

# **Compartment Review Presentation**

**Traverse City Forest Management Unit** 

Compartment 61033 Entry Year 2025 Acreage: 1,851

**County Manistee** 

Management Area: Kalkaska Sandy Moraines

Stand Examiner: Joe Ventimiglia

**Legal Description:** 

T24N, R13W, Sections, 1, 5, 6, 7, 12, 18

### **Identified Planning Goals:**

Provide timber products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses.

## Soil and topography:

Roscommon-AuGres-Croswell – poorly drained sands; Montcalm-McBride-Kalkaska, Kalkaska-Rubicon – deep, droughty sands; Carlisle-Carbondale-Karston – mucks; Saugatuck – somewhat poorly drained. Topography is level.

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

This compartment has been split since the last entry period. All lands in Springdale Twp were designated as compartment 233. All lands in Cleon Twp are compartment 33. The majority of land within the compartment is private. State ownership consists of two separate blocks of ownership, one on the west of the compartment and the other on the east end. The east block is adjacent to other State ownership in Wexford County which is managed by the Cadillac Forest Management Unit.

### **Unique Natural Features:**

Dutchman's Creek flows through Compartment 33. Dutchman's Creek is a Designated Trout Stream, and is a tributary to Bear Creek, in the Manistee River watershed. Dutchman's Creek most likely has seasonal populations of brook trout, brown trout, rainbow trout (steelhead), coho salmon, and chinook salmon. Bear Creek is a critical component of the Manistee River watershed in that it produces wild steelhead parr. Therefore, maintaining excellent water quality in the Bear Creek watershed is critical.

### Archeological, Historical, and Cultural Features:

None known.

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

None noted beyond using BMP practices and protecting water features, including Dutchman Creek.

### **Watershed and Fisheries Considerations:**

Dutchman's Creek flows through Compartment 33. Dutchman's Creek is a Designated Trout Stream, and is a tributary to Bear Creek, in the Manistee River watershed. Dutchman's Creek most likely has seasonal populations of brook trout, brown trout, rainbow trout (steelhead), coho salmon, and chinook salmon. Bear Creek is a critical component of the Manistee River watershed in that it produces wild steelhead parr. Maintaining excellent water quality in the Bear Creek watershed is critical. Therefore, we ask that all BMPs are followed when working near Dutchman's Creek, particularly for Stand 38.

### Wildlife Habitat Considerations:

The western block of the compartment falls predominately on a very poorly drained flat lake plain landscape, characterized by muck soils and flat terrain. The presettlement cover of this LTA was mainly conifer swamp, present forest cover in the compartment is dominated by mixed deciduous swamp, bog, and some low ridges of aspen and pine. Diverse fruiting shrubs, including chokeberry, wild raisin, and dogwood occupy more open areas, especially within and adjacent to nonforested wetlands. Dutchman Creek, with evidence of beaver activity, crosses the compartment. Forest treatments should provide some small or narrow final harvests, retaining components of saplings, conifers, snags, and woody debris as much as possible to mimic natural blowdowns. Individual tree or group selection cuts in hardwood-dominated stands would also be consistent with natural disturbance patterns. Activity should be confined to more well-drained low ridges or to frozen-soil conditions to avoid rutting and compaction of soils and possible disturbance to drainage patterns in the swamps. Stands of decadent alder should be habitat cut during the dormant season to stimulate regeneration. The resulting habitat mosaic will benefit species such as brown snake, black bear, broad-winged hawk, deer, ruffed grouse, downy woodpecker, woodcock, mink, bobcat, and snowshoe hare. Some areas of later-successional swamp hardwoods should be retained in older, large diameter tree cover. Logging trails in this compartment could be gated and maintained as hunting trails.

The northwest half of section 6 and west sides of sections 7 and 18 are on a flat lake plain landscape, characterized by loamy sands and relatively flat terrain. Presettlement forests of beech-maple and white pine-beech-red maple are today dominated by pine plantations, aspen-hardwood mixes on moist soils, and some wetlands and remnant fields. GLO surveyors reported large windthrow areas which were perhaps the dominant natural change factor, along with natural succession. Existing openings contain numerous upland fruiting shrubs important to many songbirds and small mammals and should be managed as semi-open habitats. Much of the aspen types have been regenerated in previous decades are now providing young deciduous cover and open patches for ruffed grouse, chestnut-sided warblers, meadow voles, wild turkey, and red fox. Proposed final harvests should leave tops unchipped for horizontal cover. When harvesting aspen that is adjacent to lowland stands, falling edge trees that occur on the upland/lowland interface provides needed horizontal cover for hares and other animals. The boundary marked trees can be felled into the uncut swamp after harvest is completed. Wildlife will benefit from thinning and diversification of monotypic pine plantations, especially if scattered deciduous trees are retained.

State lands in sections 1 and 12 are on an end moraine landscape with coarse-textured soils. Northern hardwoods occupy most of the state acreage here, with some aspen regeneration, shallow marsh, and mixed conifer swamp in low areas. Selective harvest to manage and perpetuate hardwoods should retain all conifers and a component of snags and coarse woody debris. This hardwood forest/wetland matrix provided habitat for species including red-bellied woodpecker, white-breasted nuthatch, wood frog, raccoon, red-shouldered hawk, and gray fox.

## Mineral Resource and Development Concerns and/or Restrictions

Manistee County

There is no known metallic mineral potential in this part of the state. Two active sand/gravel operations are on private land in Sec 4, less than one mile outside the compartment, and there may be potential for commercial sand & gravel development within the compartment, on the uplands. The compartment is within the Antrim Shale gas play and Silurian reef trend. Production has occurred from both formations in the immediate area, but, to date, no wells have been drilled in the western portion of the compartment. Considerable potential may still exist for additional production from beneath the compartment. However, drilling of additional Antrim wells is unlikely to be economical for the foreseeable future, and the play is generally in decline with a trend toward plugging wells. Much of the compartment has the mineral rights leased and held by just two producing wells.

### **Vehicle Access:**

The road layer is detailed in the compartment packet. Large areas of the compartment are designated as closed roads to allow for walk in hunting access. As well the old railroad grade is designated as a non motorized trail with exception of snowmobiles in the winter.

## **Survey Needs:**

24N, 13W, sections 1 and 12. Survey and delineation of the Consumers Power transmission line ownership.

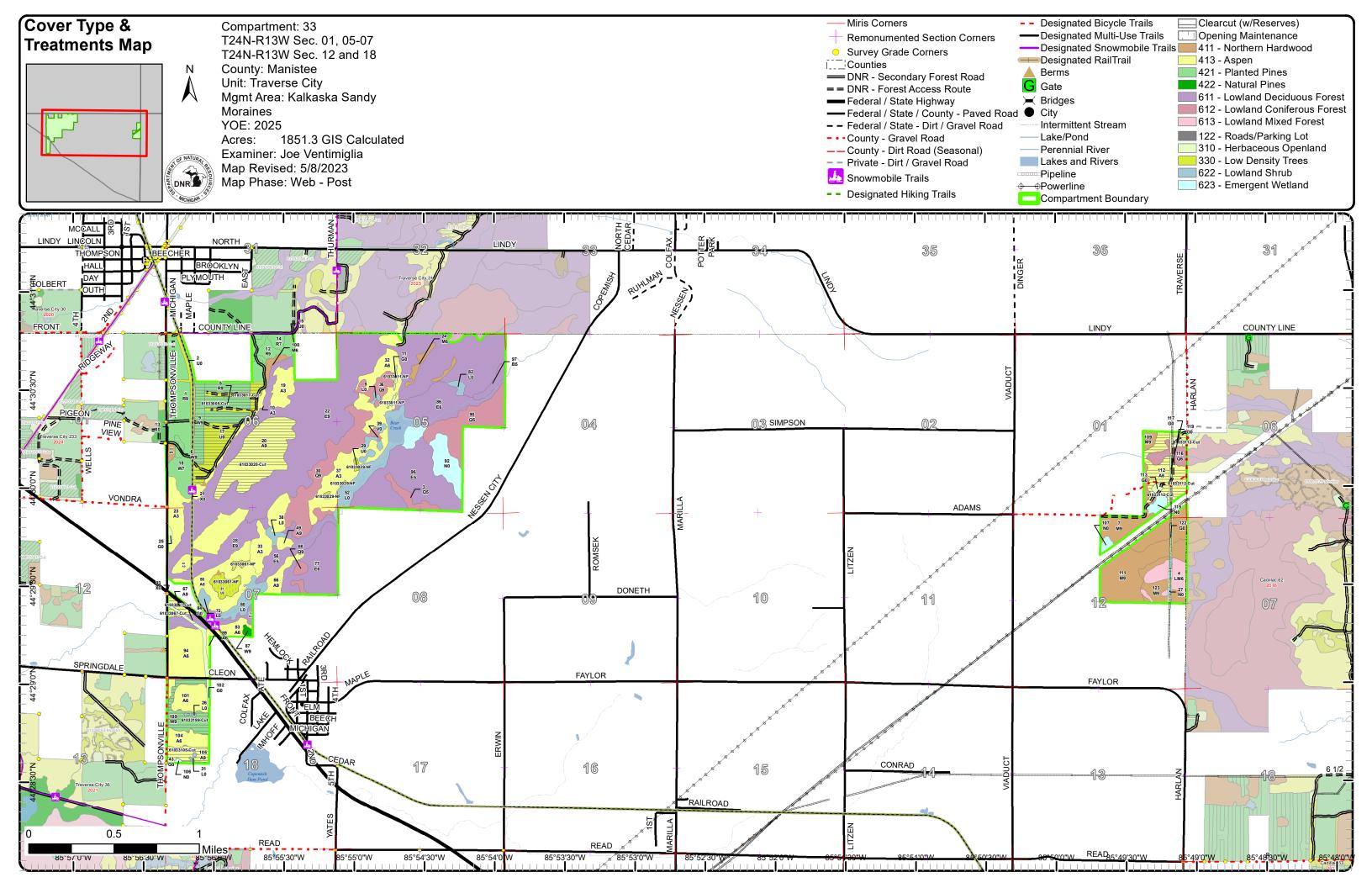
### **Recreational Facilities and Opportunities:**

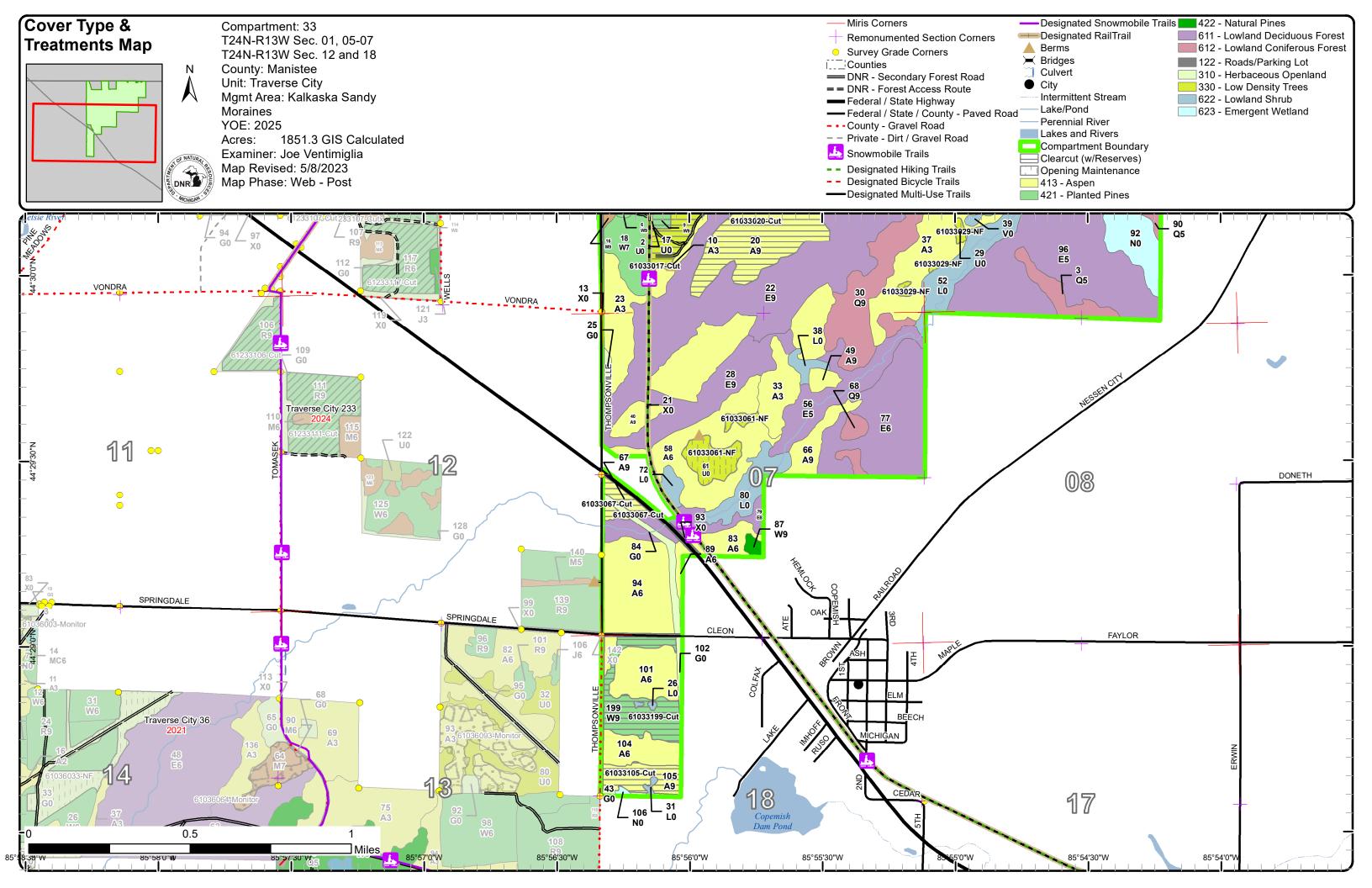
Snowmobile trail #3 (Betsie River Snowmobile Trail) runs North/South near the the western edge of the compartment on an old rail grade, as well as along the northern boundary along Countyline Street. Snowmobile trails located on straight, flat, rail grades, and roads tend to invite high speeds, which increases safety concerns. Proposed timber management activities should include trail protection specifications to reduce impacts, increase safety, as well as serve as an example of how silviculturally sound timber harvesting practices can co-exist, and often improve recreation and wildlife experiences for future generations. Non-winter harvests, coupled with a "flush cut" specification adjacent to the trails are suggested considerations. Deer and ruffed grouse hunting opportunities are important to many local hunters. (TMN 3/13)

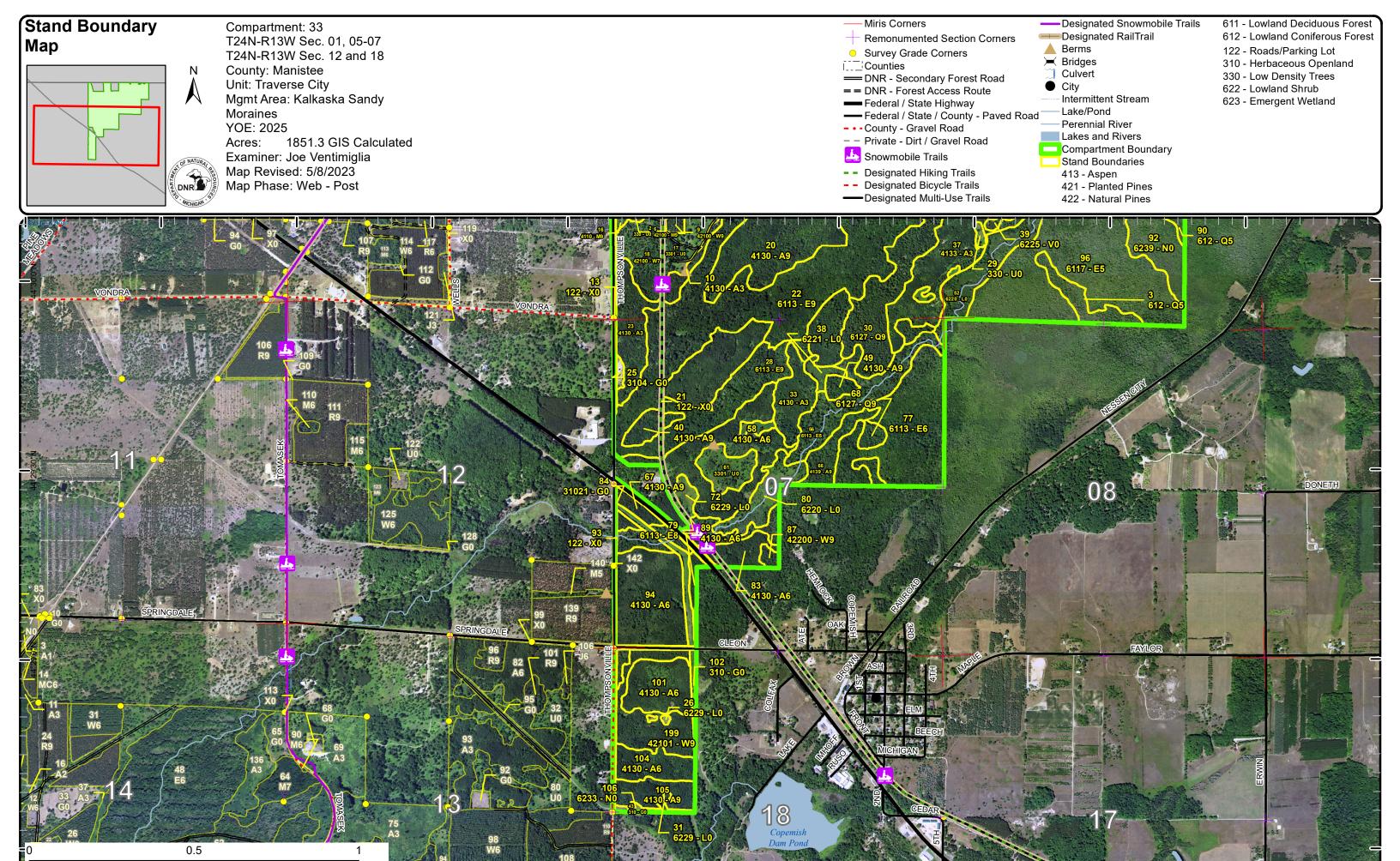
### **Fire Protection:**

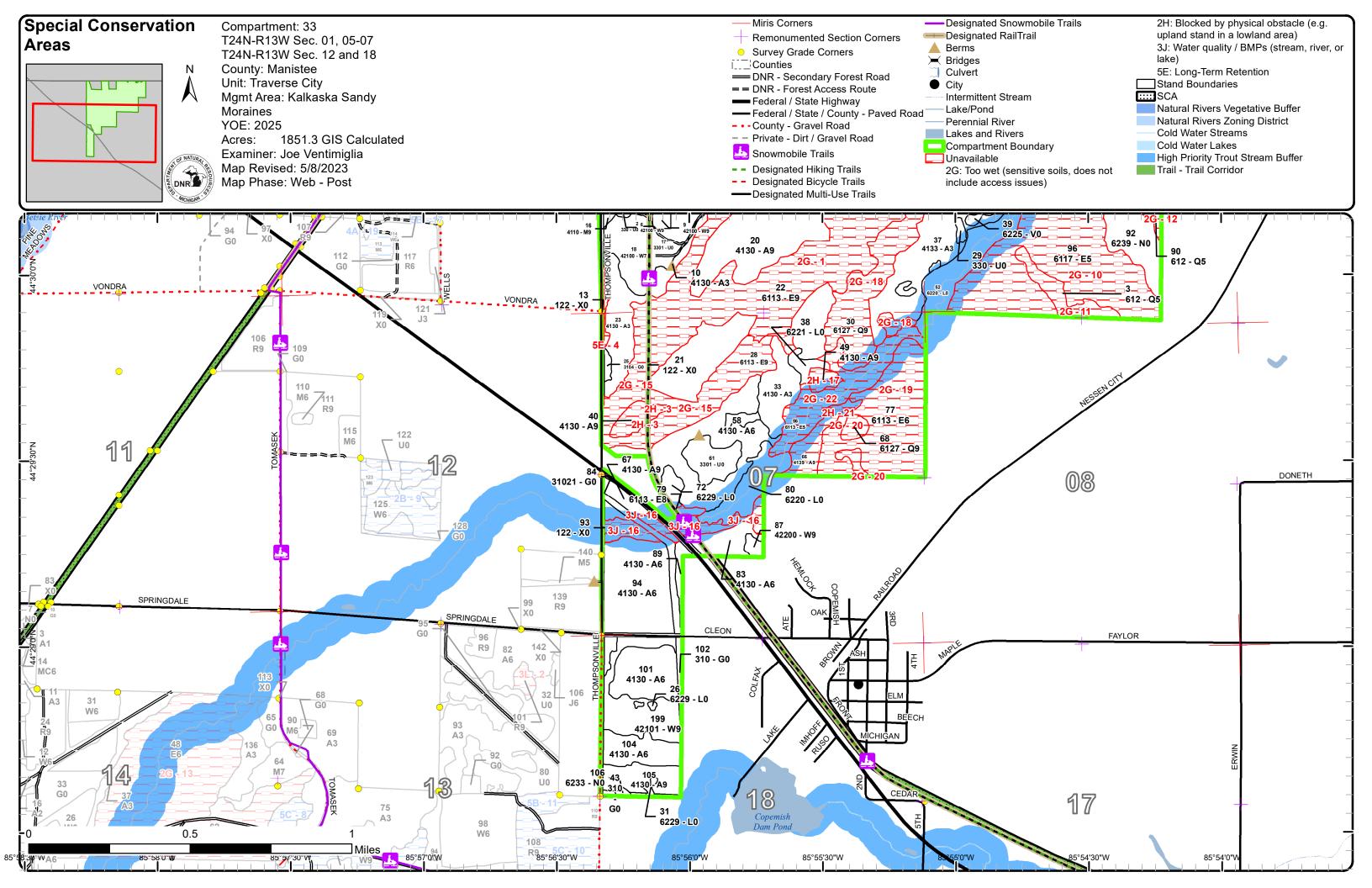
Copemish-Cleon Volunteer Fire Department, and Traverse City DNR office. Limited potential for large fires in this cover type.

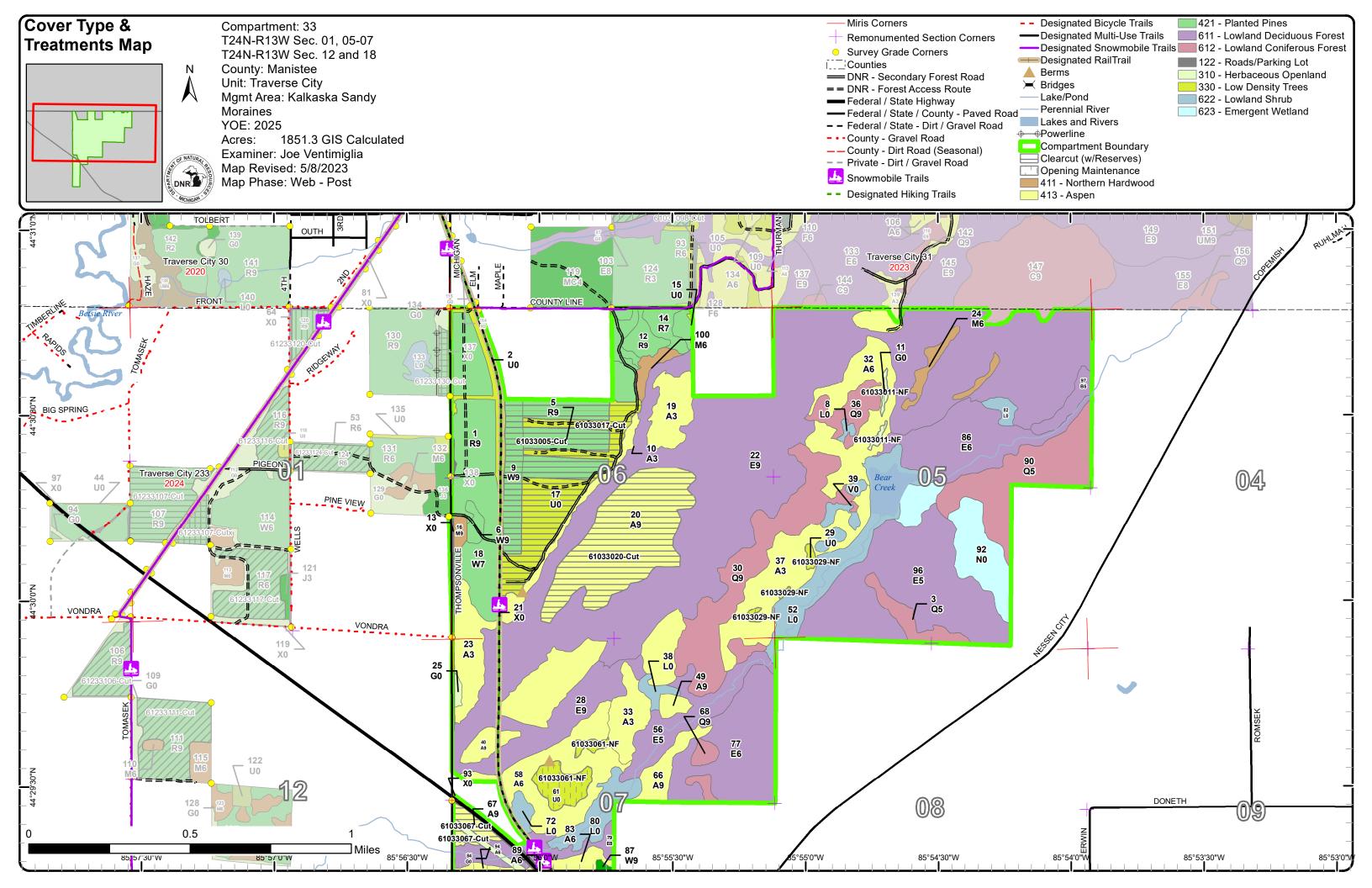
### Additional Compartment Information:

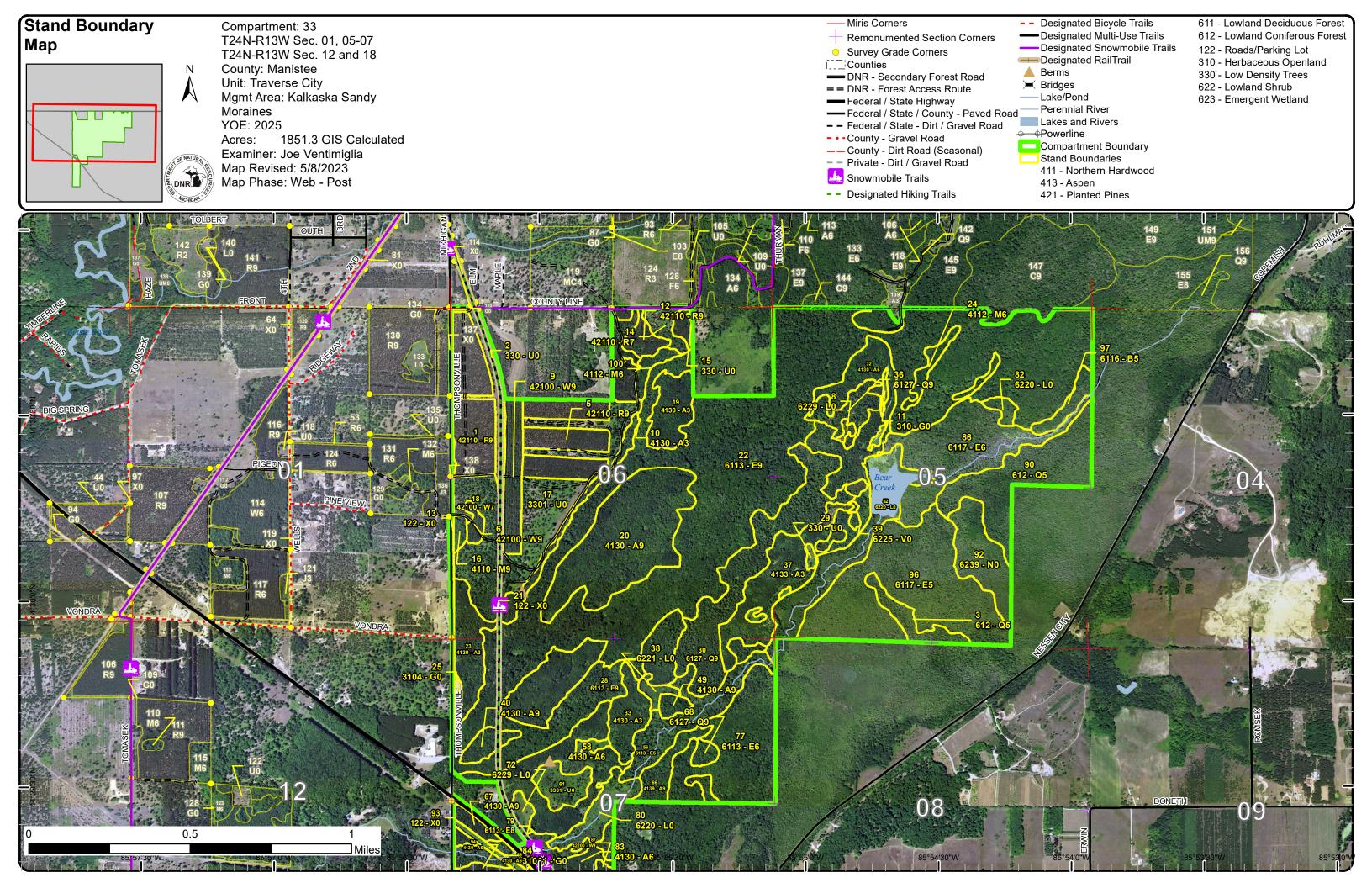


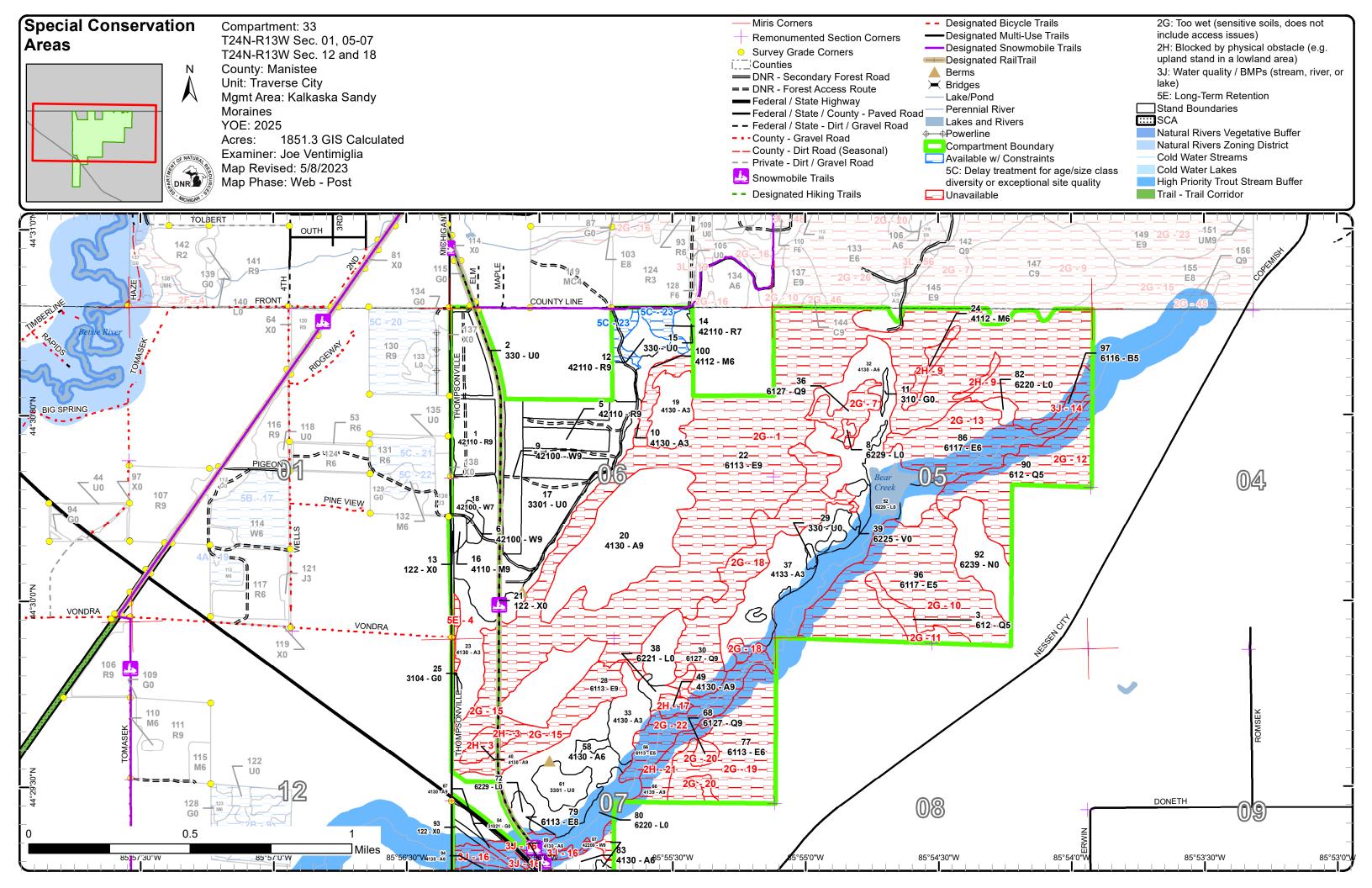


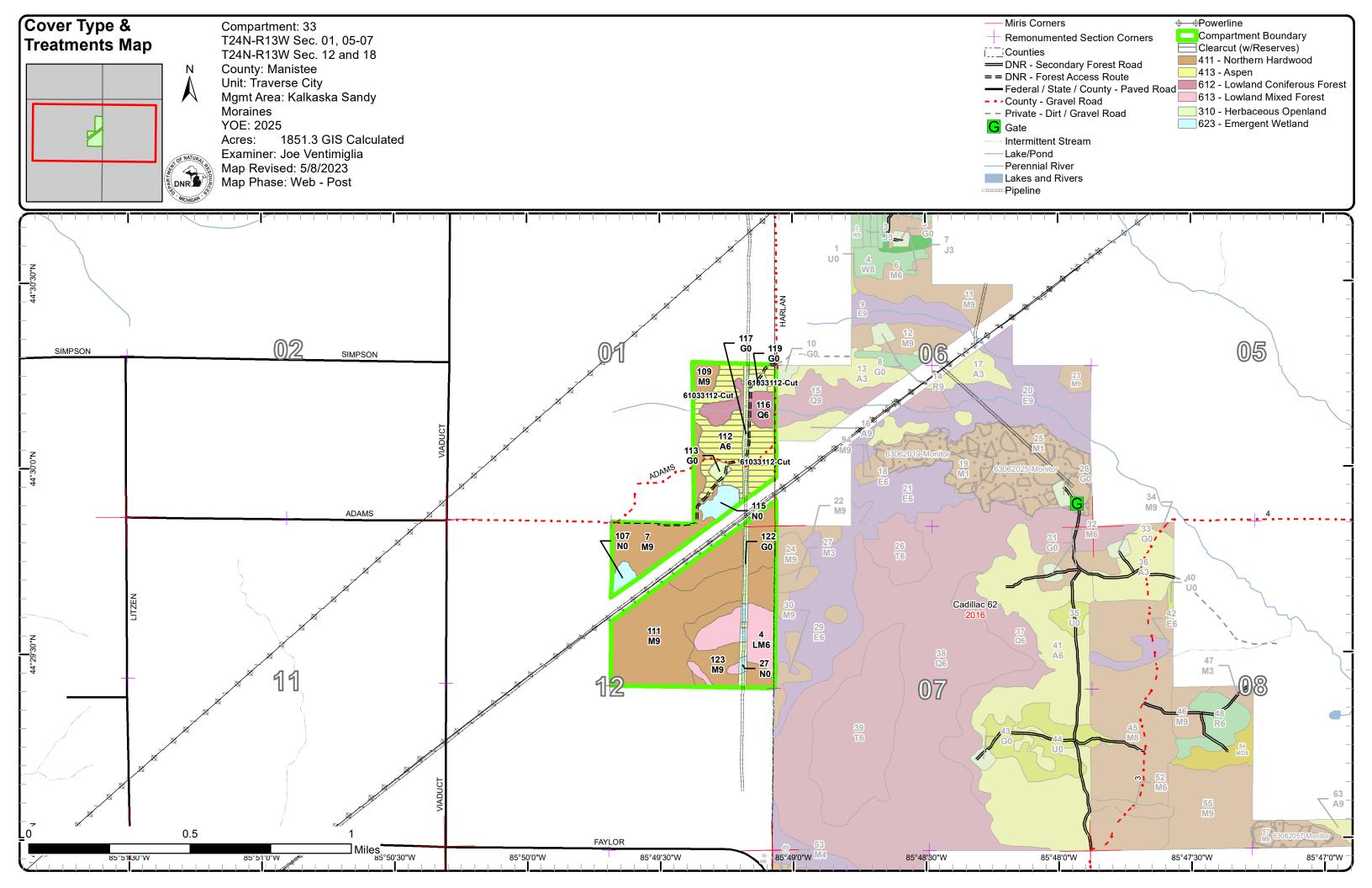


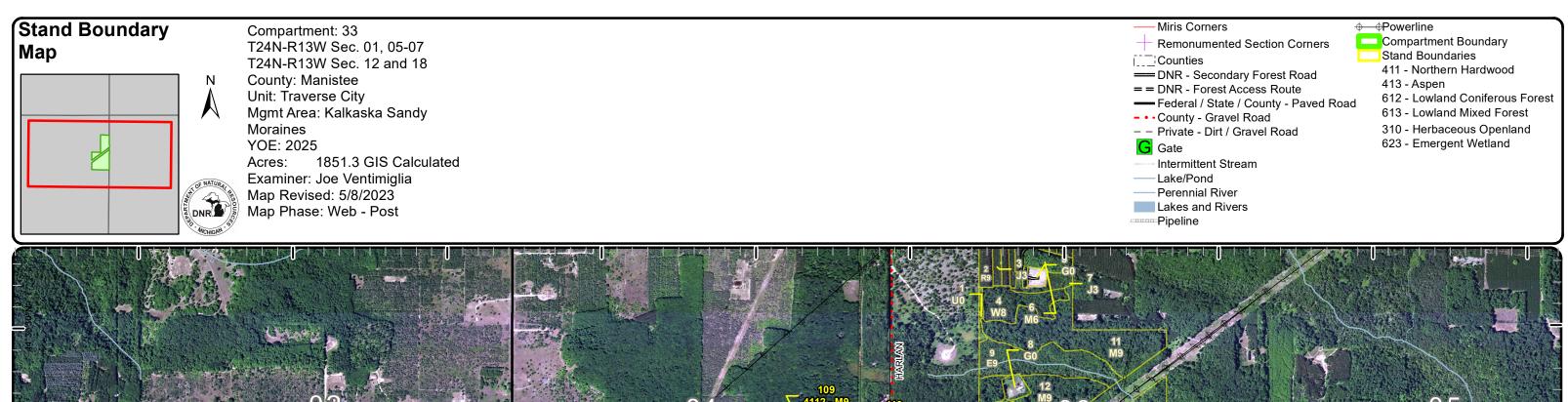


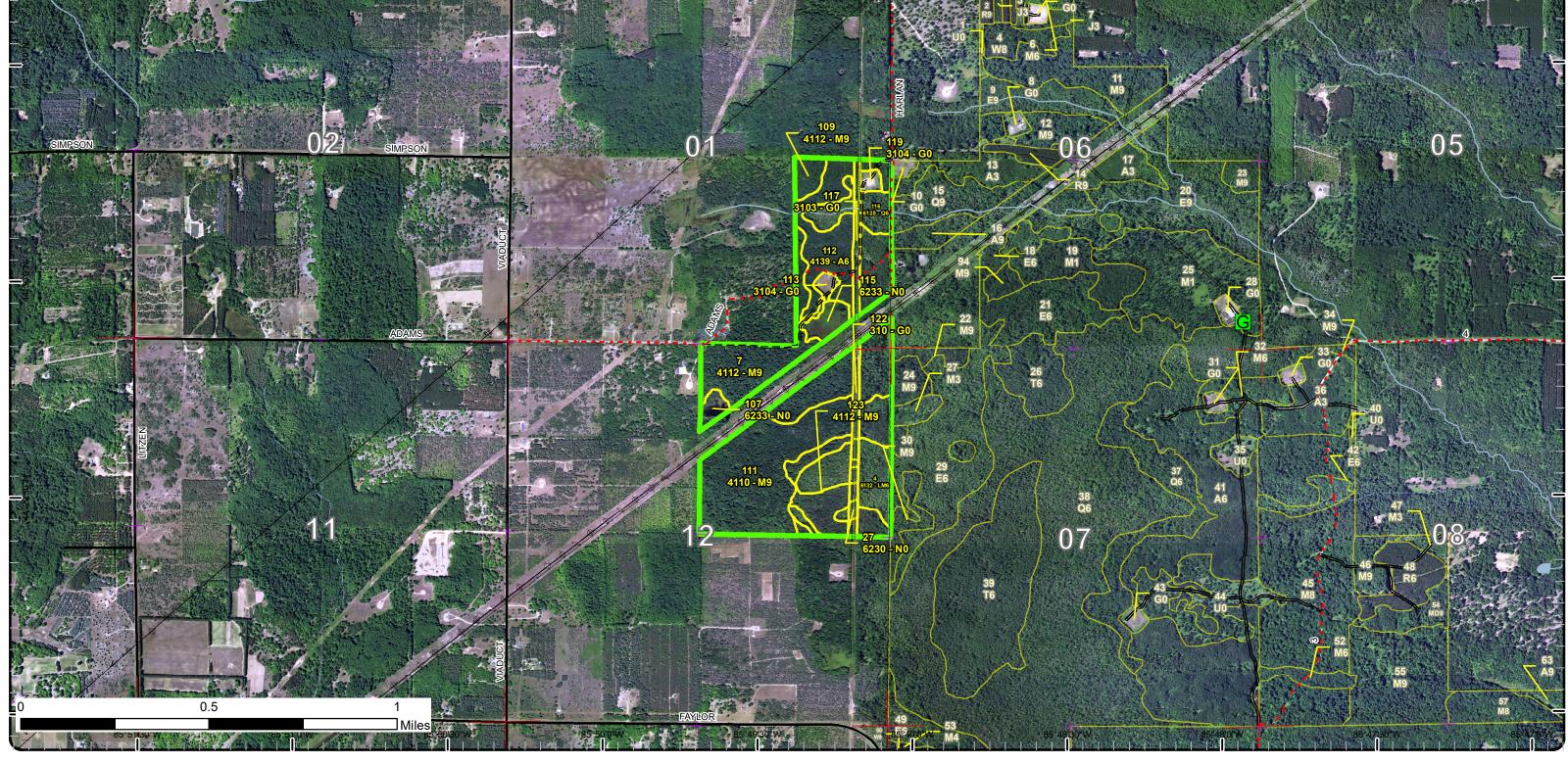


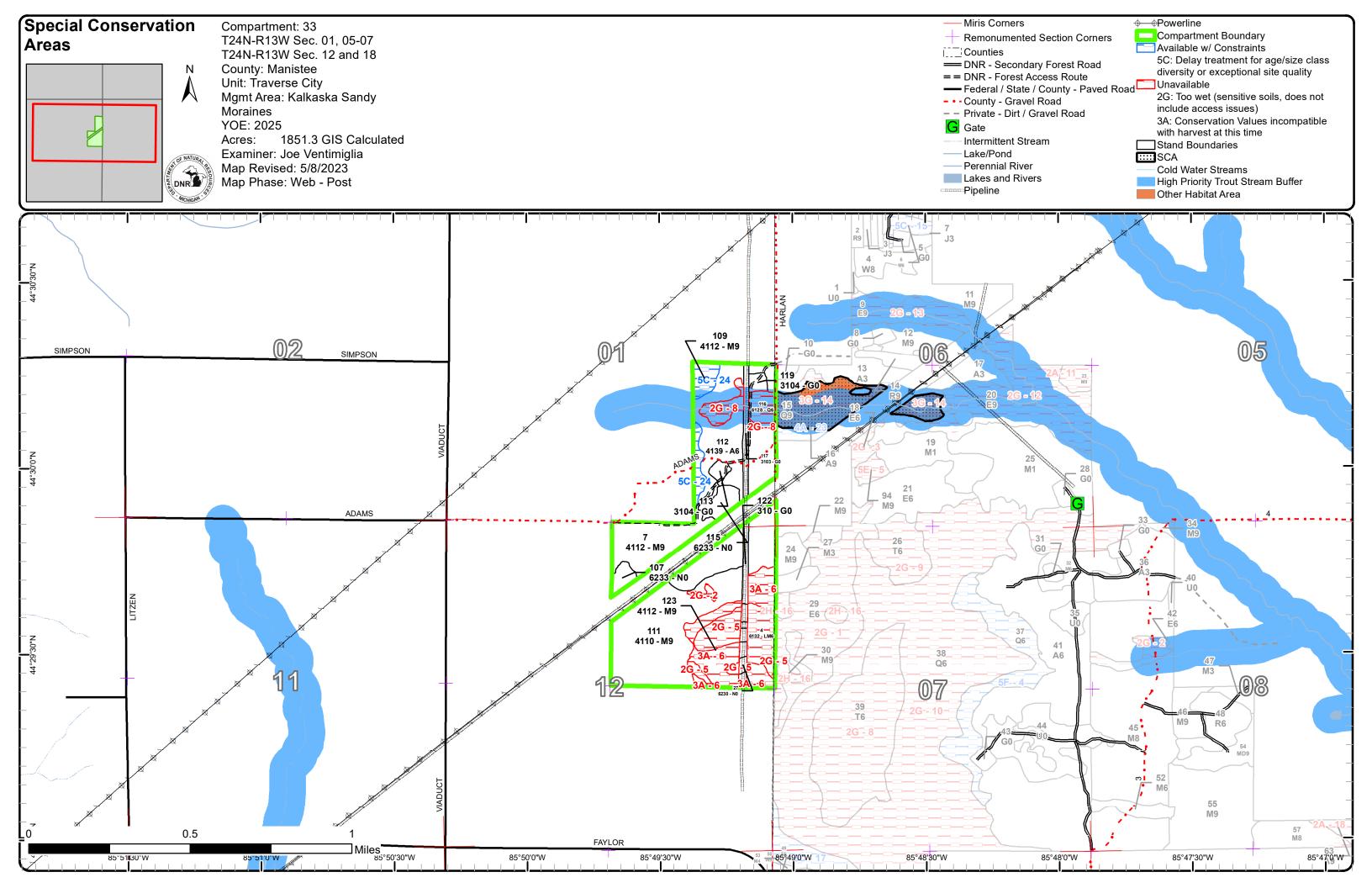












The following reports from the Inventory are attached:

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 Joe Ventimiglia: Examiner



## Age Class

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Aspen	0	49	28	75	101	176	9	11	4	0	0	0	0	0	0	0	0	6	457
Bog	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Herbaceous Openland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Low-Density Trees	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
Lowland Conifers	0	0	0	0	0	0	0	0	61	0	70	6	11	0	0	0	0	0	148
Lowland Deciduous	0	0	0	0	0	0	0	0	49	55	96	367	0	0	0	0	0	90	657
Lowland Mixed Forest	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Shrub	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Marsh	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Northern Hardwood	0	0	0	0	0	0	5	8	0	11	0	122	0	0	0	0	0	0	146
Paper Birch	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
Red Pine	0	0	0	0	0	0	0	84	0	12	0	0	0	0	0	0	0	0	96
Urban	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
White Pine	0	0	0	0	0	0	0	73	0	2	0	0	0	0	0	0	0	0	75
Total	245	49	28	75	101	176	41	176	114	80	166	495	11	0	0	0	0	96	1850



# **Report 2 – Treatment Summary**

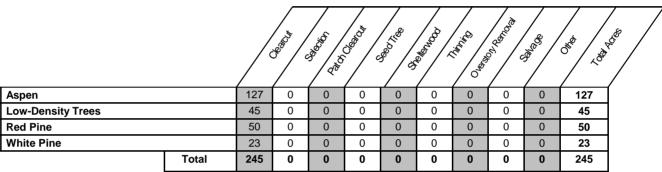
# Traverse City Mgt. Unit Year of Entry: 2025

### **Acres of Harvest**

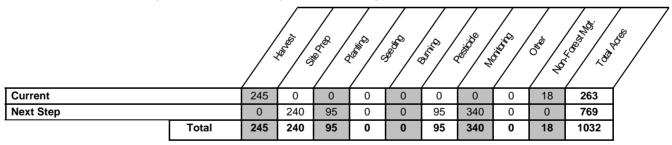
Compartment 33
Total Compartment Acres: 1,851

Commercial Harvest - 245 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: 33 Year of Entry: 2025

Habitat

Cut

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

**Proposed Treatments:** 

61033005-Cut 49.8 42110 - Planted Sawtimber 111-Harvest Clearcut 4211 - Planted Even-Aged No Red Pine Well 140 Red Pine

Prescription Final Harvest all trees 1 inch in diameter and up. Require chipping. No retention due to management objective.

Specs:

SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Next Step

Treatments: Regen(3yr); SitePrep, Roller Chopping; SitePrep, Roller Chopping

Acceptable Planted Red Pine.

Regen:

Other Moving away from strip planation to have one nice block. Replant along with stand 17 to create one future stand. Require low stumps to

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

61033011-NF 2.1 310 - Herbaceous Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed No Openland Upland /Grass Planting

Herbaceous

Prescription This opening is a traditional wildlife planting. Disk in crab/quack grass, plant to annual rye for several years and then convert back to a Specs: pasture mix (i.e. clover/alfalfa). Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.

Next Step Treatments:

<u>Acceptable</u>

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

4211 - Planted 45.1 3301 - Low Density Nonstocked Unspec 61033017-Cut Harvest Clearcut Even-Aged No **Deciduous Trees** ified Red Pine

Prescription Final harvest all trees 1 inch and up. No retention due to management objective. Require chipping.

Specs:

Next Step SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial

Treatments: Regen(3yr); SitePrep, Roller Chopping

Acceptable Planted red pine with minor mix of other species although main objective is red pine.

Regen:

Other Sale will only be merchantable when sold with adjacent planted pine. Point of including this to main one continuous pine plantation as

opposed to current strip planation's.

Site Condition

Comment:

Proposed Start Date: 10/1 /2024

Traverse City Mat. Unit

Report 3 -- Treatments

Compartment: 33 Year of Entry: 2025

n d	Name	Acres	Stand CoverType	Density Age Ran		Method	Objective	Age Structure	Habitat Cut
20	61033020-Cut	72.4	4130 - Aspen	Sawtimber 49	Harvest	Clearcut with	413 - Aspen	Even-Aged	No

Prescription Final Harvest leave retention 3 to 5 percent of acreage in form of island or edge left out. Leave all white pine.

Well

Specs:

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t

As well per wildlife drop a handful of red line trees into stand 22 along east line for wildlife habitat.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen primary with mix of red maple and white pine accepted as well.

Regen: Other

Map retention in MIFI. Access will need to be improved with combination of material including gravel. May need installation of another Comment: culvert as well. Improve crossing to south as this crossing will be needed to access stand 58 in future as well. Close access with berm or gate after crossing improved. Add grouse spec.

Site Condition

Proposed Start Date: 10/1 /2024

2.8 330 - Low-Density Nonstocked 61033029-NF 0 Unspec NonForestMgt Herbaceous/Crop 3105 - Mixed No Trees ified /Grass Planting Upland Herbaceous

Prescription This opening is a traditional wildlife planting. Disk in crab/quack grass, plant to annual rye for several years and then convert back to a pasture mix (i.e. clover/alfalfa). Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment. Specs:

Next Step

Treatments:

<u>Acceptable</u> Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

61033061-NF 13.5 3301 - Low Density Nonstocked Deciduous Trees

NonForestMgt Herbaceous/Crop 3105 - Mixed /Grass Planting Upland

Retention

Herbaceous

Specs:

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. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Work around some of the existing beneficial vegetation to create a wildlife food plot of appropriate herbaceous species suited to site and soil conditions, with fertilization. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step **Treatments:** 

Acceptable

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

No

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Stand

Well

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Cover Type

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d	Name	710100	CoverType	Density Age	Range	Туре	Method	Objective	Structure	Cut
67	61033067-Cut	5.5	4130 - Aspen	Sawtimber 68	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No

Treatment

Treatment

Prescription Final Harvest leave all conifer. No retention due to small size.

Stand

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Treatment

Acceptable Aspen primarily with some maple.

Regen:

Other Access off powerline ROW may need driveway permit from county road commission. Include with other stand too small to sell on its own.

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

**105 61033105-Cut** 12.4 4130 - Aspen Sawtimber 48 Harvest Clearcut 413 - Aspen Even-Aged No Well

<u>Prescription</u> Final harvest leave white pine over 10 inches in diameter as well as buffer along small bog in north end.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen with red maple and white pine accepted as well.

Regen:

Other No retention due to small size. Include with stand to north in one sale. Add Grouse Spec.

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

112 61033112-Cut 36.6 4139 - Aspen, Poletimber 48 Unspec Harvest Clearcut with 413 - Aspen Even-Aged No Mixed Deciduous Well ified Retention

<u>Prescription</u> Final Harvest expect leave any pine or hemlock. As well leave retention island 3 to 5 percent of total acreage.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen primary with mix of maple and pine accepted as well.

Regen:

Other Protect any wet depressions in stand as needed. Contact Consumers Power to see if small trip of aspen along in their ROW can be cut along with this sale. Access from the north, logger will need to protect any and all underground pipelines. Add grouse spec.

Site Condition

Proposed Start Date: 10/1 /2024

Even-Aged 199 61033199-Cut 22.9 42101 - Planted Sawtimber 63 141-Harvest Clearcut with 4133 - Aspen, No White Pine, Mixed Well 170 Retention Mixed Pine Deciduous

<u>Prescription</u> Final Harvest with retention. Leave retention in island or small edge taken out of sale. As well leave a few scattered wind firm white pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Aspen dominates with healthy mix of white pine as well.

Regen:

Other Do not leave enough white pine to be considered future overstory of stand. Idea is to leave a handful in stand to leave some structure as well

Comment: as help seed in some conifer to stand. Add Grouse Spec.

Site Condition

Proposed Start Date: 10/1 /2024

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 33 Year of Entry: 2025 Cover Type Objective Age Structure **Treatment** Acres Stand Size Stand ВА Treatment **Treatment** Habitat Name CoverType Density Age Method

Type

Range

Total Treatment 263.1 Acreage Proposed:

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Cut

Compartment: 33

Traverse City Mgt. Unit

Joe Ventimiglia : Examiner Year of Entry: 2025

Availa	ability for	Managemer	nt									
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	dition	s			
Acres	Available	With Condition	Not Available		4A	5C	2G	2H	ЗА	3G	3J	5E
457	434	0	23	Aspen	0			21				2
7	7	0	0	Bog								
26	26	0	0	Herbaceous Openland								
73	73	0	0	Low-Density Trees								
148	0	0	148	Lowland Conifers	0		148			0		
656	0	0	656	Lowland Deciduous			640				16	
20	0	0	20	Lowland Mixed Forest			20					
66	66	0	0	Lowland Shrub								
44	44	0	0	Marsh								
146	105	9	32	Northern Hardwood		9	1	8	24			
7	0	0	7	Paper Birch							7	
96	84	12	0	Red Pine		12						
29	29	0	0	Urban								
75	75	0	0	White Pine								
1,851	943	21	887	Total Forested Acres	0	21	810	29	24	0	24	2
	51%	1%	48%	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)	367	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
	omments: ernal pond.						

# Report 4 – Site Conditions

Compartment: 33

Traverse City Mgt. Unit

Joe Ventimiglia : Examiner Year of Entry: 2025

3	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: sland with access	compromised by rail trail. Plans	to pave t	rail soon will eliminate re	easonable access.		
ļ	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: risual buffer and ar	rea retention along Thompsonvil	le rd.				
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
ô	Unavailable	3A: Conservation Values incompatible with harvest at this time	24	Unspecified	Unspecified	Unspecified	Unspecified
ι	Comments: Unique stand with o Succession take pla	considerable hemlock compone ace.	nt. Cons	idering this hemlock i re	commend excuding this are	a from commercial harves	st and letting natural
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

# Report 4 – Site Conditions

Traverse City Mgt. Unit Joe Ventimiglia: Examiner

9	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Small acreage and	access to difficult to be worth e	effort for	these small islands.			
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	96	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	48	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	46	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
							_

# Report 4 - Site Conditions

**Traverse City Mgt. Unit** Compartment: 33 Year of Entry: 2025 Joe Ventimiglia: Examiner Unspecified Unspecified Unspecified 14 Unavailable 3J: Water quality / BMPs 7 2G: Too wet (sensitive soils, does not include (stream, river, or lake) access issues) Comments: 15 Unavailable 2G: Too wet (sensitive 49 Unspecified Unspecified Unspecified Unspecified soils, does not include access issues) Comments: 3J: Water quality / BMPs Unspecified Unspecified Unspecified 16 Unavailable 16 2G: Too wet (sensitive soils, does not include (stream, river, or lake) access issues) Comments: 2H: Blocked by physical Unspecified Unspecified Unspecified Unspecified 17 Unavailable 4 obstacle (e.g. upland stand in a lowland area) Comments: 18 Unavailable 2G: Too wet (sensitive 61 Unspecified Unspecified Unspecified Unspecified soils, does not include

### Comments:

Overall too wet although there are pockets along edges that could be managed as adjacent stands are harvested.

access issues)

# Report 4 – Site Conditions

Traverse City Mgt. Unit Joe Ventimiglia: Examiner

Unavailable	2G: Too wet (sensitive soils, does not include access issues)	55	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	28	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:						
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Hold this treatment	t until stand 12 is treated again.					
	Unavailable Comments: Unavailable Comments: Unavailable Comments: Available Comments:	Soils, does not include access issues)  Comments:  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Comments:  Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Comments:  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Comments:  Available 5C: Delay treatment for age/size class diversity or exceptional site quality	Soils, does not include access issues)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Comments:  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Comments:  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:	Soils, does not include access issues)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Comments:  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:	Somments:  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:	soils, does not include access issues)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Unavailable 5C: Delay treatment for age/size class diversity or exceptional site quality  Unspecified

# Report 4 – Site Conditions

Traverse City Mgt. Unit Joe Ventimiglia: Examiner

Compartment: 33
Year of Entry: 2025

24	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
	omments: old for this entry	as adjacent stand is being final h	arveste	d. Look to treat stand next	entry.		

5/8/2023 1:14:24 PM - Page 6 of 6 POLEYN

Mgt. Unit

Compartment: #Type! Year of Entry:

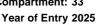


# Report 5 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* 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: 33





# 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 conditions stocked trout populations and those of other coldwater fish spec 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	ies to persist from year to year. Suitable ey 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 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



Stand	d Level 4 C	over Type		Size Dens	sity	Acres	Stand Age B	A Italige		Site	General Comments
1	42110 - Pla	nted Red P	ine S	awtimber	Well	34.8	64	111-140	N/A	_	Stand was planted in 1959.
	Canopy Species	% Cover	Size Class	DBH A	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand was third row thinned in 2005. Stand thinned again in 2016,
	Red Pine	97	Log/Pole		64	Wh	nite Pine	Low	< 5 feet	Sapling	marked second thinning.
	Black Cherry	3	Pole/Log	9		Whit	te Spruce	Trace	5 - 10 feet	Sapling	
			-			E	Beech	Medium	< 5 feet	Sapling	Decent red pine stand. Limited understory beyond some beech. Die bac pocket in north end. Stand just into log size (10 to 11 average)
						Re	ed Maple	Low	< 5 feet	Sapling	pocket in north end. Stand just into log size (10 to 11 average)
2	330 - Low-l	Density Tre	es	Nonstock	ked	10.8			No		
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Easterr	n Red Cedar	Low		Pole	
						Spotted	d Knapweed	Low		Non-Wood	
						Brac	cken Fern	Low		Non-Wood	
						Pove	erty Grass	Trace		Non-Wood	
						Mixe	d Grasses	High		Non-Wood	
						Smooth	Arrow Wood	Trace		Tall Shrub	
						Honeys	suckle (spp.)	Trace		Tall Shrub	
3	612 - Lowland (			etimber M			97		N/A		
3	6132 - Mixed Lowla	and Forest v	with Cedar P	oletimber	Well	20.4	55	Density	N/A	Size	Wet stand, lots of variability in species composition. Lowland conifers providing lots of cover throughout stand. Trail running down powerline
4		and Forest v		oletimber	Well	20.4 <b>Sub-Ca</b>		<b>Density</b> High		<b>Size</b> Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water.
4	6132 - Mixed Lowla  Canopy Species	and Forest v	with Cedar Posize Class Pole	oletimber	Well	20.4 Sub-Car	55 nopy Species	Density High Low	N/A Avg. Height	Sapling	providing lots of cover throughout stand. Trail running down powerline
4	6132 - Mixed Lowla  Canopy Species  orthern White Cedar	% Cover	with Cedar P	oletimber  DBH A	Well	20.4 Sub-Car Ba	55 nopy Species lsam Fir emlock	High	N/A  Avg. Height 5 - 10 feet	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine	and Forest v  Cover	with Cedar Poisse Class Pole Pole/Sap/Log	DBH A	Well	20.4 Sub-Car Ba	55 <b>nopy Species</b> Ilsam Fir	High Low	N/A  Avg. Height 5 - 10 feet  Variable	Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine Black Ash	Cover 20 5 5	with Cedar Posize Class Pole Pole/Sap/Log Pole	DBH A	Well	20.4 Sub-Car Ba	55 nopy Species lsam Fir emlock	High Low	N/A  Avg. Height 5 - 10 feet  Variable	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine Black Ash Red Maple	### And Forest v  ### Cover    20	with Cedar Posize Class Pole Pole/Sap/Log Pole Pole	DBH A	Well	20.4 Sub-Car Ba	55 nopy Species lsam Fir emlock	High Low	N/A  Avg. Height 5 - 10 feet  Variable	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine Black Ash Red Maple Balsam Fir	### And Forest v  ### Cover    20	with Cedar Paragraphics Size Class Pole Pole/Sap/Log Pole Pole Pole Pole/Sapling	DBH A 6 8 5 6 5	Well	20.4 Sub-Car Ba	55 nopy Species lsam Fir emlock	High Low	N/A  Avg. Height 5 - 10 feet  Variable	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4	Canopy Species Orthern White Cedar White Pine Black Ash Red Maple Balsam Fir Yellow Birch	% Cover 20 5 5 5 35 5 5 5 5	with Cedar Poles Pole Pole Pole/Sapling Pole/Sapling	DBH A 6 8 5 6 5 5 5 5	Well	20.4 Sub-Car Ba	55 nopy Species lsam Fir emlock	High Low	N/A  Avg. Height 5 - 10 feet  Variable	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine Black Ash Red Maple Balsam Fir Yellow Birch Hemlock	% Cover 20 5 5 5 35 5 20 5	with Cedar Pole  Size Class  Pole  Pole/Sap/Log  Pole  Pole  Pole/Sapling  Pole/Sapling  Pole  Pole  Pole	DBH A 6 8 5 6 5 5 7	Well Age	20.4 Sub-Car Ba	55 nopy Species Isam Fir emlock ag Alder	High Low	N/A  Avg. Height 5 - 10 feet  Variable	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
4 No	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine Black Ash Red Maple Balsam Fir Yellow Birch Hemlock Paper Birch	### And Forest v ### Cover     20	with Cedar Pole  Size Class  Pole  Pole/Sap/Log  Pole  Pole  Pole/Sapling  Pole/Sapling  Pole  Pole  Pole	DBH A 6 8 5 6 5 7 6	Well  State of the	20.4  Sub-Cal  Ba  H	55 nopy Species Isam Fir emlock ag Alder	High Low Medium	N/A  Avg. Height 5 - 10 feet  Variable 5 - 10 feet	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,
A No	6132 - Mixed Lowla Canopy Species orthern White Cedar White Pine Black Ash Red Maple Balsam Fir Yellow Birch Hemlock Paper Birch	### And Forest v ### Cover     20	with Cedar Poles Pole Pole/Sap/Log Pole Pole/Sapling Pole/Sapling Pole Pole Pole Pole Sapling Pole Pole Pole Pole Pole Pole Pole Pole	DBH A  6  8  5  6  5  7  6  awtimber	Well  State of the	20.4  Sub-Cal  Ba  H	55 nopy Species Isam Fir emlock ag Alder	High Low Medium	N/A  Avg. Height 5 - 10 feet  Variable 5 - 10 feet	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline,  Stand was planted in 1959.
A No	6132 - Mixed Lowlate Canopy Species Orthern White Cedar White Pine Black Ash Red Maple Balsam Fir Yellow Birch Hemlock Paper Birch  42110 - Pla  Canopy Species	## Cover   20   5   5   35   5   5   20   5   5   mted Red P	with Cedar Poles Pole Pole/Sap/Log Pole Pole/Sapling Pole/Sapling Pole Pole Sapling Pole Sapling Pole Pole Pole Pole Pole Pole Pole Pole	DBH A  6  8  5  6  5  7  6  awtimber	Well 55 Well	20.4  Sub-Cal  Ba  H	55 nopy Species Isam Fir emlock ag Alder	High Low Medium	N/A  Avg. Height 5 - 10 feet  Variable 5 - 10 feet	Sapling Sapling	providing lots of cover throughout stand. Trail running down powerline basically terminates adjacent to this stand due to standing water. springs, marsh marigolds, but no flowing water, bisected by powerline.  Stand was planted in 1959.  Stand third row thinned in 1996. Stand was second thinned in 2005.

Report 7 - Stands



Stand	d Level 4 C	over Type		Size De	nsity	Acres Stand Ag	e BA Range	Managed \$	Site	General Comments
6	42100 - Plar	nted White	Pine	Sawtimb	er Well	3.4 64	141-170	N/A		Stand was planted in 1959.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Spec	ies Density	Avg. Height	Size	Stand was row thinned( take two leave four) in 2008. This harvest
	Black Cherry	3	Log/Pole	10		White Pine	High	< 5 feet	Sapling	created a blanket of white pine in understory.
	Red Maple	2	Log	15		Red Maple	Low	Variable	Sapling	
	White Pine	95	Log/Pole	11	64					_
7	4112 - Maple, Beed	ch, Cherry A	Association	Sawtimb	er Well	44.6 102	81-110	N/A		Stand was originally thinned back in early 1960s Stand was thinned
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Spec	ies Density	Avg. Height	Size	1989. Stand was thinned again in 2005. Portion of sale from 2005 we into Wexford County stand 24.Decent quality hardwood, not quite as
	Basswood	1	Log	16		Black Cherry	Medium	Variable	Sapling	nice as stand 111 to south. Mostly red maple but strong mix of sugar
	Beech	5	Log	16		Sugar Maple	Medium	10 - 20 feet	Sapling	maple along with some beech/cherry. Like stand to south surprisingle
	Sugar Maple	28	Log/Pole	13		White Pine	Low	< 5 feet	Sapling	decent maple sapling regeneration including sugar maple.
	White Pine	1	Log	16		Red Maple	Medium	10 - 20 feet	Sapling	
	Red Maple	55	Log	16	102	Hemlock	Low	Variable	Pole	
	Black Cherry	10	Log	16		Beech	Low	Variable	Sapling	
8	6229 - Mixed	d lowland sl	hrub	Nonsto	cked	1.2 0		No		
9	42100 - Plar			Sawtimb		17.2 64	141-170	N/A		Stand was planted in 1959. Stand was row thinned( take two leave four) in 2008. This harvest created a blanket of white pine in underst
	Canopy Species	% Cover			Age	Sub-Canopy Spec		Avg. Height	Size	,
	Black Cherry	3	Log/Pole	10		Red Maple	Low	Variable	Sapling	
	Red Maple White Pine	95	Log/Pole	15	64	White Pine	High	< 5 feet	Sapling	
10		- Aspen	Log/T old	Sapling		11.6 6	Immature	N/A		Final harvested in winter of 2017. All sugar maple/conifer was left.
	Canopy Species	% Cover	Size Class		Age	Sub-Canopy Spec	ies Density	Avg. Height	Size	]
	White Pine	5	Pole/Log	8		Hazelnut (America		5 - 10 feet	Tall Shrub	
	Quaking Aspen	70	Sapling	1	6	Honeysuckle (spp	,	5 - 10 feet	Tall Shrub	
	Sugar Maple	10	Pole/Sapling	ig 6		, (11	,			
	Red Maple	15	Sapling	1						
11	310 - Herbac	eous Oper	ıland	Nonsto	cked	2.1 0		Managed O	pening	Old wildlife opening.
12	42110 - Pla	nted Red P	Pine	Sawtimb	er Well	16.8 62	81-110	N/A		Stand was planted in 1961. Stand broken into 3 pockets.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Spec	ies Density	Avg. Height	Size	Stand was third row thinned in 2005 and then marked second thinned
	Black Cherry	3	Log	16		Black Cherry	Low	5 - 10 feet	Sapling	2016. Die back pockets in north end of big stand.
	Red Maple	6	Log	18		Beech	Low	< 5 feet	Sapling	
	Red Pine	91	Log/Pole		62	Red Maple	Low	5 - 10 feet	Sapling	Decent red pine with limited understory with exception of few pockets nice red maple regeneration.
	122 - Roa									-r - J



Stanc	Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed 9	Site	General Comments
14	42110 - Pla	nted Red P	ine	Sawtimb	er Poor	12.3	84	1-50	N/A		Stand was planted in 1939.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand was seed tree cut in 2005. This created a two aged stand of
	Red Maple	5	XLog/Log	g 18		Re	d Maple	Medium	>20 feet	Sapling	scattered XL red pine over mix of naturally regenerated jack pine, red
	Red Pine	95	XLog/Log	20	84	Ja	ck Pine	Medium	>20 feet	Sapling	maple, cherry, as well as red pine. Some open pockets did not regenerate well but overall stand will be nice, forested mix.
						Re	ed Pine	Medium	10 - 20 feet	Sapling	regenerate well but overall stand will be flice, forested flix.
						Blac	k Cherry	Medium	>20 feet	Sapling	
15	330 - Low-I	Density Tre	ees	Nonsto	cked	0.6	0		No		Opening along private. Driveway tresspass?
16	4110 - Sugar M	laple Asso	ciation	Sawtimb	er Well	2.5	84	81-110	N/A		Very nice quality sugar quality stand just into log size class. Few red
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maples in stand as well as a few hemlock.
	Black Cherry	4	Pole/Log	9		Sug	ar Maple	Low	Variable	Sapling	
	Sugar Maple	91	Log/Pole	11	84	Wh	nite Pine	Medium	5 - 10 feet	Sapling	
	Red Maple	3	Log/Pole	10		H	emlock	Low	>20 feet	Pole	
	White Pine	2	Log/Pole	10							
17	3301 - Low Densi	ity Deciduo	us Trees	Nonsto	cked	45.1	U	nspecified	No		Old opening that is slowly filling in with mixed red and white pine from
						Sub-Ca	nopy Species	Density	Avg. Height	Size	adjacent stand. Some maple and cherry as well. Very close to considering this a forested stand.
						St. Jo	ohns Wort	Trace		Non-Wood	considering this a forested stand.
						Spotted	d Knapweed	Low		Non-Wood	
						Cho	ke Cherry	Trace			
						Servicebe	rry (Juneberry)	Trace			
						Oa	k (spp.)	Low		Pole	
						Brad	ken Fern	High		Non-Wood	
						Pove	erty Grass	Low		Non-Wood	
						Honeys	suckle (spp.)	Trace		Tall Shrub	
						Comm	on Barberry	Trace		Tall Shrub	
18	42100 - Plan	ted White I	Pine	Sawtimb	er Poor	29.3	64	1-50	N/A		Stand was interplanted with White pine in 1959.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand was shelterwood cut in 2008 (Green marked ) 10 to 30 BA of
	White Pine	100	Log/Pole	12	64	Wh	nite Pine	Medium	5 - 10 feet	Sapling	White Pine left.
						Blac	ck Cherry	Medium	10 - 20 feet	Sapling	This secretal true and stand of succession related activity of the
						Re	d Maple	Medium	10 - 20 feet	Sapling	This created two aged stand of overstory planted origin white pine with mixed maple stand regenerating under. Some variability in size of
					Ī	Sug	ar Maple	High	10 - 20 feet	Sapling	regeneration as some was advanced maple left in 2008 harvest and
					L						others sprouted from this harvest . Sugar maple really seems to be doing well in understory.



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
19		- Aspen		Saplin	g Well	16.8	5	Immature	N/A		Stand was final harvested in 2018 any sugar maple and conifer was left.
	Canopy Species	% Cover	Size Class	DBH	I Age						
	Red Maple	30	Sapling	1							
	Quaking Aspen	57	Sapling	1	5						
	Sugar Maple	8	Pole/Sapling	5							
	Bigtooth Aspen	5	Sapling	1							
20	4130 -	- Aspen	S	awtimb	er Well	72.4	49		N/A		Stand final harvested in 1974. Came back well with aspen/red maple.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	Some white pine scattered.
	Red Maple	10	Log/Pole	10			Beech	Low	5 - 10 feet	Sapling	Descent quality aspen stand with difficult but doable access. Stand is
	White Pine	5	Log/Pole	12		Re	ed Maple	Medium	Variable	Sapling	seasonally wet particularity along south edges. Two access points that
	Paper Birch	5	Pole/Log	9	·		•			1	need work along west edge.
	Quaking Aspen	80	Log/Pole	10	49						
21	122 - Road	I/Parking L	ot	Nonsto	ocked	8.9			No		Old rail grade, now snowmobile trail. This stand is grade itself, adjacent open ROW is typed in separate stands. Future plans to pave this for non-motorized use.
22	6113 - Lov	wland Mapl	e S	awtimb	er Well	366.8	104	81-110	N/A		Large lowland maple complex. Stand is 80 to 90 percent flooded with
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	standing water at time of inventory. No history of past management as a result of lowland nature of stand. No streams noted but water flows
	Red Maple	70	Log/Pole/XLog	14	104	Re	ed Maple	Low	Variable	Sapling	through stand. Some pockets of smaller red maple poles but overall
	Quaking Aspen	10	Log/Pole	13		Honey	suckle (spp.)	Low	5 - 10 feet	Tall Shrub	stand is log sized. Unique to see maple of this quality and size in such
	Black Ash	2	Pole	8		Hazeln	ut (American)	Low	5 - 10 feet	Tall Shrub	lowland conditions. There are a few upland islands within stand too small to map.
No	rthern White Cedar	5	Log/Pole	11							to map.
	White Pine	1	Log/XLog	15							
	Hemlock	2	Pole/Log	8							
	Silver Maple	10	Log/XLog	15							
23	4130	- Aspen		Saplin	g Well	20.1	5	Immature	N/A		Aspen stand final harvested in summer 2018 white pine and sugar maple
	Canopy Species	% Cover	Size Class	DBH	I Age						left. Retention left along main road to west.
	Bigtooth Aspen	23	Sapling	1							
	White Pine	3	Log/Pole	14							
	Black Cherry	5	Pole/Sapling	4							
	Red Maple	8	Sapling	1							
	Sugar Maple	6	Sapling/Pole	4							
	Quaking Aspen	55	Sapling	1	5						
24	4112 - Maple, Beecl	h, Cherry A	ssociation P	oletimb	er Well	7.6	65	81-110	N/A		Two small isolated ridges of primarily red maple. These are upland ridge
	Canopy Species	% Cover	Size Class	DBH	I Age						in sea of lowland hardwood.
	Red Maple	80	Pole	8	65						
	Ougling Asses	4.5	Dolo/Log	_							
	Quaking Aspen	15	Pole/Log	9							

# Report 7 - Stands



Stand	Level 4 C	Cover Type		Size Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments
25	3104 -	Degraded		Nonstocked	1.2					
					Sub-Ca	anopy Speci	es Density	Avg. Height	Size	
						n Arrow Woo			Tall Shrub	
					Mixe	ed Grasses	Trace		Non-Wood	
					Easter	rn Red Cedar			Sapling	
					Spotte	ed Knapweed	Low		Non-Wood	
					Bra	cken Fern	Medium		Non-Wood	
					Bals	sam Poplar	Low		Sapling	
26	6229 - Mixe	d lowland sl	hrub	Nonstocked	0.6	0		No		Small lowland pockets in stands.
27	6230	) - Cattail		Nonstocked	2.1			No		Low spots in power ROW.
					Sub-Ca	anopy Speci	es Density	Avg. Height	Size	
					Mixe	ed Grasses	Low		Non-Wood	
					Bra	cken Fern	High		Non-Wood	
					Blackbe	erry/Raspberi	ry High		Tall Shrub	
					Reed (	Canary Grass	s Trace		Non-Wood	
					Ca	attail spp.	Low		Non-Wood	
28	6113 - Lo	owland Mapl	le	Sawtimber Wel	l 48.7	78	81-110	N/A		Lowland maple with standing water in majority of stand. Unique stand
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Speci	es Density	Avg. Height	Size	similar to stand 22. Could combine in future. No history of recent management in this stand.
	Quaking Aspen	5	Pole/Log	9	В	lack Ash	Low	Variable	Sapling	The agono in the stand
	Silver Maple	10	Log	15	Re	ed Maple	Medium	Variable	Sapling	
No	rthern White Cedar	2	Pole/Log	8						
	Red Maple	83	Log/XLog	14 78						
29	330 - Low-	-Density Tre	ees	Nonstocked	2.8	0	Unspecified	No		Small openings, may have been kept open by Wildlife division in the past.
30	6127 - L	owland Pine	e	Sawtimber Wel	l 60.8	73	81-110	N/A		Natural white pine stand. Stand is lowland overall but has some upland
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Speci	es Density	Avg. Height	Size	portions particularly on the south end. Stand appears to be old bog that overtime filled in with white pine. Stand provides good thermal cover.
	White Pine	80	Log/Pole	13 73	Re	ed Maple	Medium	Variable	Sapling	overante inica in with write pine. Otana provides good thermal cover.
	Quaking Aspen	10	Pole/Log	8	W	hite Pine	Low	Variable	Sapling	
	Red Maple	10	Pole/Log	8						
31	6229 - Mixe	d lowland sl	hrub	Nonstocked	0.9	0		No		Mixed lowland, few trees scattered otherwise lowland shrub.

<b>Traverse</b>	City	Mat	I Init
rraverse	City	wat.	Unit



Stand	d Level 4 C	over Type	:	Size De	ensity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
32	4130	- Aspen	Р	oletimb	er Well	41.7	47		N/A		Majority of stands origin results from final harvest in 1975. Although
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	edges of upland red and white pine left included in this stand. Upland overall but lowland pockets present in stand.
	Red Maple	10	Pole/Log	9		WI	nite Pine	Medium	Variable	Sapling	oronan zariomana postoto processi in otana.
	Quaking Aspen	80	Pole/Log	8	47	Re	d Maple	Medium	Variable	Sapling	
	Red Pine	5	Log	12							•
	White Pine	5	Log/Pole/XLog	g 11							
33	4130	- Aspen		Sapling	g Well	28.1	17	Immature	N/A		Stand was final harvested in 2006. All conifer and any oak were left.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Access came from county road commission to south. White pine left; this component is concentrated in north end.
	Quaking Aspen	50	Sapling	3	17	WI	nite Pine	Medium	< 5 feet	Sapling	and compensation of definitional management of the control of the
	Red Oak	2	Log	12		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Black Cherry	5	Sapling	2							•
	Bigtooth Aspen	30	Sapling	2	17						
	Red Maple	5	Sapling	2							
	White Pine	8	Log/Pole/Sap	12							
36	6127 - Lo	owland Pine	e S	Sawtimb	er Well	12.2	98	81-110	N/A		Mixed red and white pine stand. Lowland character throughout a couple
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	upland high spots but overall not suitable for commercial management.  Red pine concentrated in north end with more white pine in south.
	Red Maple	5	Log/Pole	10		WI	nite Pine	Medium	< 5 feet	Sapling	red pine concentrated in north end with more write pine in south.
	Red Pine	50	Log/Pole	14	98	Re	d Maple	Medium	Variable	Sapling	
	White Pine	40	Log/Pole	12						*	•
	Paper Birch	5	Pole/Log	8							
37	4133 - Aspe	en, Mixed F	Pine	Sapling	g Well	39.9	26	Immature	N/A		Stand was final harvested in 1997. Aspen came back well with white
	Canopy Species	% Cover	Size Class	DBH	I Age						pine also seeding in well in spots.
	White Pine	25	Sapling	2	26						
	Quaking Aspen	70	Sapling	4	26						
	White Pine	5	Log	12							
38	622	1 - Fen		Nonsto	ocked	3.6			No		
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Bals	am Poplar	Trace		Sapling	
						5	Sedges	Full		Non-Wood	
						Dogv	vood (spp.)	Low		Tall Shrub	
						Spi				Tall Shrub	



Stand	Level 4 C	over Type	;	Size Density	Acres Stand Age	BA Range	Managed S	Site	General Comments
39	6225	5 - Bog		Nonstocked	6.5		No		Open bog with shrub/tree fringe, a few white pine saplings and poles in
					Sub-Canopy Specie	s Density	Avg. Height	Size	middle. "Viburnum" is wild raisin (currently not in pick-list).
					Leatherleaf	Full		Tall Shrub	
					Mountain Holly	Low		Tall Shrub	
					Wahoo	Trace		Tall Shrub	
					Sphagnum Moss	Full		Non-Wood	
					Common Barberry	Low		Tall Shrub	
					Sedges	Low		Non-Wood	
40	4130	- Aspen	8	Sawtimber We	II 8.5 58		N/A		Two part stand most of stand is island surrounded by wet. The other
(	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Specie	s Density	Avg. Height	Size	portion of stand is small sliver adjacent to private. Decent quality aspen and red maple, seasonally wet but overall upland stand for area.
C	Quaking Aspen	78	Log	14 58	Black Cherry	Medium	Variable	Sapling	
	Sugar Maple	2	Log/Pole	11	Red Maple	High	Variable	Sapling	
	Red Maple	20	Log	13					
43	310 - Herbac	eous Openl	and	Nonstocked	1.2		No		Powerline R.O.W. Undulating between dry hills and wetlands. Slightly
					Sub-Canopy Specie	es Density	Avg. Height	Size	more wetland acreage. Likely maintained by utility company.
					Bracken Fern	Trace		Non-Wood	
					Blueberry/Bilberry/Cranb	erry Trace		Tall Shrub	
						erry Trace High			
					Blueberry/Bilberry/Cranb	-		Tall Shrub	
					Blueberry/Bilberry/Cranb Sedges	High		Tall Shrub Non-Wood	
					Blueberry/Bilberry/Cranb Sedges Mixed Grasses	High Medium		Tall Shrub Non-Wood Non-Wood	
					Blueberry/Bilberry/Cranb Sedges Mixed Grasses Broom Sedge	High Medium Trace		Tall Shrub Non-Wood Non-Wood Non-Wood	
					Blueberry/Bilberry/Cranb Sedges Mixed Grasses Broom Sedge Leatherleaf	High Medium Trace Low Low		Tall Shrub Non-Wood Non-Wood Non-Wood Tall Shrub	
					Blueberry/Bilberry/Cranb Sedges Mixed Grasses Broom Sedge Leatherleaf Spotted Knapweed	High Medium Trace Low Low		Tall Shrub Non-Wood Non-Wood Tall Shrub Non-Wood	
49	4130	- Aspen	S	Sawtimber We	Blueberry/Bilberry/Cranb Sedges Mixed Grasses Broom Sedge Leatherleaf Spotted Knapweed Blackberry/Raspberry	High Medium Trace Low Low y Trace	N/A	Tall Shrub Non-Wood Non-Wood Tall Shrub Non-Wood Tall Shrub	
	4130 Canopy Species	- Aspen % Cover	Size Class	Sawtimber We	Blueberry/Bilberry/Cranb Sedges Mixed Grasses Broom Sedge Leatherleaf Spotted Knapweed Blackberry/Raspberry	High Medium Trace Low Low Y Trace Trace	N/A Avg. Height	Tall Shrub Non-Wood Non-Wood Tall Shrub Non-Wood Tall Shrub	
		•			Blueberry/Bilberry/Crant Sedges Mixed Grasses Broom Sedge Leatherleaf Spotted Knapweed Blackberry/Raspberry Chokeberry	High Medium Trace Low Low Y Trace Trace		Tall Shrub Non-Wood Non-Wood Tall Shrub Tall Shrub Tall Shrub	
	Canopy Species	% Cover	Size Class	DBH Age	Blueberry/Bilberry/Crank Sedges Mixed Grasses Broom Sedge Leatherleaf Spotted Knapweed Blackberry/Raspberry Chokeberry  11 3.7 76 Sub-Canopy Specie	High Medium Trace Low Low Trace Trace Trace Trace	Avg. Height	Tall Shrub Non-Wood Non-Wood Tall Shrub Tall Shrub Tall Shrub	
	Canopy Species Paper Birch	% Cover	Size Class Log/Pole	DBH Age	Blueberry/Bilberry/Crank Sedges Mixed Grasses Broom Sedge Leatherleaf Spotted Knapweed Blackberry/Raspberry Chokeberry  II 3.7 76 Sub-Canopy Species White Pine	High Medium Trace Low Low Trace Trace Trace Trace Trace	Avg. Height Variable	Tall Shrub Non-Wood Non-Wood Tall Shrub Non-Wood Tall Shrub Tall Shrub Tall Shrub Size Sapling	



Stand				Size Density Acres Stand Age BA Range Managed Site  Nonstocked 37.8 No				Managed	Site	General Comments  2 red-shouldered hawks nearby. Wet. Need waders to cross stream. A	
52	6220 - A	lder/willow		Nonsto	cked	37.8		No			
						Sub-Canopy Species	Density	Avg. Height	Size	rew pole snags. Viburnum = wild raisin.	
						Meadowsweet	Low		Tall Shrub		
						Black Walnut	Trace		Pole		
						Willow spp.	Low				
						Tag Alder	High		Tall Shrub		
						Willow spp.	Low				
						Reed Canary Grass	Medium		Non-Wood		
						Sedges	Low		Non-Wood		
						Wahoo	Trace		Tall Shrub		
						Dogwood (spp.)	Low		Tall Shrub		
						Willow spp.	Low				
56	6113 - Lo	wland Maple	e Pol	letimbe	· Mediun	n 28.1 68	1-50	N/A		Lowland hardwood buffering stream. Sparse stand. No as well forested	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	as some of other e types in this area.	
	Red Maple	68	Pole/Log	9	68	Tag Alder	High	5 - 10 feet	Tall Shrub		
	Silver Maple	10	Log/Pole	12		Red Maple	Low	Variable	Sapling		
	White Pine	2	Pole/Log	9				1			
	Paper Birch	20	Pole/Log	8							
58	4130	- Aspen	Р	oletimb	er Well	63.5 38		N/A		Stand was final harvests in mid 1980s, at which time it was privately	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	owned. Tract was acquired by State in 1993. Poor quality sparse asper in pockets, overall upland stand with some lowland along edges.	
	Red Maple	4	Pole	7		Red Maple	Medium	Variable	Sapling	,	
	White Pine	1	Pole/Log	9		White Pine	Low	< 5 feet	Sapling		
	Black Cherry	7	Pole	8							
	Quaking Aspen	83	Pole								
		03	Pole	8	38						
	Red Oak	5	Pole/Log	9	38						
61	Red Oak  3301 - Low Densi	5	Pole/Log			13.5		No		Formally managed wildlife opening. No evidence of recent management.	
61		5 ity Deciduou	Pole/Log us Trees	9	ocked		nspecified	No N/A		management.  From records it appears stand was attempted to be harvested in 1970s	
	3301 - Low Densi	ity Deciduou	Pole/Log us Trees	9 Nonsto	ocked		nspecified  Density		Size	management.	
	3301 - Low Densi	ity Deciduou	Pole/Log us Trees duous S	9 Nonsto	ocked er Well	10.8 68 Ur		N/A		management.  From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred. Access would be from south.  Old comment- Recommend treating to remove/regenerate aspen	
	3301 - Low Densi 4139 - Aspen, Canopy Species	ity Deciduou  Mixed Deciduou  **Cover**	Pole/Log us Trees duous S Size Class	9 Nonsto	ocked er Well	10.8 68 Ur Sub-Canopy Species	Density	N/A Avg. Height	Size	management.  From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred. Access would be from south.  Old comment- Recommend treating to remove/regenerate aspen however access is not available. stand is on an elevated ridge extending	
	3301 - Low Densi 4139 - Aspen, Canopy Species Paper Birch	5  Mixed Decid  Cover 5	Pole/Log us Trees duous S Size Class Pole	Nonsto	er Well	10.8 68 Ur  Sub-Canopy Species  White Pine	<b>Density</b> Low	N/A  Avg. Height >20 feet	Size Sapling	management.  From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred. Access would be from south.  Old comment- Recommend treating to remove/regenerate aspen however access is not available, stand is on an elevated ridge extending north from private property. Wet on all sides except south. Foot path	
	3301 - Low Densi 4139 - Aspen, Canopy Species Paper Birch Bigtooth Aspen	5 Mixed Decid  Cover 5 40	Pole/Log us Trees duous S Size Class Pole Log	9 Nonsto	er Well	10.8 68 Ur  Sub-Canopy Species  White Pine  Black Cherry	Low Low	N/A  Avg. Height >20 feet 5 - 10 feet	Size Sapling Sapling	management.  From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred. Access would be from south.  Old comment- Recommend treating to remove/regenerate aspen however access is not available. stand is on an elevated ridge extending	
	3301 - Low Densi 4139 - Aspen, Canopy Species Paper Birch Bigtooth Aspen Red Pine	Mixed Decide  **Cover**  5 40 5	Pole/Log us Trees duous S Size Class Pole Log Log	9 Nonsto  Bawtimb  BBH  8 13 16	er Well	10.8 68 Ur  Sub-Canopy Species  White Pine  Black Cherry  Northern White Cedar	Low Low Low	N/A  Avg. Height  >20 feet  5 - 10 feet  >20 feet	Size Sapling Sapling Pole	management.  From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred. Access would be from south.  Old comment- Recommend treating to remove/regenerate aspen however access is not available, stand is on an elevated ridge extending north from private property. Wet on all sides except south. Foot path from private property runs north /south the length of the ridge. Noticed	
	3301 - Low Densi 4139 - Aspen, Canopy Species Paper Birch Bigtooth Aspen Red Pine Hemlock	Mixed Decide  **Cover**  5 40 5 5 5	Pole/Log us Trees duous S Size Class Pole Log Log Pole	9  Nonsto  Bawtimb  DBH  8  13  16  8	er Well	10.8 68 Ur  Sub-Canopy Species  White Pine  Black Cherry  Northern White Cedar  Red Maple	Low Low Low Low	N/A  Avg. Height  >20 feet  5 - 10 feet  >20 feet  5 - 10 feet	Size Sapling Sapling Pole Sapling	management.  From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred. Access would be from south.  Old comment- Recommend treating to remove/regenerate aspen however access is not available. stand is on an elevated ridge extending north from private property. Wet on all sides except south. Foot path from private property runs north /south the length of the ridge. Noticed one or two large red oaks, pockets of conifer sub canopy (thermal cover	



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed \$	Site	General Comments
67	4130	- Aspen	;	Sawtimb	er Well	5.5	68	81-110	N/A		Aspen stand overall but northwest portion of stand is maple stand,
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	primarily red maple. Too small to manage on its own or split out. Few white pine and hemlock scattered in.
	Bigtooth Aspen	60	Log	12	68	Н	emlock	Low	10 - 20 feet	Pole	white pine and hermook souttered in:
	Red Maple	30	Log	14		Blad	ck Cherry	Medium	5 - 10 feet	Sapling	
	Sugar Maple	5	Log/Pole	12		Re	d Maple	Medium	Variable	Sapling	
	Black Cherry	4	Log/Pole	12							
	White Pine	1	Log	12							
68	6127 - Lo	wland Pine	:	Sawtimb	er Well	5.8	105	111-140	N/A		Got as close as possible to stand in order to estimate BA
	Canopy Species	% Cover	Size Class	DBH	Age						measurements. Stand was field visited last inventory so no other stage data was edited-(old comment) natural white pine, pocket of conifer
	Red Maple	15	Pole	8							cover, wanted to label it "lowland natural white pine" but that is not in the
	Hemlock	20	Pole	8							classification key
	White Pine	50	XLog/Log	18	105						
No	rthern White Cedar	10	Pole	8							
	Quaking Aspen	5	Pole	8							
						Mea Wil	Alder dowsweet llow spp.	Low High Medium		Tall Shrub	
							d Grasses am Poplar	High Low		Non-Wood	
						Dais	атт Роргаг	LOW		Sapling	
77	6113 - Lov	wland Maple	e I	Poletimb		55.3	80 U	Inspecified	N/A		From records it appears stand was attempted to be harvested in 1970s although it looks like it never occurred.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	attriough it looks like it hever occurred.
	Black Ash	4	Pole/Sap/Log	,		Re	ed Maple	Low	Variable	Sapling	
	White Pine	5	Log	18			White Cedar	Low	Variable	Pole	Another difficult to access stand, crossed PVT from RR grade to view stand from edge. Some large WP, scattered blow down. Black ash is
	Quaking Aspen	6	Log/Pole	11		Bla	ack Ash	Medium	Variable	Sapling	declining, adjusted canopy composition to reflect this. Did not change
	Red Maple	85	Pole/Log	9	80						remaining stage 1 data with the exception of estimating a 1st age.
79	6113 - Lov	wland Maple	e Sa	awtimber	Mediur	m 16.3	81 U	Inspecified	N/A		Lowland Harwood armoring Dutchman Creek.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	75	Log/XLog	14	81	Bla	ack Ash	Low	Variable	Sapling	
No	rthern White Cedar	5	Pole/Log	8		Musclewe	ood/Hornbeam	Low	Variable	Tall Shrub	
	Silver Maple	10	Log/Pole	15		Re	ed Maple	Low	Variable	Sapling	
	Quaking Aspen	8	Pole/Log	9		<del>.</del>				<del> </del>	
	Black Ash	2	Pole/Sapling	1 6							

# Report 7 - Stands



Stand				Size De	nsity	Acres	Stand Age B	A Range	Managed 9	Site	General Comments
80	6220 - A	Alder/willow		Nonsto	cked	15.0			No		
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Na	nnyberry	Low		Tall Shrub	
							Alder	Trace		Tall Shrub	
						Pin Oa	k (Southern)	Low		Sapling	
						Dogw	vood (spp.)	Low		Tall Shrub	
						Mixe	d Grasses	Full		Non-Wood	
						Wil	llow spp.	High			
						Gr	een Ash	Trace		Sapling	
82	6220 - A	Alder/willow		Nonsto	cked	3.4			No		goldenrod present
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Ta	ag Alder	Full		Tall Shrub	
						Pin Oa	k (Southern)	Trace		Log	
						Ва	asswood	Trace		Seeding	
						Musclewe	ood/Hornbeam	Trace		Sapling	
						Blac	ck Walnut	Low		Sapling	
						Easter	n Red Cedar	Trace		Pole	
83	4130	- Aspen	F	oletimb		8.1	42		N/A		Upland overall but lowland character on edges and seasonally.
(	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
(	Quaking Aspen	85	Pole	7	42	WI	hite Pine	Low	5 - 10 feet	Sapling	
	Black Cherry	3	Sapling	3		Re	ed Maple	Medium	Variable	Sapling	
	White Pine	3	Log	15							-
	Red Maple	5	Pole	8							
Nort	hern White Cedar	3	Pole/Log	8							
	Hemlock	1	Log	13							

# Report 7 - Stands



Stand	, , , , , , , , , , , , , , , , , , ,			Size Density	Acres	Stand Age B	A Range	Managed S	ite	General Comments
84	31021 - Cool	31021 - Cool Season Grass			6.7			No		Powerline R.O.W. A middle section NW of elbow is lowland shrub and
					Sub-Car	nopy Species	Density	Avg. Height	Size	sedge.
					Wil	low spp.	Trace			
					Spotted	d Knapweed	Low		Non-Wood	
					Wil	low spp.	Trace			
					Mixed	d Grasses	High		Non-Wood	
					Honeys	suckle (spp.)	Trace		Tall Shrub	
					Mead	dowsweet	Low		Tall Shrub	
					S	edges	Low		Non-Wood	
					Brac	ken Fern	Medium		Non-Wood	
					Wil	low spp.	Trace			
					Blackbei	rry/Raspberry	Trace		Tall Shrub	
					Pove	erty Grass	Medium		Non-Wood	
					Mixed Fr	ruiting Shrubs	Low		Non-Wood	
86	6117 - Lowland E Conit	Deciduous, ferous	Mixed F	Poletimber Well	45.7	55		N/A		
87	42200 - Natu	ral White F	Pine :	Sawtimber Well	2.1	86	81-110	N/A		Small white pine grove with a few aspen and cedar mixed in. No planting
	42200 - Natu Canopy Species		Pine Size Class	Sawtimber Well	2.1	86	81-110	N/A		Small white pine grove with a few aspen and cedar mixed in. No planting records found.
					2.1	86	81-110	N/A		
(	Canopy Species	% Cover	Size Class	DBH Age	2.1	86	81-110	N/A		
(	Canopy Species Quaking Aspen	% Cover	Size Class Log/Pole	DBH Age	2.1	86	81-110	N/A		
(	Canopy Species Quaking Aspen rthern White Cedar White Pine	<b>% Cover</b> 10 10	Size Class Log/Pole Log/Pole Log/XLog	10 11	2.1	86 47	81-110	N/A		records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand
Nor	Canopy Species Quaking Aspen rthern White Cedar White Pine	% Cover 10 10 80	Size Class Log/Pole Log/Pole Log/XLog	DBH Age           10           11           15         86	4.5		81-110 Density		Size	records found.
Nor	Canopy Species Quaking Aspen rthern White Cedar White Pine 4130 -	% Cover 10 10 80 - Aspen	Size Class Log/Pole Log/Pole Log/XLog	10	4.5 Sub-Car	47		N/A	Size Sapling	records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand
Nor	Canopy Species Quaking Aspen thern White Cedar White Pine 4130 -	% Cover 10 10 80 - Aspen % Cover	Size Class Log/Pole Log/Pole Log/XLog Size Class	DBH Age 10 11 15 86  Poletimber Well DBH Age	4.5 Sub-Car	47 nopy Species	Density	N/A Avg. Height		records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand
Nor	Canopy Species Quaking Aspen thern White Cedar White Pine 4130 - Canopy Species Red Maple	% Cover 10 10 80 Aspen 5	Size Class Log/Pole Log/Pole Log/XLog  Size Class Log/Pole	10	4.5 Sub-Car	47 nopy Species nite Pine	<b>Density</b> High	N/A  Avg. Height  Variable	Sapling	records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand
Nor	Canopy Species Quaking Aspen thern White Cedar White Pine  4130 - Canopy Species Red Maple Black Cherry	% Cover	Size Class Log/Pole Log/XLog  Size Class Log/Pole Pole/Log	10	4.5 Sub-Car	47 nopy Species nite Pine	<b>Density</b> High	N/A  Avg. Height  Variable	Sapling	records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand
Nor	Canopy Species Quaking Aspen rthern White Cedar White Pine  4130 - Canopy Species Red Maple Black Cherry White Pine	**Cover   10   10   80   **  - Aspen   5   5   1   89   **  **Recover   5   89   **  **Recover   5   1   80   80   **  **Recover   5   1   80   80   **  **Recover   5   1   80   80   80   80	Size Class Log/Pole Log/XLog  Size Class Log/Pole Pole/Log Pole/Log Pole/Log	10	4.5 Sub-Cai Wh Blac	47 nopy Species nite Pine	<b>Density</b> High	N/A  Avg. Height  Variable	Sapling	records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand
Nor	Canopy Species Quaking Aspen rthern White Cedar White Pine  4130 - Canopy Species Red Maple Black Cherry White Pine Bigtooth Aspen	% Cover	Size Class Log/Pole Log/XLog  Size Class Log/Pole Pole/Log Pole/Log Pole/Log Pole/Log	10	4.5 Sub-Cai Wh Blac	47 nopy Species nite Pine ck Cherry	<b>Density</b> High	N/A  Avg. Height  Variable  Variable	Sapling	records found.  Small, narrow aspen stand adjacent to powerline ROW and PVT. Stand



Stand	d Level 4 Co	ver Type	s	ize Dens	ity	Acres Stand A	ge BA	Range	Managed \$	Site	General Comments
94	4130 -	Aspen	Po	oletimber	Well	37.7 33			N/A		Stand was final harvested in 1990. White pine left at that time. White
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Canopy Spe	ecies	Density	Avg. Height	Size	pine left mostly concentrated in south-middle area of stand. Upland overall but more lowland character in north end. Old RR grade runs
	Quaking Aspen	42	Pole	7 :	33	White Pine		Medium	5 - 10 feet	Sapling	through stand.
	Black Cherry	5	Pole	6		Black Cherry		Low	5 - 10 feet	Sapling	
	White Pine	14	Log/XLog	17		Red Maple		Medium	Variable	Sapling	
	Bigtooth Aspen	34	Pole	8 3	33						
	Red Maple	5 3	Sapling/Pole/Log	g 2							
96	6117 - Lowland D Conif	Deciduous, ferous	, Mixed Pole	etimber M	edium	95.5 97			N/A		
97	6116 - Lov	wland Bircl	h Pole	etimber M	edium	7.2 52			N/A		Band of solid white birch saplings/small poles parallel to creek; BA about
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Canopy Spe	ecies	Density	Avg. Height	Size	50; 39' tall. "5% black ash" actually a mix of ash/elm/red maple. Habitat cut in 1971?
	Black Ash	5	Pole	7		Tag Alder		Low	5 - 10 feet	Tall Shrub	
	Paper Birch	95	Pole/Sapling	5 !	52	Michigan Holly	/	Low	5 - 10 feet	Tall Shrub	
100	4112 - Maple, Beech	n, Cherry A	Association Po			4.9 52	į	51-80	N/A		Appears to be old poor-quality aspen that through natural succession has a fallen out and been overtaken by red maple. Mostly pole red maple but a
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Canopy Spe	ecies	Density	Avg. Height	Size	few large red maple on west edge.
	Quaking Aspen	10	Pole	9 !	52	Black Cherry		Medium	Variable	Sapling	
	Black Cherry	15	Pole	8							
	Red Maple	75	Pole	7 !	52						
101	4130 -	Aspen	Po	oletimber	Well	21.6 27	lm	nmature	N/A		Stand was final harvested in 1996. Came back well to aspen, some lowland character in pockets but overall upland. Some pockets of nice
	Canopy Species	% Cover	Size Class	DBH A	_						aspen and other look little rough.
	Black Cherry	5	Sapling		27						
	White Pine	10	Sapling/Pole	2							
	Bigtooth Aspen	40	Pole/Sapling		27						
	Quaking Aspen	45	Pole/Sapling	5 2	27						
102	310 - Herbace	eous Open	land	Nonstock	ed _	2.4			No		Powerline ROW. Some lowland character in stand.
						Sub-Canopy Spe		Density	Avg. Height	Size	
						Poverty Grass		Trace		Non-Wood	
						Honeysuckle (sp	p.)	Trace		Tall Shrub	
						Willow spp.		Low			
						Broom Sedge		Trace		Non-Wood	
						Eastern Red Ced	dar	Trace		Tall Shrub	
						Spiraea spp.		Medium		Tall Shrub	
						Spotted Knapwe		Trace		Non-Wood	
					В	lueberry/Bilberry/Cra				Tall Shrub	
						Mixed Grasses		Medium		Non-Wood	
						Bracken Fern		Low		Non-Wood	



nated stand with some
nd not mapped otherwise



Stand	nd Level 4 Cover Type		Size Density		Acres	Stand Age BA Range		Managed \$	Site	General Comments  Small block of hardwood broken into two blocks along private. Southern			
109	4112 - Maple, Beech, Cherry Association			Sawtimb	Sawtimber Well		85	111-140	N/A				
	Canopy Species % Cover Size Class		s DBF	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	block is little, larger diameter and structure but included together due to small size and likelihood of be treated together in the future.			
	Beech	10	Log/Pole	14		He	mlock	Trace	10 - 20 feet	Sapling			
	Red Maple	45	Log	14	85	Black	c Cherry	Medium	Variable	Sapling			
	Black Cherry	10	Log/Pole	12									
	Sugar Maple	35	Log/Pole	12									
111	4110 - Sugar Maple Association				Sawtimber Well		54.0 102 81-110		N/A		Stand was originally thinned in 1960 then again in 1998. Stand was		
	Canopy Species	% Cover	Size Class	s DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	thinned again for third time in 2017.		
	Sugar Maple	53	Log	15	102	В	eech	Low	5 - 10 feet	Sapling	Good quality hardwood stand, cherry is of exceptional quality. (Good		
	Red Maple	ed Maple 10		16		Suga	r Maple	Medium	10 - 20 feet	Sapling	quality black cherry found in this area) Regen is descent throughout with		
	Black Cherry	35	XLog/Log	19		Black	c Cherry	Medium	10 - 20 feet	Sapling	some dense pockets of SM, cherry and beech regen. Pockets of hemlock throughout, most notably in eastern and southern areas of the		
	Hemlock	1	Log/Pole	11		Red	Maple	Low	10 - 20 feet	Sapling	stand. SM regen seems to have all resulted from 1998 harvest, pretty		
	Beech	1	Log	14		Serviceber	ry (Juneberry)	Low	10 - 20 feet	Tall Shrub	uniform in understory.		
					<u>'</u>	He	mlock	Low	Variable	Pole			
112	4139 - Aspen,	Mixed Deci	duous	Poletimb	er Well	36.6	48 U	nspecified	N/A		Stand was final harvested in 1974.		
	Canopy Species	% Cover	Size Class	s DBH	I Age	Sub-Can	opy Species	Density	Avg. Height	Size	Came back to mix of aspen and hardwood. The hardwood pockets are		
	Quaking Aspen	55	Pole/Log	8	48	Red	Maple	Medium	5 - 10 feet	Sapling	primarily red maple. Stand broken up by pipeline. Aspen not the best		
	White Pine	2	Log/Pole	13		Black	Cherry	Medium	>20 feet	Sapling	quality, but overall is dominate species.		
	Sugar Maple	3	Pole	8		Bals	sam Fir	Low	Variable	Sapling			
	Black Cherry	15	Pole	7									
	Red Maple	25	Pole	8									
113	3104 - Degraded			Nonsto	ocked	2.0					Old well site.		
								Sub-Can	opy Species	Density	Avg. Height	Size	
						St. Jo	hns Wort	Trace		Non-Wood			
						Spotted	Knapweed	Full		Non-Wood			
						Stra	wberry	Low		Non-Wood			
							y/Raspberry	Low		Tall Shrub			
							ken Fern	Trace		Non-Wood			
115	6233 - W	et Meadow	1	Nonsto	ocked	5.4			No				
						Sub-Can	opy Species	Density	Avg. Height	Size			
					Reed Ca	nary Grass	Low		Non-Wood				
						Lea	therleaf	Medium		Tall Shrub			
						Se	edges	High		Non-Wood			
						Bud	kthorn	Trace		Tall Shrub			
						\\/illa		Low			1		
						V V 1111	ow spp.	Low					



Stand	d Level 4 Cover Type		;	Size Density		Acres	Stand Age B	A Range	Managed Site		General Comments		
116	6128 - Lowland Dec	Coniferous iduous	, Mixed P	oletimb	er Well	11.0	114		N/A		Wet stand divided by powerline ROW. Mixed species composition, pockets of larger diameter trees with higher stocking. Also areas of low		
Canopy Species % Cover Size Class DBH Age						Sub-Canopy Species Density		Avg. Height Size		stocking, poor quality, low DBH individuals. As noted, there is a small stream flowing E?W through stand, overall area is quite wet-seeps and			
	Quaking Aspen 5 Log/XLog/Pole 12						Tag Alder Low		5 - 10 feet Tall S	Tall Shrub	stream flow. large amount of dead and down, regen pockets and age		
	White Pine 5 Log 18					Northern	n White Cedar	Low	5 - 10 feet	Sapling	classes as the result of numerous blow downs, springs/seeps, small		
Nor	thern White Cedar	15	Pole	8		W	hite Pine	Low	5 - 10 feet	Sapling	creek flowing west to east originates west of powerline,		
	Hemlock	30	Pole/Log	9	114	Ва	ılsam Fir	High	5 - 10 feet	Sapling			
	Red Maple	20	Log/Pole	12									
117	3103 - Rubus-Fern			Nonstocked		4.4		No		Powerline ROW.			
						Sub-Ca	nopy Species	Density	Avg. Height	Size			
						Ca	ttail spp.	Trace		Non-Wood			
						Spotte	d Knapweed	Low		Non-Wood			
						Blackbe	rry/Raspberry	Medium		Tall Shrub			
						Bra	cken Fern	High		Non-Wood			
						St. J	ohns Wort	Low		Non-Wood			
						Mixe	d Grasses	Low		Non-Wood			
119	3104 -	3104 - Degraded Nonstocked		cked	2.0					Active site.			
							nopy Species	Density	Avg. Height	Size			
						Mixe	d Legumes	Trace		Non-Wood			
							d Knapweed	High		Non-Wood			
						Bra	cken Fern	Medium		Non-Wood			
122	310 - Herbac	eous Oper	ıland	Nonsto	cked	4.4			No		Upland portions of power ROW.		
						Sub-Ca	nopy Species	Density	Avg. Height	Size			
						Bra	cken Fern	High		Non-Wood			
							ttail spp.	Low		Non-Wood			
							rry/Raspberry	High		Tall Shrub			
							d Grasses	Low		Non-Wood			
						Reed C	Canary Grass	Trace		Non-Wood			
123 4112 - Maple, Beech, Cherry Association Sawtimber Wel						23.6	105	81-110	N/A		Unique hardwood stand with very heavy hemlock component. Hemlock working its way to overstory, has done this in few spots. Upland overall		
	Canopy Species		Size Class	DBH	Age		nopy Species	Density	Avg. Height	Size	but lowland character. Likely seeps throughout stand.		
	Hemlock	8	Log/Pole	13			Beech	Low	5 - 10 feet	Sapling	<b>v</b>		
	Black Cherry	20	Log/Pole	14		Н	emlock	Full	Variable	Pole			
	Yellow Birch	2	Log/Pole	10									
	Red Maple	55	Log/XLog	17	105								
	Beech	15	XLog/Log	18									

Report 7 - Stands



Stand	Level 4 C	Size De	Size Density		Stand Age	BA Range	Managed Site		General Comments		
199	42101 - Planted Dec	Sawtimber We		22.9	63	141-170	N/A		Stand was planted in 1960 to white pine. Some portions failed with aspen dominate. Where white pine did take it did well. Rows not well defined at		
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	this point.
	White Pine	64	Log/Pole	13	63	Re	ed Maple	Medium	Variable	Sapling	
	Red Maple	3	Log/Pole	12		W	hite Pine	Low	Variable	Sapling	
1	Bigtooth Aspen	30	Log/Pole	12		Bla	ck Cherry	Medium	Variable	Sapling	
								- '			