixed deciduous.
	Paper Birch	2	Pole	8		Whi	te Spruce	Low	5 - 10 feet	Sapling	
48	6126 - Low	land Jack F	ine	Sapling	Well	39.0	29 l	Jnspecified	N/A	1	stand seeded back in the day, west side slower to fill in, as its leatherleaf
	Canopy Species	% Cover	Size Class	DBH	Age						in some areas. overall stnad fully to moderately stocked.
	Jack Pine	60	Sapling	1	29						
	Black Spruce	40	Sapling	1	29						
49	122 - Roa	d/Parking L	ot	Nonstoo	cked	35.1			No		south sharon and fletcher roads
50	42120 - Pla	nted Jack F	Pine	Sapling	Well	252.5	35	Immature	N/A		KW opposing weave JP. Trees are about 25 tall. Stand has a couple of
	Canopy Species	% Cover	Size Class	DBH	Age						private easements through it with quite a bit of adjacent private property.
	Jack Pine	95	Sapling/Pole	9 4	35						
	Black Cherry	5	Sapling	2							
51	42290 - Nat	ural Mixed I	Pine S	Sawtimbe	r Poor	30.6	95	1-50	N/A		stand filling in very nicely. Be end pushing to maple aspen and fire and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pine, middle mixed maple spruce, fir n pine. Se end mixed pine with spruce n fir. Cut 2015 with 135 Wet n Dry Mix, 61-053-11-01. Middle part
	White Pine	55	Log/XLog	14	95	Ja	ack Pine	Low	< 5 feet	Sapling	of stand is wetter and more spruce. White pine at either end. Filling in
	Red Pine	45	Log/Pole	10		Whi	te Spruce	Low	< 5 feet	Sapling	very nicely to mixed conifer and some red maple
					_	Re	ed Maple	Medium	< 5 feet	Sapling	
						WI	hite Pine	Low	Variable	Sapling	
						R	ed Pine	Low	< 5 feet	Sapling	
52	42120 - Pla	nted Jack F	Pine	Sapling	Well	59.6	22	Immature	N/A		trees are about 10-15` tall. very thick density
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	90	Sapling	2	22						
	Black Cherry	10	Sapling	1	22						



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
53	6132 - Mixed Lowla			Poletimb			110	51-80	N/A		Stand with ephemeral drain down the middle. Cut on both sides and looks like we have dipped into stand about as much as we can. South
	Canopy Species	% Cover	Size Class	DBH	l Age		nopy Species	Density	Avg. Height	Size	end has some red pine over thick pine and maple regen.
	Yellow Birch	10	Pole	8		Ba	alsam Fir	Low	5 - 10 feet	Sapling	
	White Pine	20	Log/XLog	16	110	Bla	ck Spruce	Low	5 - 10 feet	Sapling	
	Paper Birch	10	Pole	8		W	hite Pine	Low	5 - 10 feet	Sapling	
	Balsam Fir	10	Pole	6							
	Black Ash	15	Pole	7							
	Red Maple	15	Pole	8							
No	rthern White Cedar	20	Pole	8	110						
54	42220 - Nat	ural Jack P	ine	Sapling	g Well	6.7	22	Immature	N/A		Scattered to clumpy red and white pine over j3. Manage for understory
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Black Cherry	15	Sapling	1							
	White Pine	10	Pole	8							
	Red Pine	10	Pole	8							
	Jack Pine	65	Sapling	1	22						
55	4319 - Mixed	l Upland Fo	rest	Sapling l			40	1-50	N/A		Stand filling in with pixel pine, maple aspen and cherry
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	
	Black Cherry	20	Sapling	3		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
	White Pine	40	Sapling/Pol	e 4	40	Re	ed Maple	Low	5 - 10 feet	Sapling	
	Quaking Aspen	20	Sapling	3	30						
	Jack Pine	3	Sapling/Pol	e 3							
	Red Maple	17	Sapling/Pol	e 4							
56	42220 - Nat	ural Jack P	ine	Sapling	g Well	27.8	22	Immature	N/A		trees are about 10-15' tall. stocking is a bit more sparse on the north
	Canopy Species	% Cover	Size Class	DBH	l Age						east end of the stand.
	Black Cherry	10	Sapling	2	22						
	Jack Pine	90	Sapling	2	22						
58	42121 - Planted Deci	Jack Pine,	Mixed	Sapling	g Well	78.2	22	Immature	N/A		trees are about 10' tall. quite a bit of cherry mixed in. J3 opposing weav jack pine KW block.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Black Cherry	20	Sapling	1	17						
	Jack Pine	80	Sapling	1	22						
		Jack Pine,	Mixed	Saplin	g Well	147.7	22	Immature	N/A		large KW block, pretty young block.
59	42121 - Planted Deci	iduous									
59			Size Class	DBH	l Age						
59	Deci		Size Class Sapling	DB I	1 Age 22						



Stand	Level 4 Cover Type			Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
60	42200 - Nati	ural White F	Pine Sa	awtimbe	r Medium	55.3	90	1-50	N/A		stand regenerating nicely. Some pushing to maple but a lot going to
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	mixed pine and fir, a lot of snow. south block has a lot of log trees left some areas pretty thick. Should be able to take the top off in 10-20, filling
	Red Pine	15	Pole/Log	8	90	W	hite Pine	Medium	Variable	Sapling	in nicely for now. Cut 2015 with 135 Wet n Dry Mix, 61-053-11-01. Cut
	White Pine	85	Log/Pole	12	90	Bla	ck Spruce	Medium	< 5 feet	Sapling	everything > 3" except cedar, hemlock, oak and trees marked to leave.
						Já	ack Pine	Low	< 5 feet	Sapling	
						Qual	king Aspen	Low	5 - 10 feet	Sapling	
						Re	ed Maple	High	< 5 feet	Sapling	
61	6127 - Lo	owland Pine	e (Sawtimb	er Well	4.4	85	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Pine	5	Log/Pole	12							
	Black Ash	10	Pole	7							
	White Pine	60	Log	14	85						
	Red Maple	10	Log/Pole	10							
	Tamarack	5	Pole	7							
	Balsam Fir	10	Pole	7							
62	42220 - Nat	ural Jack P	ine S	Sapling	Medium	30.7	22	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age						
	White Pine	10	Log/Pole	10							
	Red Pine	10	Log/Pole	10							
	Jack Pine	80	Sapling	1	22						
63	42220 - Nat	ural Jack P	ine F	Poletimb	er Well	8.5	85	Unspecified	N/A		Mature jack pine stand but some is younger, narrow strip between road
	Canopy Species	% Cover	Size Class	DBH	l Age						private, save for retention in heavy cut KW area. very narrow and alot of line running for very little timber.
	Quaking Aspen	5	Sapling/Pole	6							and full ling for very fittle timber.
	White Pine	5	Pole/Log	10							
	Jack Pine	90	Pole	7	85						
64	330 - Low-	Density Tre	ees	Nonst	ocked	23.1		Unspecified	No		opening filling in a bit with Jack pine and cherry. There is a J5 pocket of a couple of acres in the middle.
65	42290 - Nati	ural Mixed F	Pine S	Sawtimb	er Well	8.3	117	201+	N/A		Could cut some of the maple out and push to big tree management by
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	marking stand?
	White Pine	55	Log/XLog/Pol	le 14	117	W	hite Pine	Low	< 5 feet	Sapling	
	White Spruce	10	Pole	7		Whi	ite Spruce	Low	< 5 feet	Sapling	
No	orthern White Cedar	5	Pole	7		Ва	alsam Fir	Low	< 5 feet	Sapling	
	Bigtooth Aspen	5	Pole	7							-
	Hemlock	5	Pole/Sapling	7							
	Red Pine	10	Log/XLog/Pol	le 14							
	Red Maple	10	Pole	7							

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Stand	d Level 4 C	Cover Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
66	42120 - Plar	nted Jack P	Pine	Sapling	y Well	42.6	44	Unspecified	N/A		assume it will be managed with KW blocks. looks healthy, to big for KW
	Canopy Species	% Cover	Size Class	DBH	l Age						use
	White Pine	2	Sapling	3	44						
	Red Pine	3	Sapling	3	44						
	Jack Pine	95	Sapling	3	44						
67	330 - Low-l	Density Tre	es	Nonsto	cked	5.5	0	Unspecified	613 - Lowland Mi	xed Forest	2024 - Stand was seed tree harvested under More Admin Mix (61-111-21)
68	42120 - Plar	nted Jack P	Pine	Sapling	y Well	251.4	43	1-50	N/A		stand is starting to convert to pole sized trees. trees are 20 -30 tall.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	Some J6 pockets.
	Black Cherry	10	Sapling	2			ick Pine	Low	Variable	Sapling	
	Jack Pine	90	Sapling/Pole	9 4	43						
69	42220 - Nat	ural Jack P	ine	Sapling	Poor	3.9	22	Immature	N/A		opening filling in with Jack pine. A variety of sizes
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Black Cherry	20	Sapling/Pole	9 3		Blad	ck Cherry	Low		Tall Shrub	
	Jack Pine	80	Sapling/Pole	3	22			1		1	
70	42220 - Nat	ural Jack P	ine F	Poletimb	er Well	13.6	80	51-80	N/A		mostly pole sized jack pine with some immature pockets. stocking is variable and patchy. Some individual dieback.
	Canopy Species		Size Class	DBH	l Age	Sub-Ca	nopy Speci	es Density		Size	variable and paterly. Some individual dieback.
	Northern Pin Oak	10	Pole/Log	9		WI	nite Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	80	Pole	8	80	Ja	ick Pine	Low	5 - 10 feet	Sapling	
	Black Cherry	10	Pole/Sapling	9 6							
71	42220 - Nat	ural Jack P	ine F	Poletimb	er Well	8.1	70	51-80	N/A		smaller diameter pine but dense stocking. Looks like this pocket was left
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	as retention.
	Black Cherry	5	Sapling/Pole	9 4		Ja	ick Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	85	Pole/Sapling	9 6	70						
	Red Pine	5	Pole	7							
	Northern Pin Oak	5	Pole	8	70						
72	42220 - Nat	ural Jack P	ine Po	oletimbe	Mediui	m 2.2	45	51-80	N/A		small pocket of Jack pine. edges are seeding in with young stuff
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Jack Pine	95	Pole/Sapling	9 6	45	Ja	ick Pine	Low	Variable	Sapling	
			Pole/Sapling	a 6							=

Compartment: 135 Year of Entry: 2021

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Stand	Level 4 C	Level 4 Cover Type			Size Density		Stand Age E	BA Range	ge Managed Site		General Comments	
73	42220 - Nat	ural Jack P	ine S	apling I	Medium	131.1	13	Immature	N/A		Part of 135 Overstory Jack, 61-015-11-01, completed December 2013.	
	Canopy Species	% Cover	Size Class	DBH	l Age						- Jack pine has seeded in pretty well. trees are about 3-5` tall. scattered	
	Red Pine	5	Pole	7							oak of various sizes. The harvest was a cut all Jack pine over 4` so	
	Jack Pine	65	Sapling	1	13						there are some pockets of 4" Jack pine scattered through the stand. bit	
	Black Cherry	5	Pole/Sapling	5							off rolling terrain in the South end also a heavier oak component.	
	White Pine	5	Sapling/Pole	4								
1	Northern Pin Oak	20	Pole	8	70							
76	4319 - Mixed Canopy Species	% Cover	Size Class		Medium Age	11.2	10	Immature	N/A		site has regenerated nicely to red maple, fir, spruce and white pine. Some pole and log white pine scattered and some 2-5" fir. Site looks great.	
	Red Maple	50	Sapling	1	10						great. 10ish acre pocket cut at south end with adjacent timber sale for habitat	
	Black Spruce	5	Sapling	1	10						work left brush piles and tops throughout for deer browse and hare	
	White Pine	20	Sapling	1	10						habitat. turned out great, should fill in nicely to mixed fir deciduous and conifer. Cut 2015, 135 Wet n Dry Mix, 61-053-11-01.	
	Balsam Fir	25	Sapling/Pole	2	10						COLINGI. Out 2010, 100 Wet 11 DIY WILX, 01 000 11 01.	
79	6127 - Lo	wland Pine	S	awtimb	er Well	3.5	90	141-170	N/A		Nice quality natural white pine mixed with hemlock. Mostly 8-10 stick	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	trees. heavily used by the deer.	
	Hemlock	20	Log/Pole	10		Blad	ck Spruce	Low	Variable	Sapling		
	Black Spruce	5	Pole	8		Ва	lsam Fir	Low	Variable	Sapling		
	White Pine	65	XLog/Log	18	90						-	
	Red Maple	10	Pole	8								