

## **Compartment Review Presentation**

**Traverse City Forest Management Unit** 

Compartment 61049 Entry Year 2022 Acreage: 3,931

County Grand Traverse

Management Area: Boardman Plains

**Revision Date: 2020-04-28** 

Stand Examiner: Patrick Cotant

**Legal Description:** 

T26N - R11W - sections 9, 13-15, 21-28

### **Identified Planning Goals:**

Maintain vegetative cover and encourage long lived species along the banks of the Boardman River and tributaries. Maintain and expand aspen cover types where possible while continuing to maintain a balanced age class distribution of aspen cover types. Oak should be managed as a minor species for mast production where it is present in aspen cover types.

### Soil and topography:

Level to rolling with some steep slopes along the Boardman River Valley.

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

Residential development continues around the compartment. Several of the private parcels that are intermingled with state ownership have been recently subdivided for residential development. Minor trespass encroachments such as mowing or trimming, dumping of yard debris, underground pet containment systems, fire pits, are common along these shared property lines. Continued development is expected due to the close proximity of this compartment to Traverse City. The northeast part of the compartment, known locally as "Hoosier Valley," has been an area of historic ORV use and also has an area commonly used as a shooting range. Recent efforts to close the shooting range as well as reshape Hoosier Valley rd with ditches and elimination of washed out parking areas has proven to be effective at lessening the problems identified in past entry years associated with illegal dumping and ORV use. Work that is yet to be completed includes tree planting, additional road work in conjunction with Grand Traverse Co. Road Commission and lead level measurement and follow-up lead abatement. The Supply Rd shooting range is a State operated shooting range now located in Grand Traverse County which has taken a great deal of burden off the Hoosier Valley area with respect to target shooting.

### **Unique Natural Features:**

The Weidenhamer Swamp occupies the southern third of the compartment and is the largest deer yarding area in Grand Traverse County. MNFI records indicate numerous occurrences of Red-shouldered Hawk in and around the compartment as well as wood turtle and golden-winged warbler. Occurrences of Osprey, Common Loon, and Hill's Thistle are recorded near, but outside of the compartment. MNFI indicates potential for Goshawk, Massasauga Rattle Snake, Blanding's Turtle, Eagle, Osprey, Great Blue Heron Rookery, Ram's Head Orchid, Calypso Orchid, Limestone Oak Fern, and Michigan Monkey Flower.

### Archeological, Historical, and Cultural Features:

According to SHPO and the Archaeological database housed in the Citrix environment, two occurrences are identified in T26N11W; one in section 5, the other in section 9.

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

The Boardman River is a state designated natural river. This designation also applies to Beitner and Jaxon Creeks. These waters are also designated trout streams.

### Watershed and Fisheries Considerations:

The Boardman River and its tributaries are all designated trout streams. Since these streams are of very high quality, their trout populations are supported by natural reproduction. They are not stocked. To keep them in good condition, it is critical that BMPs and Natural Rivers buffers are strictly adhered to. Natural Rivers buffers are as follows: tributaries, 50 ft; the Boardman River, 100 ft. Shade, limiting sediment input, and woody debris recruitment are crucial to trout streams. In Stand 45, Mason Creek is also a designated trout stream. Patch or strip clear cut in Stand 45 should be managed for species other than young aspen, in order to avoid problems with beavers. Beavers have the ability to severely degrade small trout streams. Restricting cutting to outside the appropriate buffers will help to maintain the temperatures and habitat required to maintain the health of these streams, and the watershed in general (Heather Seites, MDNRE Fish Division comments).

### Wildlife Habitat Considerations:

Maintain mature conifer cover in the Weidenhamer swamp. Although some small patch cuts or habitat cuts may be appropriate to replicate naturally occurring blowdowns, none are prescribed this period. Stands on the outwash plains should continue to be managed for a variety of successional stages and habitat conditions, including everything from open grass/brush habitat to late successional forest. Some open areas should be converted to native warm season grass mixes to replace bracken fern monocultures. Early successional forest patches created through timber harvest should incorporate snags, scattered and clumped residual live trees, and down logs to more closely represent within-stand habitat structure left in the wake of wildfires. Tops should be left unchipped and scattered around the sale area. Maintaining or regenerating oak as a component of these forest stands is very important to local wildlife habitat diversity. The best location for late successional forest would be northeast of the conifer swamp, where there is some natural fire protection. Not coincidentally, active red-shouldered hawk nests have been located in upland deciduous stand just north of the swamp. These stands should be managed per the Department guidelines for this threatened raptor. As much as possible, tree species diversity and habitat structure should be incorporated into pine plantations. Incorporating small (2-5 acre) islands that are left relatively un-thinned within mature pine stands would provide winter roosting cover for turkeys. This entire compartment is particularly popular among local residents as an accessible hunting area.

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

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift are the Mississippian Coldwater and Devonian Ellsworth Shale. There is no current economic use for the Coldwater or Ellsworth Shales. The nearest gravel pits are within one mile to the north and south. Gravel potential in the compartment is considered good. This area is located in the Silurian Niagaran reef trend. Some of the State land is currently leased for oil and gas development and there may be additional reef potential. Portions of the Compartment have also been nominated for underground gas storage and the May 2010 oil & gas lease auction. The Antrim Shale has not been developed in this area, but may have some future potential.

### **Vehicle Access:**

Vehicle access to majority of compartment is good. On the north, River road provides access to a number of stands with county and seasonal roads leading to stands. Blair Townhall rd and Hoosier Valley rd traverse the center of the compartment with numerous seasonal county and state managed forest roads providing more access. Both Blair Townhall and Hoosier Valley are seasonal when they reach halfway across the compartment. On the southern edge of the compartment, Mill rd provides direct access to a number of the e-type stands in the southern tier of the compartment. Mill rd also becomes seasonal as it goes east.

### **Survey Needs:**

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

There is a Parks & Recreation Division maintained access site on the Boardman River in section 13. The Michigan Riding/Hiking Trail and Boardman Valley Snowmobile run through the compartment. In addition, the newly developed Boardman River Trail bisects the compartment, generally paralleling the Hoosier Valley Rd and Blair Townhall road corridors.

### **Fire Protection:**

Local fire protection is provided by Blair Twp. Fire Dept. DNRE fire protection is provided by the Traverse City Field Office. Access to most of this compartment is acceptable; travel time is not a problem. Urban Interface issues are possible with cabins, seasonal residences along sections of the river, and private residences scattered throughout this compartment. There is a fairly large swamp component in the south part of the compartment which would make fires difficult to extinguish at times, but no fire occurrence has taken place in recent years.

### **Additional Compartment Information:**

The following reports from the Inventory are attached:

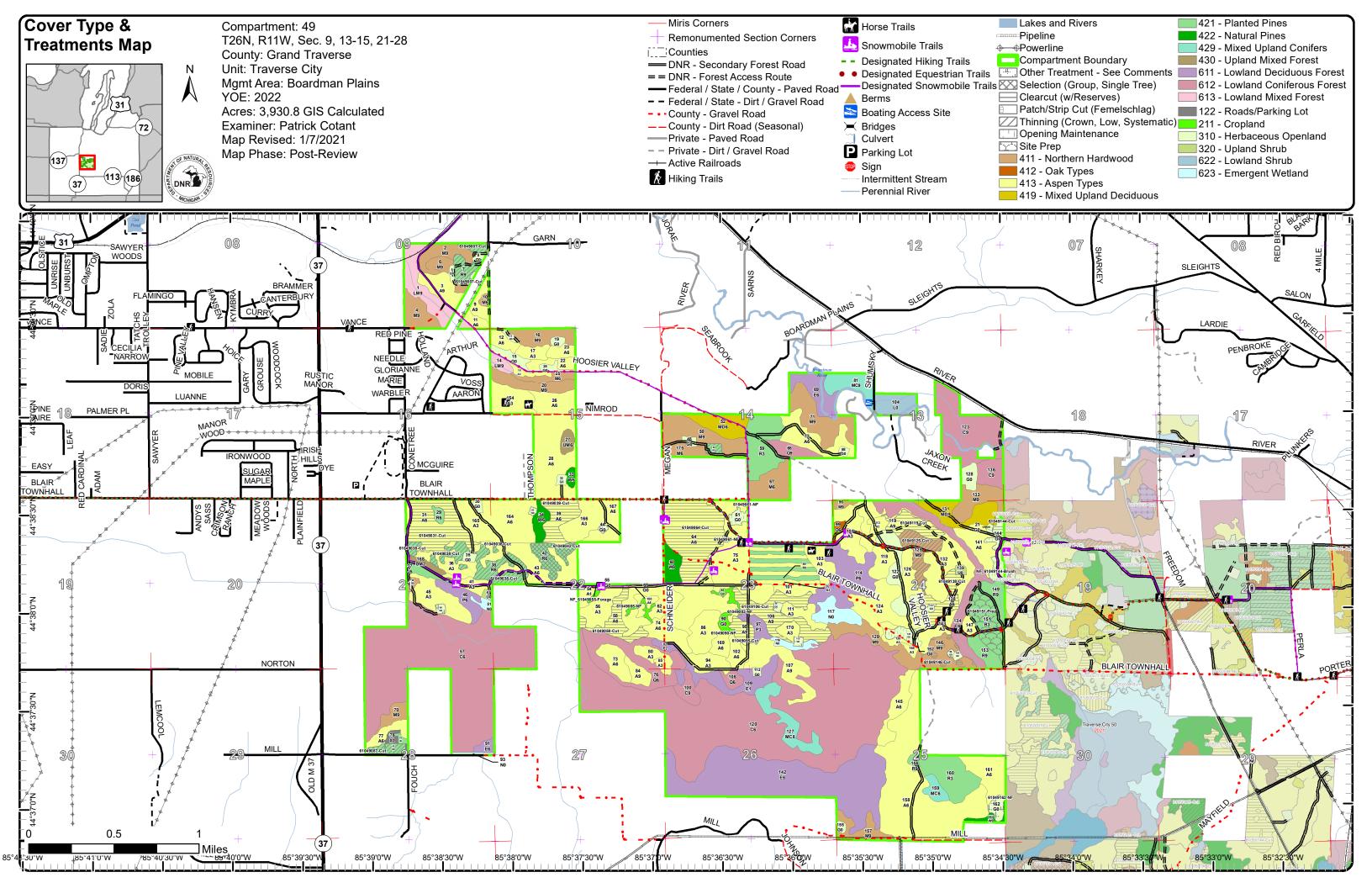
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

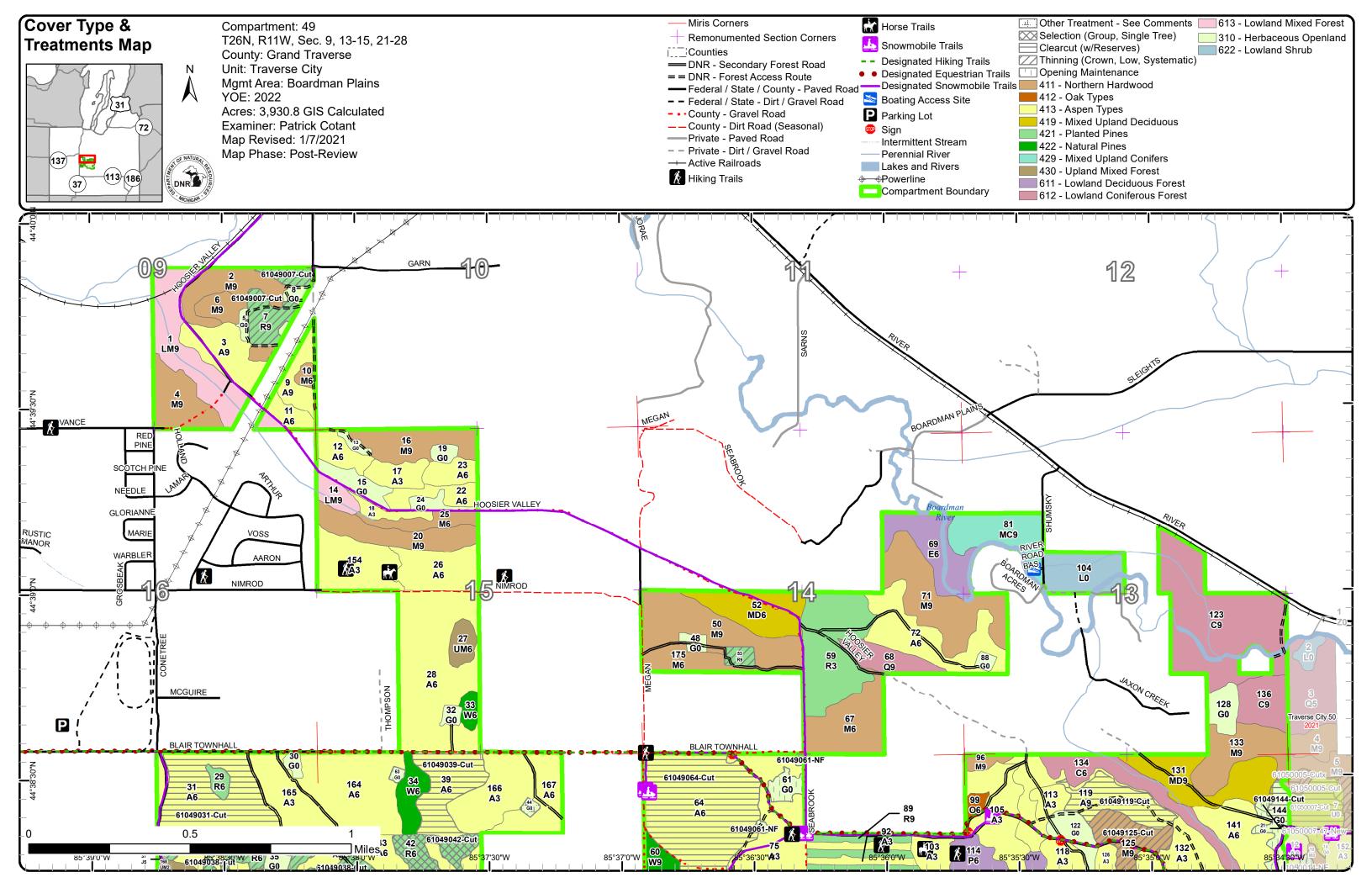
The following information is displayed, where pertinent, on the attached compartment maps:

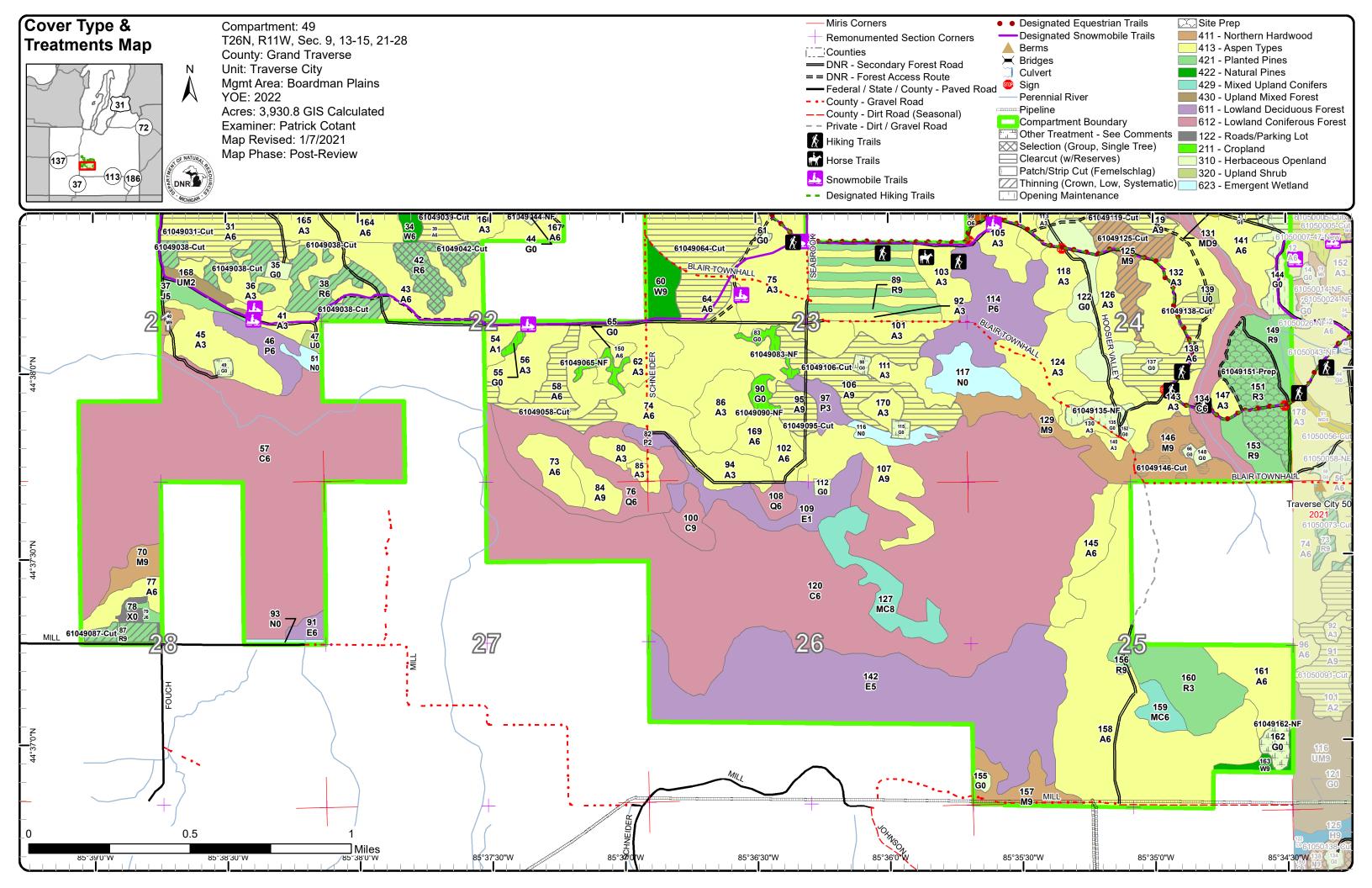
Base feature information, stand boundaries, cover types, and numbers

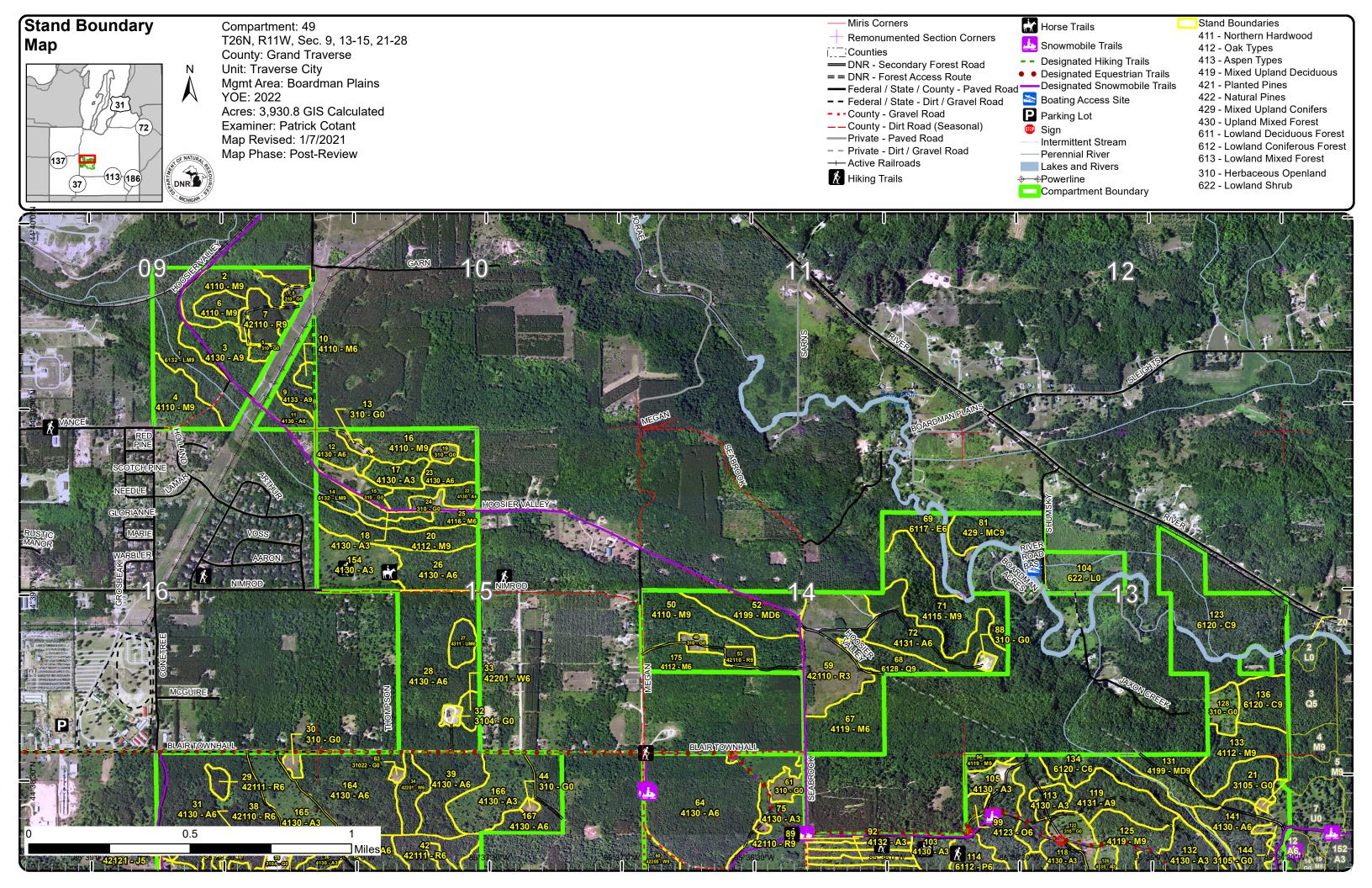
Proposed treatments
Site condition boundaries

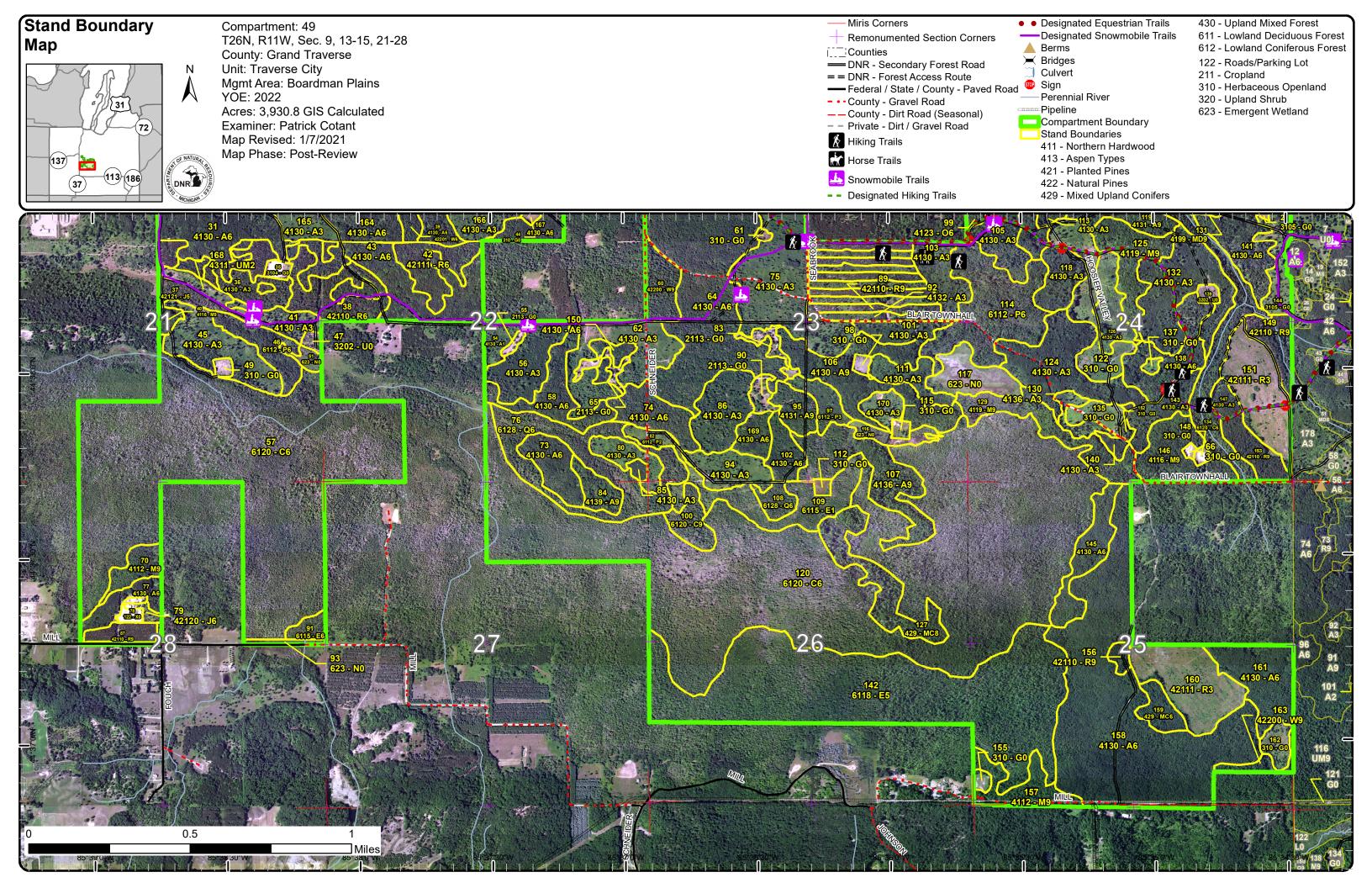
Details on the road access system

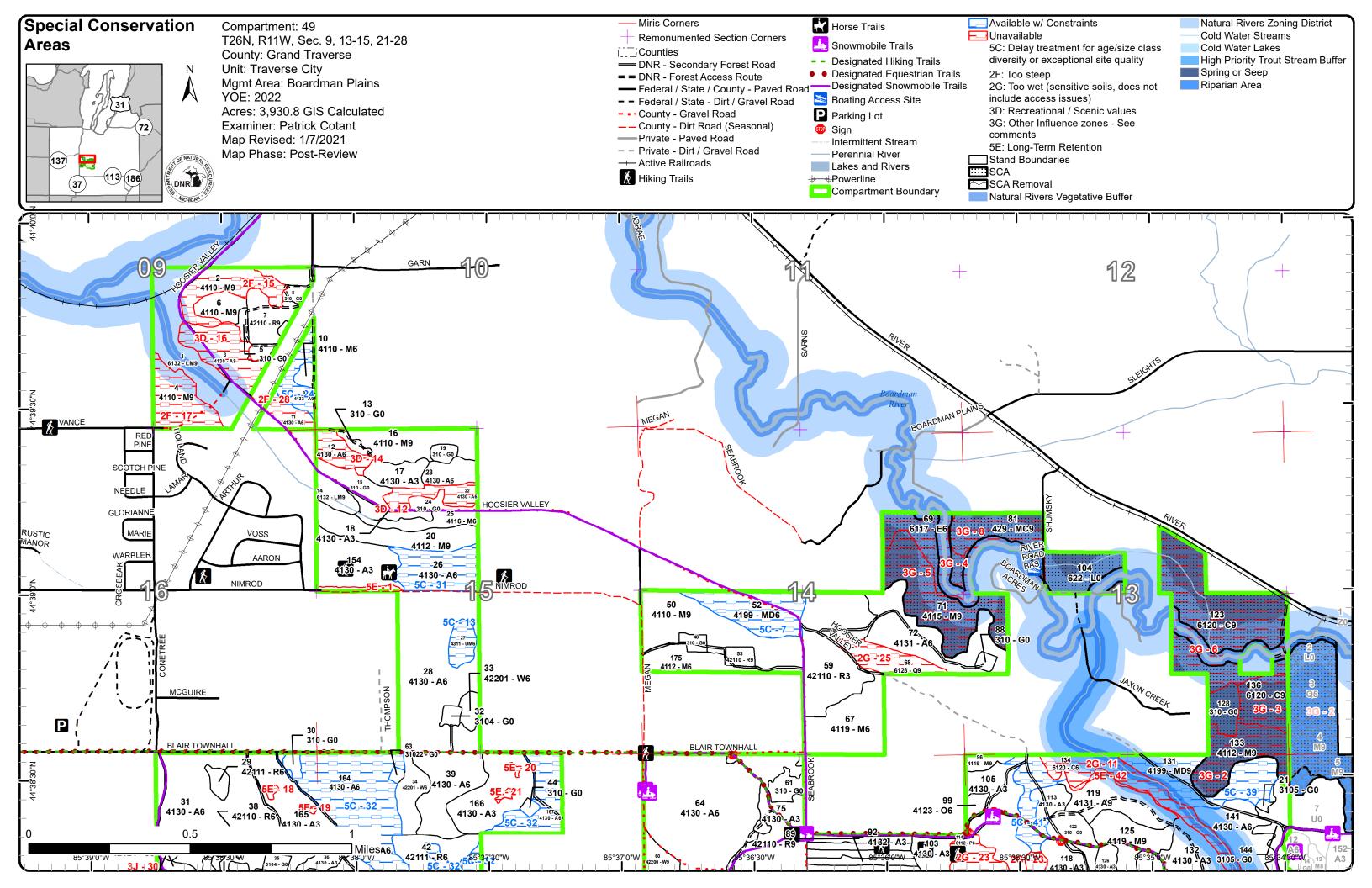


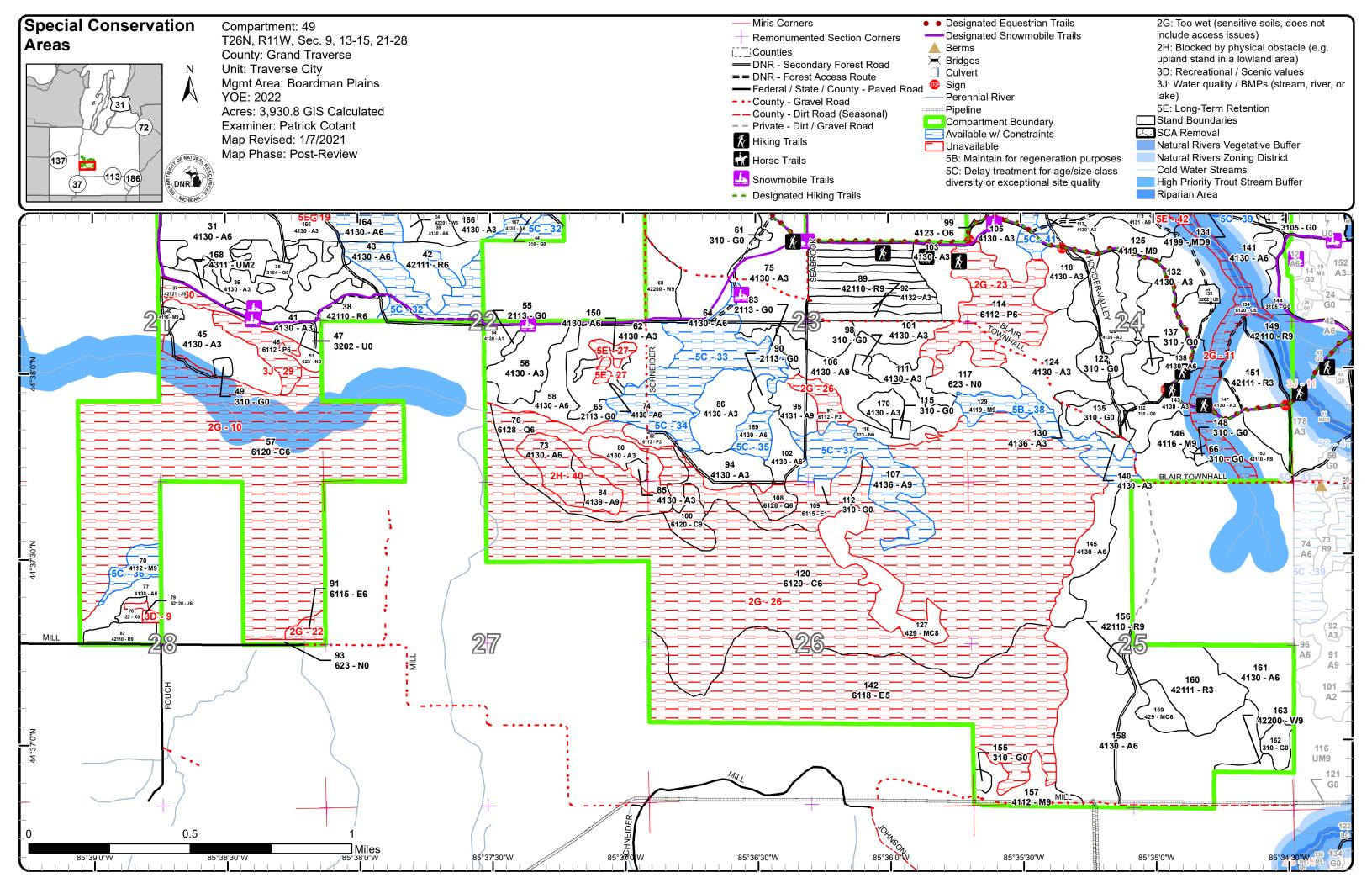












Compartment 49

Year of Entry 2022

Traverse City Mgt. Unit
Patrick Cotant: Examiner



### Age Class

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	No.	Kor C	3 / 2		\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			3/8					a za		N. S.			No.	No.
Aspen	0	167	350	89	253	91	228	353	17	0	0	0	0	0	0	0	0	16	1563
Cedar	0	0	0	0	0	0	0	0	0	787	11	72	65	0	0	0	0	0	935
Cropland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Herbaceous Openland	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124
Jack Pine	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
Lowland Aspen/Balsam Poplar	0	5	9	0	0	0	0	68	0	0	0	0	0	0	0	0	0	0	82
Lowland Conifers	0	0	0	0	0	0	0	0	0	54	0	12	0	0	0	0	0	0	66
Lowland Deciduous	0	0	0	0	0	32	5	25	0	200	0	0	0	0	0	0	0	0	262
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	43
Lowland Shrub	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Marsh	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Mixed Upland Deciduous	0	0	0	0	0	0	0	23	0	0	29	0	0	0	0	0	0	0	52
Northern Hardwood	0	0	0	0	0	28	0	12	103	100	62	21	24	0	0	0	0	0	350
Oak	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Red Pine	0	113	0	0	0	0	19	126	0	0	0	0	0	0	0	0	0	0	258
Upland Conifers	0	0	0	0	0	9	0	24	0	0	28	0	0	0	0	0	0	0	61
Upland Mixed Forest	0	7	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	13
Upland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Urban	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	14	5	14	0	0	0	0	0	0	0	33
Total	199	292	359	89	253	160	252	644	140	1146	144	148	89	0	0	0	0	16	3930



## **Report 2 – Treatment Summary**

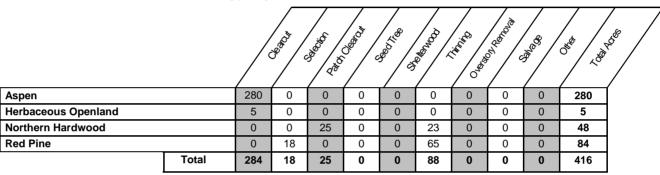
# Traverse City Mgt. Unit Year of Entry: 2022

### **Acres of Harvest**

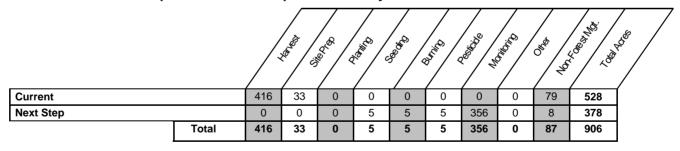
Compartment 49
Total Compartment Acres: 3,931

Commercial Harvest - 416 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



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



Report 3 -- Treatments

Compartment: 49 Year of Entry: 2022

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**Treatment** Name

Acres Stand CoverType

Size Density

Stand BA Age Range **Treatment** Type

Treatment Method

**Cover Type** Objective

Age Structure Habitat Cut

**Proposed Treatments:** 

122 61049122-NF 26.2 310 - Herbaceous Nonstocked Openland

NonForestMgt Herbaceous/Crop 31022 - Warm /Grass Planting Season Grass No

Specs:

Prescription Remove exotics as needed by herbiciding, or other methods. Seed in annual crop for soil building for several years then convert to appropriate native mix for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing

beneficial vegetation (i.e. blackberry).

Next Step

Treatments:

Acceptable Regen:

Other

Maintain as needed with mowing, burning, native shrub planting, seeding of native grasses/forbs or Forest Certification approved forage, or

Comment: removal of woody encroachment.

Site Condition

Proposed Start Date: 10/1 /2021

**Approved Treatments:** 

61049007-Cut 15.7 42110 - Planted Sawtimber 141-Harvest Crown Thinning 4211 - Planted Nο 59 Even-Aged Red Pine Well 170 Red Pine

Prescription Thin stand removing approximately 1/3 of overall volume, focusing removal on stems with defect, forked tops, etc, while also removing some

Specs: good quality stems to move stand to a more appropriate stocking level.

Next Step

Treatments:

**Acceptable** 

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

61049031-Cut 54.3 4130 - Aspen Poletimber 52 111-Harvest Clearcut with 413 - Aspen Even-Aged No

Well

140

Retention

Specs:

Prescription Final harvest stand, removing majority of overstory while retaining a few scattered islands concentrated in northern portion of stand and also along western edge of stand where snowmobile trail heads south. Consider excluding this small sliver of stand from treatment to provide for

aesthetics and retention acreage. Retain scattered oaks for mast source where appropriate.

Next Step

Monitoring, Natural Regen (Intermediate)

**Treatments:** 

Acceptable aspen, oak species, white pine, red maple and scattered balsam fir.

Regen:

Other

Comment:

Site Condition

Red Pine

Well

Red Pine

n	Treatment	Acres	Stand	Size	Stand	BA	Treatment	Treatment	Cover Type	Age	Habitat
d	Name		CoverType	Density	Age	Range	Type	Method	Objective	Structure	Cut
38	61049038-Cut	38.8	42110 - Planted	Poletimbe	er 65	141-	Harvest	Crown Thinning	4211 - Planted	Even-Aged	No

170

Specs:

S

t

Prescription Thin red pine focusing removal on forked, suppressed or otherwise poorly formed individuals while also removing good quality stems where appropriate to achieve better overall stocking within stand. It is expected that some portions of stand will see significant aspen regeneration once stand is opened up - in areas where aspen is a higher % of canopy, thin and/or remove red pine canopy if these pockets lie near the edge of the red pine stand.

Next Step **Treatments:** 

Acceptable Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

39 61049039-Cut 24.6 4130 - Aspen Poletimber Harvest Clearcut with 413 - Aspen Even-Aged Well Retention

Prescription Final harvest stand, retain 2-3 small islands in northern portion of stand to provide for retention and aesthetic relief near Blair Townhall Rd. Specs: In addition, retain some individual oak and white pine scattered throughout stand to serve as mast/seed source and to provide vertical

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable aspen, red maple, oak species, white pine and other species currently present in lower numbers are anticipated.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

65 171-42 61049042-Cut 18.3 42111 - Planted Poletimber Harvest Group Selection 4133 - Aspen, Two-Aged No Red Pine, Mixed Well 200 Mixed Pine Deciduous

Prescription Remove all species and majority of red pine, specifically where aspen stems are present in greater numbers to ensure that adequate aspen regenerates. In areas where red pine is more uniformly stocked, leave small islands/pockets of red pine, mainly for aesthetics, but also to Specs: provide some vertical structure in stand area.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable aspen, red maple, oak species, red pine and other species currently represented in stand area.

Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 49 S Year of Entry: 2022 t а **Treatment** Stand Size Stand BA **Treatment** Treatment **Cover Type** Acres Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d 44 61049044-NF 310 - Herbaceous Nonstocked NonForestMqt Fruit Tree/Shrub 3105 - Mixed No Upland Openland **Planting** Herbaceous Prescription Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire Specs: Next Step Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 61049049-NF 1.9 310 - Herbaceous Nonstocked NonForestMgt Fruit Tree/Shrub 3105 - Mixed No **Planting** Openland Upland Herbaceous Prescription Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire Specs: cages or tubex. Next Step **Treatments:** <u>Acceptable</u> Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 61049053-Cut 3.5 42110 - Planted Sawtimber 60 141-Crown Thinning 4211 - Planted No Harvest Even-Aged Red Pine Well 170 Red Pine Prescription Thin stand focusing removal on trees with defect, forked tops, etc, while also removing good quality stems to improve overall stocking levels. Specs: Next Step **Treatments:** Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 61049058-Cut 22.6 4130 - Aspen Poletimber 66 Harvest Clearcut with 413 - Aspen Even-Aged No Well Retention Prescription Final harvest stand, retaining some white pine and red oak throughout sale area. Retention should generally be minimal so as to maximize aspen stems/acre in this relatively narrow stand. Specs: Next Step Monitoring, Natural Regen (Intermediate) Treatments:

Regen: Other

Proposed Start Date: 10/1 /2021

Acceptable aspen, red maple, white pine and red oak.

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 49 S Year of Entry: 2022 ŧ а **Treatment** Stand Size Stand BA **Treatment** Treatment **Cover Type** Acres Age Habitat n Method Objective Age Structure Name CoverType Density Range Type Cut d 61 61049061-NF 6.6 310 - Herbaceous Nonstocked NonForestMat Herbaceous/Crop 3105 - Mixed Nο Openland /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. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food Specs: and cover. Work around some of the existing beneficial vegetation to establish a seed mix of native grasses and forbs suited to site and soil conditions. Maintain as needed with mowing, seeding of native grasses and forbs, burning, or removal of woody encroachment. Next Step NonForestMgt, Other - Specify Treatments: <u>Acceptable</u> Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 31022 - Warm Unspec NonForestMgt Herbaceous/Crop 31022 - Warm 61049063-NF 1.1 Nonstocked 0 Nο Season Grass ified /Grass Planting Season Grass Prescription Maintain as needed with mowing, seeding of native grasses/forbs, native shrub planting, burning, or removal of woody encroachment. Specs: NonForestMgt, Other - Specify Next Step Treatments: Acceptable Regen: Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

64 61049064-Cut 82.3 4130 - Aspen Poletimber 60 111- Harvest Clearcut with 4133 - Aspen, Two-Aged No Well 140 Retention Mixed Pine

Prescription Final harvest treatment area. Retain 3-4 groups of white pine in north and west portion of treatment area, 1-2 acres in size leaving ~10 BA of Specs:

larger white pine. This will address some aesthetic concerns and also provide for some species diversity while maintaining a degree of vertical structure in a geographic area where aspen is being regenerated on a relatively large scale. Pipeline ROW along western edge is just off road and should be addressed during sale set up. Also, rec trails at north and south edge of stand should be protected.

Next Step Monitoring, Natural Regen (Intermediate) Treatments:

Acceptable aspen, red maple, white pine and oak species.

Regen:
Other
Comment:

Site Condition

Report 3 -- Treatments

Compartment: 49 Year of Entry: 2022

Nο

No

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

NonForestMgt

65 61049065-NF 3.9 2113 - Forage Crops Nonstocked Herbaceous/Crop 3105 - Mixed /Grass Planting

Upland

Herbaceous

Prescription This opening is a traditional wildlife planting. Disk is 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:

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Acceptable

Regen: Other

Or consider, disk, plant to annual rye for several years and then convert to appropriate native species mix.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

61049083-NF 4.8 2113 - Forage Crops Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed /Grass Planting

Upland

Herbaceous

Prescription This opening is a traditional wildlife planting. Disk is 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:

Or consider, disk, plant to annual rye for several years and then convert to appropriate native species mix.

Comment:

Other

Site Condition

Proposed Start Date: 10/1 /2021

61049087-Cut 7.4 42110 - Planted Sawtimber 141-Harvest Crown Thinning 4211 - Planted Nο Even-Aged Red Pine Well 170 Red Pine

Prescription Thin stand to more desirable stocking level, removing approximately 1/2 of overall volume. Steer stand in the direction of a more natural red Specs: pine stand with the management goal of aesthetics near DNR facility being the priority. Focus removal on forked, suppressed or otherwise poorly formed trees, removing some high quality individuals to reach appropriate stocking.

Next Step **Treatments:** 

Acceptable

Regen:

Other Comment:

Site Condition

Report 3 -- Treatments

Compartment: 49 Year of Entry: 2022

t а **Treatment** Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age Habitat n Method Objective Structure Name CoverType Density Age Range Type Cut d 90 61049090-NF 4.5 2113 - Forage Crops Nonstocked NonForestMqt Herbaceous/Crop 3105 - Mixed Nο

/Grass Planting

Upland

Herbaceous

Specs:

S

Prescription This opening is a traditional wildlife planting. Disk is 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.

Next Step Treatments:

Acceptable

Regen: Other

Or consider, disk, plant to annual rye for several years and then convert to appropriate native species mix.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

61049095-Cut 10.5 4131 - Aspen, Oak Sawtimber Harvest

Clearcut with Retention

4131 - Aspen, Oak

Two-Aged

No

Specs:

Prescription Final harvest all species, retaining scattered oak and white pine for mast/seed source. Because of small stand size, retention should be relatively minimal, with large white pine and large crowned oak being identified for retention. Understory conifers should be saved where

Next Step

Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable aspen, red maple, white pine, red oak and scattered balsam fir.

Regen:

Other

Comment: Site Condition

Proposed Start Date: 10/1 /2021

61049098-NF 1.9 310 - Herbaceous Nonstocked Openland

NonForestMgt Fruit Tree/Shrub 320 - Upland Shrub **Planting** 

No

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. Fertilize plantings and protect with wire cages or tubex.

Next Step

Treatments:

**Acceptable** 

Regen:

Other 4 2 2 Comment:

Site Condition

Report 3 -- Treatments

Compartment: 49 Year of Entry: 2022

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**Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Habitat n Age Method Objective Name CoverType Density Range Type Structure Cut d 106 61049106-Cut 41.6 4130 - Aspen Sawtimber Harvest Clearcut with 413 - Aspen Even-Aged Nο Retention Well Prescription Treat stand with a final harvest, removing majority of overstory with the exception of scattered white pine and oak species for aesthetic relief and also thermal cover and mast source purposes. Additionally, a couple small islands and acre or less could be placed in western portion Specs: Next Step Monitoring, Natural Regen (Intermediate) Treatments: Acceptable aspen, white pine, oak species, balsam fir, red maple and scattered birch are acceptable and expected. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 NonForestMgt Fruit Tree/Shrub 320 - Upland 115 61049115-NF 1.9 310 - Herbaceous Nonstocked Nο Openland Shrub 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 Specs: and cover. Fertilize plantings and protect with wire cages or tubex. Next Step **Treatments:** Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 119 61049119-Cut 19.7 4131 - Aspen, Oak Sawtimber Unspec Harvest Clearcut with 4131 - Aspen, Two-Aged No Retention Oak Well ified Prescription Final harvest aspen, red maple and majority of red oak. Retain scattered red oak that appear to be healthy and vigorous for mast production and to account for aesthetics throughout stand, specifically near the shore to shore/boardman river trail that runs through the center of the Specs: stand. Within treatment area, a sliver of the treatment area should be removed to account for retention and also to serve as setback from Jaxon creek for water quality purposes. Treatment area should take into account recreation management specifically adjacent to rec trails.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Aspen, red maple and oak species.

Regen:

Other Comment:

Site Condition

Traverse C	ity M	gt. Unit
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Report 3 -- Treatments

Compartment: 49



S Year of Entry: 2022 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Habitat n Method Objective Structure Name CoverType Density Age Range Type Cut d 125 61049125-Cut 22.9 4119 - Mixed Sawtimber 111-Harvest Crown Thinning 4116 - Mixed N. Uneven-Nο Northern Hardwoods Hardwood -Well 140 Aged Aspen Prescription Remove all aspen and beech. Thin hardwoods retaining best quality trees in place, focusing on retention of red maple, sugar maple and oak. Leave larger, theoretical seed producing sugar maple along with larger oak. Where these trees are retained, create large gaps of ~1 Specs: acre in an attempt to achieve better quality desirable regeneration of sugar maple and red oak. Next Step Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 135 61049135-NF 7.9 310 - Herbaceous Nonstocked NonForestMgt Herbaceous/Crop 31022 - Warm No Openland /Grass Planting Season Grass Prescription Remove exotics as needed by herbiciding, or other methods. Seed in annual crop for soil building for several years then convert to Specs: appropriate native mix for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry). Next Step **Treatments:** <u>Acceptable</u> Regen: Maintain as needed with mowing, burning, native shrub planting, seeding of native grasses/forbs or Forest Certification approved forage, or **Other** removal of woody encroachment. Comment: Site Condition Proposed Start Date: 10/1 /2021 138 61049138-Cut 24.1 4130 - Aspen Poletimber 111-Harvest Clearcut with No 413 - Aspen Even-Aged Well 140 Retention Prescription Final harvest stand, retain white pine in small pockets, specifically near rec trails. Also retain some white pine regen where it will not impede aspen regen - this will likely be done during sale admin process. In addition, retain some overstory oak, again specifically near rec trails. Specs: Next Step Monitoring, Natural Regen (Intermediate) Treatments: Acceptable Aspen, white pine, oak species, red maple, scattered balsam fir. Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 49 S Year of Entry: 2022 ŧ а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age n Method Age Objective Structure Name CoverType Density Range Type d 144 61049144-Cut 4 6 3105 - Mixed Nonstocked Harvest Clearcut with 3105 - Mixed **Upland Herbaceous** Retention Upland . Herbaceous Prescription Remove woody vegetation to barrens equivalent. Important trees to retain would be mature "wolf" trees of oak, pine or cherry, fruiting shrubs, and a scattering of other trees and shrubs. Should eventually burn to stimulate any existing seed bank and encourage existing Specs: native vegetation. Augment with additional native seeds/seedling as needed to diversify site for wildlife forage and cover. Eventually burn rotationally to maintain barrens dynamic. Remove invasive species mechanically or with herbicide treatment.

Next Step Burn, Opening; Seeding, Machine Seed; Pesticide, Hand Application Treatments:

Acceptable grasses and forbs

Regen:

Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment. Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

Strip/Patch/Gap 4116 - Mixed N. Sawtimber 72 4116 - Mixed N. 146 61049146-Cut 24.9 111-Harvest Nο Two-Aged Hardwood - Aspen Well 140 Cut Hardwood -(Femelschlag) Aspen

Prescription Remove aspen and beech throughout stand. Retain white pine and hemlock and thin/mark to leave higher quality trees in areas where more concentrated hardwoods are present, namely the central portion of the stand. In these areas of more concentrated hardwoods, retain ~40-Specs: 60 BA of good quality red maple, black cherry, red oak and some sugar maple.

Monitoring, Natural Regen (Intermediate) Next Step

**Treatments:** 

Acceptable Aspen, red maple, beech, white pine, black cherry and oak species.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

61049151-33.4 42111 - Planted SitePrep 42110 - Planted Even-Aged 151 Sapling Immatu Other - Specify No Prep Red Pine, Mixed Well Red Pine re Deciduous

Prescription Consider mechanical release of red pine by removing hardwood competition where possible.

Specs:

Next Step Monitoring, Herbicide Use

Treatments:

Acceptable Red pine at plantation spacing.

Regen:

**Other** Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/1 /2019

Habitat

Cut

Nο

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 49 S Year of Entry: 2022 t а **Treatment** Stand BA **Treatment** Treatment **Cover Type** Acres Stand Size Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d 162 61049162-NF 6.6 310 - Herbaceous Nonstocked NonForestMqt Fruit Tree/Shrub 3105 - Mixed Nο Upland Openland Planting 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. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food

Nevt Sten

Specs:

Next Step Treatments:

Acceptable Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

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

Next Step Treatments:

Acceptable Regen:

Other Or consider, disk, plant to annual rye for several years and then convert to appropriate native species mix. Comment:

and cover. Fertilize plantings and protect with wire cages or tubex.

Site Condition

Proposed Start Date: 10/1 /2021

144 NF\_61049144-12.53105 - MixedNonForestMgtHerbaceous/Crop3105 - MixedNoBrushUpland Herbaceous/Grass PlantingUplandHerbaceous

<u>Prescription</u> Selectively remove woody vegetation to barrens equivalent. Important trees to retain would be mature "wolf" trees of oak, pine or cherry, fruiting shrubs, and a scattering of other trees and shrubs. Should eventually burn to stimulate any existing seed bank and encourage

existing native vegetation. Augment with additional native seeds/seedling as needed to diversify site for wildlife forage and cover. Eventually burn rotationally to maintain barrens dynamic. Remove invasive species mechanically or with herbicide treatment.

Next Step
Treatments:

Acceptable

Regen:

**Other** 

Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Total Treatment 531.9 Acreage Proposed:

Compartment: 49

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Availa	ability for	Managemer	nt										
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	ditions	S				
Acres	Available	With Condition	Not Available		5B	5C	2F	2G	2H	3D	3G	3J	5E
1562	1227	253	82	Aspen		253	6		25	38	0		12
935	0	0	935	Cedar				848			87		
15	15	0	0	Cropland									
125	125	0	0	Herbaceous Openland						0	0		
10	0	0	10	Jack Pine						2		8	
82	5	0	77	Lowland Aspen/Balsam Poplar				62				15	
66	0	0	66	Lowland Conifers				66					
261	0	0	261	Lowland Deciduous				237			25		
43	43	0	0	Lowland Mixed Forest						0			
20	20	0	0	Lowland Shrub									
31	31	0	0	Marsh									
52	0	52	0	Mixed Upland Deciduous		52							
351	214	37	100	Northern Hardwood	27	10	37			0	63		
3	3	0	0	Oak									
258	258	0	0	Red Pine		0				0			
61	37	0	24	Upland Conifers							24		
13	7	6	0	Upland Mixed Forest		6							
4	4	0	0	Upland Shrub									
5	5	0	0	Urban						0			
33	33	0	0	White Pine									
3,931	2,027	348	1,556	Total Forested Acres	27	321	44	1,213	25	41	199	23	12
	52%	9%	40%	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	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1 Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						

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2	Unavailable	3G: Other Influence zones - See comments	24	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: See stand commen	ts					
3	Unavailable	3G: Other Influence zones - See comments	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: See stand Commer	nts					
1	Unavailable	3G: Other Influence zones - See comments	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: See stand commen	ts					
5	Unavailable	3G: Other Influence zones - See comments	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: See stand commen	ts					
6	Unavailable	3G: Other Influence zones - See comments	72	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Riparian area along	the Boardman River					
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Traces of black che	erry, ironwood, red oak, white as	sh in can	opy. Stand converting to	low quality hardwood. Consi	der clearcut to maintain a	spen if desired.

Compartment: 49

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8	Unavailable	3G: Other Influence zones - See comments	24	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: See stand commer	nts					
9	Unavailable	3D: Recreational / Scenic values	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Small area of jack pyears or cut now.	oine next to the Grawn Field Of	fice. Cł	neck with staff at Grawn Field	Office to see if they wo	uld prefer to have this stand	retained for ten more
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	307	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified
	Comments: very wet, WLD reco	ommends holding for deer cove	er as we	ell.			
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	50	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	3D: Recreational / Scenic values	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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С		3D: Recreational / Scenic values	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
15	Unavailable	2F: Too steep	18	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Unavailable	3D: Recreational / Scenic values	20	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
17	Unavailable	2F: Too steep	20	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: /linimal opportunity	r for landing areas, stand also c	ontains s	eeps along eastern edge.			
18	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
19	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
20	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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21	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
23	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	53	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
24	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
25	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
26	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	786	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

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27	Unavailable	5E: Long-Term Retention	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
28	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
29	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	15	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
C	Comments:						
30	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
31	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
32	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	98	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

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33	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	44	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
34	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	18	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
35	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
36	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
37	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
38	Available	5B: Maintain for regeneration purposes	27	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

Compartment: 49

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39	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
40	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Potential to reevalu	ate next YOE for access, high v	vater tab	le at time of inventory ma	kes this upland island inac	ccessible.	
41	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
42	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Mgt. Unit Compartment: 049
Year of Entry: 2022



## 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
	Spring Wetlands Riparian Area	Spring Seep	SCA	39
Comments				
Multiple springs, seeps and	riparian areas.			
	Spring Wetlands Riparian Area	Spring Seep	SCA	49
Comments				
Multiple springs, seeps and	riparian areas.			
	Spring Wetlands Riparian Area	Spring Seep	SCA	49
Comments				
Multiple springs, seeps and	riparian areas.			
	Spring Wetlands Riparian Area	Spring Seep	SCA	61
<b>Comments</b> Multiple springs, seeps and	riparian areas.			

Traverse City Mgt. Unit Compartment: 49
Year of Entry 2022



## 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 specific 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 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.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	s Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts

Report 7 - Stands



Stan	d Level 4 C	over Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments						
1	6132 - Mixed Lo C	wland Fore edar	est with	Sawtimb	er Well	36.2	105	81-110	N/A		dense stand of cedar with hemlock, birch, red maple and balsam fir present as well. Stand occupies riparian area along Bietner Creek.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Numerous springs and seeps.
	Red Maple	30	Log/Pole	12		Bal	sam Fir	Low	Variable	Sapling	
	Yellow Birch	5	Pole/Log	8		Northern	White Cedar	Low	Variable	Sapling	
No	orthern White Cedar	30	Pole/Log	9	105	He	emlock	High	Variable	Sapling	
	Tamarack	3	Log/Pole	12		Bla	ick Ash	Low	Variable	Sapling	
	White Pine	5	Log	16							•
	Hemlock	20	Pole/Log	9							
2	4110 - Sugar N	/laple Assoc	ciation	Sawtimb	er Well	17.7	105	171-200	N/A		very steep slopes throughout stand rendering much of stand area
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	inoperable. areas of stand have very nice sugar maple regen and nice saplings and poles, other pockets are dominated by larger log sized
	Sugar Maple	85	Log/Pole	11	105	Iro	nwood	Medium	5 - 10 feet	Sapling	sugar maple with scattered basswood, beech and occasional ash.
	Basswood	5	Log	14		Sug	ar Maple	Medium	< 5 feet	Sapling	Portion of stand was treated under tsale contract 610841201 in
	White Ash	5	Log/Pole	12		Не	emlock	Low	10 - 20 feet	Sapling	summer/winter, 2015 by Billsby Lumber. Has been separated and is now stand 171.
	Beech	5	Log/Pole	12		Е	Beech	Low	5 - 10 feet	Sapling	Stand 171.
3	<b>3</b> 4130 - Aspen Sa		Sawtimb	er Well	19.9 63 N			N/A		Aspen stand with ~2/3's of stand area on steeper west facing slope,	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	majority of level stand area is near Hoosier Valley road ROW. Variable understory stocking with some more dense pockets.
	Sugar Maple	15	Pole/Log	8		Е	Beech	Low	Variable	Sapling	
	Basswood	5	Pole/Log	8		Wh	ite Pine	Low	Variable	Sapling	
	Bigtooth Aspen	60	Log/Pole	10	63						
	White Pine	15	Pole/Log	12							
	Black Cherry	5	Pole/Log	8							
4	4110 - Sugar M	Maple Assoc	ciation	Sawtimb	er Well	19.6	80	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	80	Log/Pole	10	80	Iro	nwood	Medium	Variable	Sapling	
	Red Maple	10	Pole/Log	8							
	Basswood	5	Pole/Log	8							
	White Ash	5	Log/Pole	10							
5	310 - Herbac	eous Open	land	Nonsto	ocked	1.8	U	nspecified	No		Small fire occurred on 4/20/20 within stand.
6	4110 - Sugar N	laple Assoc	ciation	Sawtimb	er Well	9.3	96	81-110	N/A		Stand was treated under contract 610841201 by Billsby Lumber company
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	in the summer/winter of 2015. Sugar maple regeneration is dense in areas of this multi-part stand, much of it has advanced to 2-4' tall, some
	Sugar Maple	80	Log/Pole	11	96	Sug	ar Maple	Low	Variable	Sapling	areas of more dense ironwood regen.
								-		1	†
	Red Maple	10	Pole/Log	8		E	Beech	Low	Variable	Sapling	



Stand	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age E	A Range	Managed Site		General Comments
7	42110 - Pla	nted Red P	ine	Sawtimb	er Well	15.7	59	141-170	N/A		Stand is growing well, good quality overall with some defect present
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	throughout. Thin stand to remove defect and move stand to a more appropriate stocking level.
	Red Pine	100	Log/Pole	10	59	Sug	gar Maple	Low	5 - 10 feet	Sapling	Stand was treated under contract 019-12-01 in spring/summer 2014 by
						W	hite Ash	Low	5 - 10 feet	Sapling	Proctor Logging. Small fire occurred within stand on 4/20/20.
							Beech	Low	5 - 10 feet	Sapling	Small fire occurred within stand on 4/20/20.
						Autı	umn Olive	Medium	5 - 10 feet	Tall Shrub	
8	310 - Herbac	eous Open	land	Nonst	ocked	3.9			No		Area of chronic dumping of both household and yard debris.
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Apı	ple (spp.)	Low			
						Re	ed Maple	Trace		Pole	
						WI	hite Pine	Trace		Log	
						Bla	ck Cherry	Trace		Pole	
9	4133 - Aspe	en, Mixed P	ine	Sawtimb	er Well	10.5	70		N/A		aspen dominant overall however a pocket of white pine exists in southern
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	portion along with some pockets of sugar maple and basswood making a mixed stand. stand includes small red pine plantation inclusion in
	Sugar Maple	20	Log/Pole	10		WI	hite Pine	Low	Variable	Sapling	northern tip, unthinned. Also, small area surrounding this red pine is
	Bigtooth Aspen	45	Log/Pole	10	70	Ire	onwood	Medium	Variable	Sapling	slightly more open and of generally smaller diameter trees. potential
	White Pine	20	Log/Pole	10							treatment to remove aspen and retain some white pine for aesthetics.
	Basswood	15	Log/Pole	12							
10	4110 - Sugar N	Maple Asso	ciation	ciation Poletimber Well 2.5 82 111-140 N/A			fair quality hardwood pocket, ash declining rapidly with a few trees				
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	holding on. light beech and ironwood understory, sugar maple is multi sized with some small poles in the intermediate canopy layer. could treat
	Sugar Maple	70	Pole/Log	9	82	Sug	gar Maple	Low	Variable	Sapling	if adjacent aspen is cut.
	Basswood	15	Log/Pole	10		Ire	onwood	Low	Variable	Sapling	
	White Ash	5	Pole/Log	8							•
	Beech	5	Pole/Log	8							
	Bigtooth Aspen	5	Pole/Log	8							
11	4130	- Aspen		Poletimb	er Well	6.2	70	81-110	N/A		mixed stand dominated by Aspen with red and sugar maple present
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	throughout, white pine also a significant component. understory is advanced in some areas. consider harvesting stand with aspen
	Sugar Maple	10	Pole/Log	9		Re	ed Maple	Low	Variable	Sapling	regeneration being the goal along with aesthetic concerns along HV road.
	Red Maple	10	Pole	7		Ва	ılsam Fir	Low	Variable	Sapling	steep slopes in northern portion of stand may need to be avoided.
	Bigtooth Aspen	70	Pole/Log	9	70	WI	hite Pine	Low	Variable	Sapling	
	White Pine	10	Log/Pole	10		Ire	onwood	Medium	Variable	Sapling	
						Wit	tch Hazel	Low	5 - 10 feet	Tall Shrub	



Stand	Level 4 C	over Type		Size De	nsity	Acres Stand Age I	BA Range	Managed Site		General Comments			
12	4130	- Aspen	ı	Poletimber Well		8.7 63		N/A		mediocre quality aspen stand growing on somewhat steep slope. could			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	treat by final harvest retaining oak and conifers as residual. expect good aspen regen based on adjacent harvests.			
	Red Maple	10	Pole/Log	8		Red Pine	Low	Variable	Sapling	aopon rogon bassa on adjassin narvosis.			
	Bigtooth Aspen	80	Pole	8	63	Ironwood	Medium	5 - 10 feet	Sapling				
	Black Cherry	5	Pole	7		White Pine	Low	5 - 10 feet	Sapling				
	Red Oak	5	Pole	8									
13	310 - Herbac	eous Open	ıland	Nonsto	ocked	2.1		No					
14	14 6132 - Mixed Lowland Forest with Cedar			Sawtimb	er Well	6.5 105 111-140		N/A		Stand is upper most reaches of Bietner Creek riparian area. numerous springs and seeps present feeding creek, saturated soils common, quite			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	a few larger boulders scattered throughout stand.			
	Red Maple	35	Log	14	105	Red Maple	Low	Variable	Sapling				
	Basswood	5	Log	13		Hemlock	Medium	Variable	Sapling				
	Bigtooth Aspen	5	Log	14		Black Ash	Low	Variable	Sapling				
No	rthern White Cedar	20	Log/Pole	10									
	White Pine	3	Log	15									
	Hemlock	25	Log/Pole	10									
	Black Ash	2	Pole/Log	8									
15	310 - Herbac	eous Open	ıland	Nonsto	ocked	8.7		No		Stand contains area historically used as a shooting range and hill climb. Efforts last entry period to control use were partially successful. Installation of fence has stopped ORV activity. Area remains a problem from a garbage/trash area. Users continue to leave large quantities of shooting related debris on site.			
16	6 4110 - Sugar Maple Association		ciation 5	Sawtimb	er Well	20.2 94	81-110	N/A		Stand growing well following treatment, minimal epicormic branching on stems adjacent to more open gaps. Regeneration consists mainly of			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	beech and ironwood with occasional trace cherry and sugar maple.			
	Sugar Maple	90	Log/Pole	10	94	Beech	Medium	< 5 feet	Sapling	Some browse taking place on regen. Stand was treated under tsale			
	Basswood	10	Log/Pole	12		Ironwood	Medium	5 - 10 feet	Sapling	contract 610841201 by Billsby Lumber in summer/winter 2015. Traces of white ash in canopy. Traces of hemlock in sub canopy.			
						Hemlock	Low	10 - 20 feet	Pole	write astriit carropy. Traces of hermock in sub-carropy.			
17	4130	- Aspen		Sapling	y Well	8.8 15	Immature	N/A		regenerating stand with red and and red maple retained during harvest as overstory, trace spruce and white pine as well.			
	Canopy Species	% Cover			l Age					oversions, trace spruce and write prine as well.			
	Red Maple	5	Log/Pole	10									
	Red Oak	5	Log	14									
	Bigtooth Aspen	90	Sapling	2	15								

## Report 7 - Stands



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
18	4130	- Aspen		Sapling	Well	4.7	15	Immature	N/A		Trace amounts of white pine, red maple, black cherry, hemlock, and
	Canopy Species	% Cover	Size Class	DBH	Age						balsam fir present (retained from previous harvest). Aspen regen is growing quite well with a fair amount of red maple, black cherry and red
	Red Maple	20	Sapling	1	15						oak scattered throughout as well.
	Bigtooth Aspen	65	Sapling	1	15						· ·
	Black Cherry	10	Sapling	1	15						
	Red Oak	5	Sapling	2							
19	310 - Herbac	eous Open	land	Nonsto	cked	2.7			No		
20	4112 - Maple Asso	, Beech, Ch	nerry S	Sawtimb	er Well	21.2	80	81-110	N/A		Steep north facing slope, fair quality hardwoods throughout. Hemlock understory providing nice thermal cover in areas, fair amount of wildlife
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	activity within stand.
	Sugar Maple	40	Log/Pole	12	80		Beech	Low	Variable	Sapling	
	Red Maple	35	Pole/Log	12		F	lemlock	High	10 - 20 feet	Sapling	
	Basswood	15	Log/Pole	12		Ir	onwood	Low	< 5 feet	Sapling	
	Beech	5	Log	12							_
21	3105 - Mixed U	pland Herba	aceous	Nonsto	cked	0.8		Unspecified			Plugged 12/10/2010, rehab status unknown.
22	4130	- Aspen	ſ	Poletimb	er Well	9.6	68		N/A		The historic 'Hoosier Valley Shooting Range' was recently closed, this
	Canopy Species	% Cover	Size Class	DBH	Age						stand breaks up the open area surrounding and between the old ranges. Recommend leaving this stand until next YOE and then regenerating
	Red Maple	10	Pole/Sapling	7							possibly with stand 23. Stand itself is mediocre BTA, quite variable in
	Red Oak	5	Log	14							terms of size and some variability in stocking.
	Bigtooth Aspen	80	Pole/Sap/Log	g 8	68						
	Black Cherry	5	Pole/Sapling	5							
23	4130	- Aspen	F	Poletimb	er Well	7.8	35	Immature	N/A		aspen stand with red oak and red maple present. some variability in
	Canopy Species	% Cover	Size Class	DBH	Age						terms of size with majority being small pole sized, ut also some larger and smaller trees present, records indicate this stand resulted from a fire
	Red Maple	10	Log/Pole	10							a more recent fire from 2017 burned small area along western edge.
	Red Oak	10	Log	12							
	Bigtooth Aspen	80	Pole/Sapling		35						
24	310 - Herbac	ceous Open	land	Nonsto	cked	4.2			No		Shooting range area. Same as PI stand number 14.



Stand	Level 4 C	Level 4 Cover Type			nsity	Acres Stand Age BA Range		Managed Site		General Comments MICHIGAN
25	4116 - Mixed N.	Hardwood	- Aspen F	Poletimb	er Well	8.9 60	81-110	N/A		Traces of hemlock and elm in canopy, consider treating stand by
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Specie	es Density	Avg. Height	Size	removing merchantable aspen and red maple for regeneration purpose avoid any wet areas and/or sensitive soils along south side of stand,
	Sugar Maple	20	Pole/Sapling	6		Red Maple	Low	Variable	Sapling	retain most conifers and portions of red oak component for mast
	Red Maple	35	Pole/Sapling	6	60	Hemlock	Low	Variable	Pole	production.
	Basswood	10	Pole/Log	8		Ironwood	Low	Variable	Sapling	
	Quaking Aspen	30	Pole/Log	8		Musclewood/Hornbea	am Low	5 - 10 feet	Tall Shrub	
	Black Cherry	5	Pole/Log	8		Hawthorn (spp.)	Low	5 - 10 feet	Tall Shrub	
26	4130	- Aspen	F	Poletimb	er Well	20.8 57		N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Specie	es Density	Avg. Height	Size	
	Red Maple	17	Pole	8		Red Maple	Low	Variable	Sapling	
	Bigtooth Aspen	80	Pole	8	57	White Pine	Low	Variable	Sapling	
	White Pine	3	Pole	8		Red Oak	Low	5 - 10 feet	Sapling	
				•		Ironwood	Low	5 - 10 feet	Sapling	
27	4311 - Pin	ie, Aspen M	1ix F	Poletimb	er Well	6.4 78	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Specie	es Density	Avg. Height	Size	
	Red Maple	8	Pole/Sapling	6		White Pine	Medium	Variable	Sapling	
	Red Oak	2	Pole/Log	9	1					•
	Bigtooth Aspen	40	Pole	5	45					
	White Pine	50	Pole/Sap/Log	g 8	78					
28	4130	- Aspen	F	Poletimb	er Well	67.8 45	51-80	N/A		apen dominated stand with a significant component of white pine and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Specie	es Density	Avg. Height	Size	some pockets of red oak concentrated mainly in the western half of stand. red maple and black cherry present throughout as well. western
	Red Maple	5	Pole/Sapling	5		White Pine	Medium	Variable	Sapling	portion where larger oak are present is more open, has an oak Savanr
	Red Oak	2	Pole/Log	9		Black Cherry	Medium	5 - 10 feet	Sapling	character. overall aspen is small to medium size pole diameter. allowing
	Quaking Aspen	46	Pole/Sap/Log	7	45		,			stand to grow one more entry year would be ideal especially with the amount of aspen present in the compartment ready for harvest.
	Bigtooth Aspen	30	Pole/Log	8	45					amount of aspen present in the compartment ready for harvest.
	White Pine	12	Pole/Log	9						
	Black Cherry	5	Pole/Sapling	6						
29	42111 - Planted Dec	d Red Pine, ciduous	Mixed F	Poletimb	er Well	3.3 59	141-170	N/A		small stand of unthinned red pine, could grow thin or retain long term f thermal cover as suggested in previous inventory.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Specie	es Density	Avg. Height	Size	
	Red Maple	3	Pole/Log	9		Black Cherry	Low	Variable	Sapling	
	Red Oak	2	Log	12		-		1		1
	Bigtooth Aspen	15	Pole	8						
	Red Pine	80	Pole	7	59					
	310 - Herbad	nagua Onan	aland	Noneta	alcad	2.2		NI.		
30	310 - Heibac	eous Oper	nanu	Nonsto	icked	2.2		No		



Stan	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
31	4130	- Aspen	I	Poletimb	er Well	58.0	52	111-140	N/A		treat all or portion of stand depending on what is needed from this 50
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	year old age class. aspen is growing well, still showing signs of vigor with minimal overstory mortality, options for retention include islands along
	Red Maple	3	Pole	7		Re	ed Maple	Low	Variable	Sapling	with individual trees scattered for aesthetics and mast production.
	Red Oak	2	Log/Pole	12		W	hite Pine	Low	Variable	Sapling	
	Quaking Aspen	20	Pole/Log	8	52	Bla	ck Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	70	Pole/Log	9	52	Wit	tch Hazel	Low	5 - 10 feet	Tall Shruk	
	White Pine	2	Log/Pole	10							-
	Black Cherry	3	Pole	7							
32	3104 -	Degraded		Nonst	ocked	2.2		Unspecified			
33	42201 - Natural Dec	White Pine	, Mixed	Poletimb	oer Well	3.9	78	81-110	N/A		white pine dominated stand with aspen scattered throughout. oak that is present is fairly good quality. stand provides a. I e breakup of aspen with
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	nice diversity and thermal cover provided. retain for these reasons if/when surrounding aspen is treated.
	Bigtooth Aspen	30	Pole	6		W	hite Pine	High	>20 feet	Sapling	inwhen surrounding aspen is freated.
	White Pine	64	Pole/Sap/Log	g 7	78			'	1	'	-
	Red Maple	2	Pole	7							
	Red Oak	2	Pole	8							
34	42201 - Natural Dec	White Pine	, Mixed	Poletimb	per Well	10.2	71	141-170	N/A		Natural white pine, several clusters of log sized trees with natural regeneration of various sizes and ages throughout. Age is for some of the
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	larer white pine. aspen is scattered throughout but much more prevalent along edges, interior is more pure white pine of various size/age. trace
	Red Maple	10	Pole	7		W	hite Pine	Low	Variable	Sapling	large sugar maple.
	Quaking Aspen	15	Pole	7		Bla	ck Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	10	Pole	8							
35	3104 -	Degraded		Nonst	ocked	2.6		Unspecified			
36	4130	- Aspen		Saplin	-	28.9	16	Immature	N/A		aspen growing well, re pine and occasional oak and red maple in overstory providing nice vertical structure and a seed/mast source. some
	Canopy Species	% Cover	Size Class	DBH	H Age						red and white pine along with red oak regen developing under aspen.
	Red Maple	5	Sapling	1	16						,
	Bigtooth Aspen	75	Sapling	1	16						
	Red Pine	13	Pole/Log	8	65						
	Black Cherry	5	Sapling	1	16						
	Red Oak	2	Log/Pole	12							

Compartment: 49 Year of Entry: 2022



	Level 4 Cover Type Size Density		Acres Stand Age E	oA Nalige	Managed S	Site	General Comments			
37	42121 - Planted Dec	Jack Pine iduous	, Mixed Pole	timbe	r Mediu	m 7.8 66	1-50	N/A		Portions of this stand are marginally lowland. Stand occupies a seasor drainage and margins and lies on an area of generally high water table
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	overall lowly stocked and poor quality. Retain stand for cover and for water quality purposes.
	Red Maple	5	Pole/Log	8		Balsam Fir	Medium	Variable	Sapling	water quality purposes.
	Quaking Aspen	10	Sapling/Pole	2	17	Black Cherry	Medium	Variable	Sapling	
	Bigtooth Aspen	5	Pole	8		Prickly Ash	Low	Variable	Tall Shrub	
	Jack Pine	75	Pole	6	66	Unlisted - See Comment	s Medium	Variable	Tall Shrub	
38	42110 - Pla	nted Red F	Pine Po	letimb	er Wel	38.8 65	141-170	N/A		multi part stand row thinned two entry periods ago, somewhat erratic
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	rows in portions of stand. ba is variable as is size and quality in spots, overall stocking hovers in 150-180 range on average. overall size of re
	Red Maple	10	Log	12		Bigtooth Aspen	Low	5 - 10 feet	Sapling	pine is ~9", could be called log sized overall, right at the cusp. signification
	Bigtooth Aspen	5	Pole/Log	8		Red Maple	Low	5 - 10 feet	Sapling	amount of suppressed smaller poles was determining factor in calling
	Red Pine	81	Pole/Log	9	65	Witch Hazel	Low	5 - 10 feet	Tall Shrub	overall pole sized. red pine are definitely pole and log size though. cou
	Black Cherry	2	Log/Pole	10				<u>I</u>		mark to thin, consider removing deciduous component at this time and protect pockets of aspen regen. Overall aspen and red maple underst
	Red Oak	2	Log/Pole	12						component are low density but there are pockets/areas of stand where
39	4130	- Aspen	Po	letimh	er Wel	24.6 52		N/A		stems are a bit more concentrated.  aspen stand with red maple, white pine, cherry and scattered oak
33	Canopy Species				l Age		Density		C:	throughout. decent quality, some variability in terms of size and stocking
	Red Maple	5 Cover	Size Class Pole	7	Age	Sub-Canopy Species White Pine	<b>Density</b> Medium	Avg. Height  Variable	Size Sapling	higher quality than stand 164 to the west. if aspen is needed from this age class, consider this stand for treatment, removing all aspen and re
	Quaking Aspen	60	Pole	6	52	Black Cherry	Low	Variable	Sapling	maple and retaining some individual trees and/or clumps/islands for
	Bigtooth Aspen	18	Pole	7	52	Witch Hazel	Low	5 - 10 feet	Tall Shrub	diversity, aesthetics and a mast/seed source.
	White Pine	10	Pole/Sapling	7	02	VVIIOTITIAZOI	LOW	0 101000	Tall Official	
	Black Cherry	5	Pole/Log	8						
	Red Oak									
		7	Pole/Loa	8						
40	4116 - Miyed N	2 Hardwood	Pole/Log	8 wtimb	or Wol	2.1 65	91 110	NI/A		Small hardwood stand fair quality. Providing pice diversity in area of
40	4116 - Mixed N.	Hardwood	- Aspen Sa	wtimb	er Wel		81-110 Density	N/A Ava Height	Size	Small hardwood stand, fair quality. Providing nice diversity in area of aspen regeneration and conifer swamp further to the south.
40	Canopy Species	Hardwood	- Aspen Sa	wtimb <b>DB</b> F	er Wel	Sub-Canopy Species	Density	Avg. Height	<b>Size</b>	
40	Canopy Species Sugar Maple	Hardwood  **Cover** 10	- Aspen Sa Size Class Pole/Log	wtimb	I Age	Sub-Canopy Species Red Maple	<b>Density</b> Low	Avg. Height Variable	Sapling	
40	Canopy Species Sugar Maple Red Maple	Hardwood  **Cover* 10 50	- Aspen Sa Size Class Pole/Log Log/Pole	DBH 9		Sub-Canopy Species Red Maple Balsam Fir	Density Low Medium	Avg. Height  Variable  Variable	Sapling Sapling	
40	Canopy Species Sugar Maple Red Maple Basswood	Hardwood  **Cover 10 50 3	- Aspen Sa Size Class Pole/Log Log/Pole Log/Pole	9 10 12	I Age	Sub-Canopy Species Red Maple	<b>Density</b> Low	Avg. Height Variable	Sapling	
40	Canopy Species Sugar Maple Red Maple Basswood Red Oak	Hardwood  % Cover  10  50  3  2	- Aspen Sa Size Class Pole/Log Log/Pole Log/Pole Log/Pole	9 10 12 12	I Age	Sub-Canopy Species Red Maple Balsam Fir	Density Low Medium	Avg. Height  Variable  Variable	Sapling Sapling	
40	Canopy Species Sugar Maple Red Maple Basswood	Hardwood  **Cover 10 50 3	- Aspen Sa Size Class Pole/Log Log/Pole Log/Pole	9 10 12	I Age	Sub-Canopy Species Red Maple Balsam Fir	Density Low Medium	Avg. Height  Variable  Variable	Sapling Sapling	
40	Canopy Species Sugar Maple Red Maple Basswood Red Oak Quaking Aspen Bigtooth Aspen	Hardwood  % Cover  10  50  3  2  20	- Aspen Sa Size Class Pole/Log Log/Pole Log/Pole Log/Pole Pole/Log Pole/Log	9 10 12 12 8 9	I Age	Sub-Canopy Species  Red Maple  Balsam Fir  White Pine	Density Low Medium	Avg. Height  Variable  Variable	Sapling Sapling	aspen regeneration and conifer swamp further to the south.  aspen regenerating well along with white pine, red oak and red maple.
	Canopy Species Sugar Maple Red Maple Basswood Red Oak Quaking Aspen Bigtooth Aspen	Hardwood  % Cover  10 50 3 2 20 15 - Aspen	- Aspen Sa Size Class Pole/Log Log/Pole Log/Pole Log/Pole Pole/Log Pole/Log	9 10 12 12 8 9	65	Sub-Canopy Species  Red Maple  Balsam Fir  White Pine	Density Low Medium Low	Avg. Height Variable Variable Variable	Sapling Sapling	aspen regeneration and conifer swamp further to the south.  aspen regenerating well along with white pine, red oak and red maple. scattered fir present as well throughout stand. overstory red oak, red
	Canopy Species Sugar Maple Red Maple Basswood Red Oak Quaking Aspen Bigtooth Aspen	Hardwood  % Cover  10 50 3 2 20 15 - Aspen	- Aspen Sa  Size Class  Pole/Log  Log/Pole  Log/Pole  Log/Pole  Pole/Log  Pole/Log  Solution	9 10 12 12 8 9	Age 65 65 Well	Sub-Canopy Species  Red Maple  Balsam Fir  White Pine	Density Low Medium Low	Avg. Height Variable Variable Variable	Sapling Sapling	aspen regeneration and conifer swamp further to the south.  aspen regenerating well along with white pine, red oak and red maple.
	Canopy Species Sugar Maple Red Maple Basswood Red Oak Quaking Aspen Bigtooth Aspen 4130 Canopy Species	Hardwood  % Cover  10 50 3 2 20 15 - Aspen  % Cover	- Aspen Sa  Size Class  Pole/Log  Log/Pole  Log/Pole  Log/Pole  Pole/Log  Pole/Log  Size Class	9 10 12 12 8 9 Sapling	Age 65 65 Well	Sub-Canopy Species  Red Maple  Balsam Fir  White Pine	Density Low Medium Low	Avg. Height Variable Variable Variable	Sapling Sapling	aspen regeneration and conifer swamp further to the south.  aspen regenerating well along with white pine, red oak and red maple. scattered fir present as well throughout stand. overstory red oak, red
	Canopy Species Sugar Maple Red Maple Basswood Red Oak Quaking Aspen Bigtooth Aspen 4130 Canopy Species Red Maple	Hardwood  % Cover  10 50 3 2 20 15  - Aspen  % Cover	- Aspen Sa Size Class Pole/Log Log/Pole Log/Pole Log/Pole Pole/Log Pole/Log Size Class Sapling	9 10 12 12 8 9 Sapling	65 65 Well	Sub-Canopy Species  Red Maple  Balsam Fir  White Pine	Density Low Medium Low	Avg. Height Variable Variable Variable	Sapling Sapling	aspen regeneration and conifer swamp further to the south.  aspen regenerating well along with white pine, red oak and red maple. scattered fir present as well throughout stand. overstory red oak, red

5

Sapling

3

Balsam Fir



Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
		Mixed	Poletimb	er Well	18.3	65	171-200	N/A		red pine plantation that has significant aspen component along with some red maple and red oak. southern fingers of stand contain more Aspen
Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	than red pine. pockets of plantation are more pure red pine, mainly in western lobe but majority is mixed at this point and any treatment would
Red Maple	5	Pole/Log	8				Low	Variable	Sapling	likely result in aspen regeneration making future management of red pine
Bigtooth Aspen	25	Pole/Log	8		Blac	k Cherry	Low	Variable	Sapling	difficult. consider treating by final harvest. retaining a pocket or two of red
Red Pine	65	Pole/Log	8	65			,			pine as long term retention.
4130	- Aspen		Poletimb	er Well	35.2	54 U	nspecified	N/A		good quality aspen, fairly uniform density with some variability in size and
Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	quality. corners present along southern line, consider treating stand or portions of it to continue to break up age classes in this area. options for
Red Maple	13	Pole	7		Red	d Maple	Low	Variable	Sapling	retention include retaining islands and/or individual trees for aesthetics
Quaking Aspen	20	Pole	8		Wh	ite Pine	Low	Variable	Pole	and mast/seed production.
Bigtooth Aspen	60	Pole/Log	9	54	Re	ed Pine	Low	Variable	Pole	
White Pine	3	Pole/Log	9		Wite	ch Hazel	Low	5 - 10 feet	Tall Shrub	
Black Cherry	2	Pole	7				'	1	'	•
Red Oak	2	Log/Pole	12							
310 - Herbac	eous Open	land	Nonsto	ocked	1.4			No		
					29.7	7	1-50	N/A		Stand harvested under tsale contract 058-12-01, white pine retention left along southern sale boundary, also retention islands along with scattered
										red oak, white pine and red maple individuals throughout stand.
				7						regeneration is doing well, balsam fir and white pine regen providing good
										thermal cover.
· · · · · · · · · · · · · · · · · · ·			_							
Red Oak	2	Log	12							
6112 - Lo	wland Aspe	en	Poletimb	er Well	15.3	60		N/A		small lowland aspen stand looks to be seasonally wet. originally part of
Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	adjacent stand 45 but left as retention and/or because it was deemed too wet. low quality, good regen working it's way into canopy. recommend not
Red Maple	15	Pole	8		Red	d Maple	Medium	Variable	Sapling	harvesting at this time.
Quaking Aspen	80	Pole	7	60	Bal	sam Fir	Medium	Variable	Sapling	
Balsam Fir	2	Pole	7	12	Pric	kly Ash	Medium	< 5 feet	Tall Shrub	
White Pine	3	Log/Pole	12		Dogw	ood (spp.)	Medium	< 5 feet	Tall Shrub	
3202 - Autumn (	Olive/Hone	ysuckle	Nonsto	cked	2.1			Managed O	pening	
							Density	Avg. Height	Size	
					Autu	mn Olive	High		Tall Shrub	
					Ja	ck Pine	Low		Sapling	
310 - Herbac	eous Open	land	Nonsto	ocked	2.6	U	nspecified			
310 - Herbaceous Openland Nonstocked					1.9			No		
	42111 - Planted Dec Canopy Species Red Maple Bigtooth Aspen Red Pine  4130 Canopy Species Red Maple Quaking Aspen Bigtooth Aspen White Pine Black Cherry Red Oak  310 - Herbac  Canopy Species Bigtooth Aspen White Pine Red Maple Red Oak  6112 - Loo Canopy Species Red Maple Red Oak  3202 - Autumn G	42111 - Planted Red Pine, Deciduous  Canopy Species	Canopy Species % Cover Size Class Red Maple 5 Pole/Log Red Pine 65 Pole/Log Red Pine 65 Pole/Log Red Maple 13 Pole Quaking Aspen 20 Pole Bigtooth Aspen 60 Pole/Log White Pine 3 Pole/Log Red Oak 2 Log/Pole  Canopy Species % Cover Size Class Red Maple 13 Pole Quaking Aspen 20 Pole Bigtooth Aspen 60 Pole/Log White Pine 3 Pole/Log Red Oak 2 Log/Pole  Canopy Species % Cover Size Class Bigtooth Aspen 73 Sapling White Pine 15 Pole Red Maple 10 Sapling/Pole/I Red Oak 2 Log  6112 - Lowland Aspen  Canopy Species % Cover Size Class Red Maple 10 Sapling/Pole/I Red Oak 2 Log  6112 - Lowland Aspen  Canopy Species % Cover Size Class Red Maple 15 Pole Quaking Aspen 80 Pole Balsam Fir 2 Pole White Pine 3 Log/Pole  3202 - Autumn Olive/Honeysuckle	A2111 - Planted Red Pine, Mixed Deciduous	A2111 - Plantad Red Pine, Mixed   Poletimber Well   18.3   65   171-200   N/A					



Stand	d Level 4 C	over Type		Size Dei	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
50	4110 - Sugar M	Maple Assoc	ciation	Sawtimbe	er Well	38.2	70	81-110	N/A		Stand was harvested under tsale contract 050-12-01, completed in
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	fall/winter 2014 by Zoscsak Logging. Stand is responding fairly well to thinning, overstory seems to be growing well and is decent quality.
	Sugar Maple	72	Log/Pole	10	70	[	Beech	Medium	< 5 feet	Sapling	Desirable regeneration however is lacking as majority of regeneration is
	Red Maple	15	Log/Pole	10		Н	emlock	Low	>20 feet	Pole	beech, ironwood with only scattered red and sugar maple regen.
	Basswood	5	Log/Pole	10		Iro	onwood	Medium	< 5 feet	Sapling	
	Beech	5	Log/Pole	12							
	Black Cherry	3	Pole	7							
51	623 - Emer	gent Wetla	nd	Nonsto	cked	3.5			No		Standing dead jack pine snags. Area appears to be seasonally flooded,
						Sub-Ca	nopy Species	Density	Avg. Height	Size	but unsure of level 3 call.
						Ja	ick Pine	Low		Pole	
						Quak	king Aspen	Medium		Pole	
52	4199 - Other Mixe	d Upland D	eciduous	Poletimbe	er Well	23.4	66	81-110	N/A		mediocre quality hardwoods with aspen present throughout. white pine more prevalent in eastern portion of stand. scattered hemlock in
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	understory, could potentially treat by removing aspen, retaining some
	Sugar Maple	25	Log/Pole	11	66	E	Beech	Low	< 5 feet	Sapling	white pine and sugar maple as a seed source, with the focus being on
	Red Maple	30	Pole	8	66	Wh	nite Pine	Low	5 - 10 feet	Sapling	regenerating aspen and some hardwoods.
	Quaking Aspen	5	Pole	7		Iro	onwood	Medium	Variable	Sapling	
	Bigtooth Aspen	30	Pole	8	66						
	White Pine	10	Pole/Log	9							
53	42110 - Pla			Sawtimbe		3.5	60	141-170	N/A		small stand, good quality. small amount of defect remains. thin one more time removing remaining defect and to improve overall stocking.
	Canopy Species		Size Class	DBH			nopy Species		Avg. Height	Size	understory is moderately stocked, trace cherry and a few hemlock
	Red Pine	100	Log/Pole	10	60		Beech	Medium	5 - 10 feet	Sapling	saplings in sw corner. Stand was harvested in summer 2014 under tsale
							nite Pine	Low	5 - 10 feet	Sapling	contract 019-12-01 by Proctor Logging.
					L	Iro	onwood	Low	5 - 10 feet	Sapling	
54	4130	- Aspen		Sapling	Poor	7.7	10	Immature	N/A		regenerating well, stand is fully stocked, good quality regen throughout.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	20	Sapling	1		Wh	nite Pine	Low	Variable	Sapling	
	Quaking Aspen	20	Sapling	1		Blad	ck Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	60	Sapling	1	10						-
55	2113 - Fo	orage Crops	<b>S</b>	Nonsto	cked	1.5			Managed Op	pening	Formerly maintained rye planting.



Stand	I Level 4 C	over Type		Size De	nsity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
56	4130	- Aspen		Sapling	Well	22.4	17	Immature	N/A		aspen growing well, very dense stocking overall. scattered red maple,
	Canopy Species	% Cover	Size Class	DBH	Age						oak. white pine and red pine throughout in understory and larger retained trees from harvest.
	Red Maple	3	Pole/Log	8							nees nom naivest.
	Red Maple	10	Sapling	1	17						
	Quaking Aspen	20	Sapling	1	17						
	Bigtooth Aspen	65	Sapling	1	17						
	White Pine	2	Pole	5							
57	6120 - Lo	wland Ceda	ır F	Poletimb	er Well	307.2	81		N/A		fair amount of dieback in cedar tops and some overall mortality in spots.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Areas of tag alder present, very difficult to access interior portions of stand due to standing water, springs/seeps, etc. In some of the more
	Yellow Birch	10	Pole/Sapling	g 6		Ва	lsam Fir	Low	< 5 feet	Sapling	open areas balsam fir pockets have developed and are providing some
	Balsam Fir	25	Pole	5				'			great thermal cover. Some areas are in the 50-75 canopy closure range
No	rthern White Cedar	60	Pole/Sapling	7	81						but overall the stand has full canopy.
	Hemlock	5	Pole	5							
58		5   Pole		Poletimb	oletimber Well		66		N/A		aspen growing fairly well, some variability in size and stocking but overall
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	fully stocked. some larger diameter aspen present, however overall average diameter is pole sized. some pockets of smaller diameter red
	Red Maple	10	Pole/Log	8		Wh	nite Pine	Low	Variable	Sapling	maple regen. consider treating with final harvest, retention in the form of
	Quaking Aspen	10	Pole	8		Blad	ck Cherry	Low	Variable	Sapling	scattered white pine and red oak would be appropriate in order to
	Bigtooth Aspen	75	Pole/Log	9	66	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	maximize aspen and red maple regen in this more narrow stand.
	White Pine	2	Log/Pole	10		Re	d Maple	Low	10 - 20 feet	Sapling	
	Black Cherry	3	Pole	7							
59	42110 - Pla	nted Red P	ine	Sapling	Well	42.0	9	Immature	N/A		After looking at stand this inventory cycle it is my opinion that we should leave the stand as is. Some pockets will have lighter density as stand
	Canopy Species	% Cover	Size Class	DBH	Age						becomes merchantable but overall stocking should be average and as is
	Red Pine	85	Sapling	1	9						the saplings in place area growing well.
	Red Maple	5	Sapling	1							Stand was clearcut under contract #610410901 (red pine project) which was completed June 2011. Stand is prescribed for trenching and
	White Pine	5	Sapling	1							replanting to red pine. The site was trenched 2011, planted 2012. The
	Black Cherry	5	Sapling	1							year 1 regen survey in 2013 shows 487 TPA red pine and 881 TPA of Cherry, Beech, Upland shrub. The site needs to be replanted but we
											should herbicide the site to reduce competition first. Site was release sprayed in 2013, replanted in 2014. The yr1 replant survey was completed in 2015 and year 3 regen survey of the replant was done in 2017 - 495 TPA planted, 175 volunteer TPA (670TPA) and non-target TPA 307. Recommend when reinventoried that it be determined whethe this stand/planting needs any further treatments to ensure success of plantation. Could not update treatment steps through this process so an spelling it out in the MiFI stand specific comments and have entered a monitoring treatment for the stand to keep it on the radar prior to the reinventory cycle.



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	BA Range	Managed S	ite	General Comments
60	42200 - Nat	ural White F	Pine	Sawtimb	er Well	13.8	90	51-80	N/A		white pine overstory with aspen regenerating underneath. aspen growing
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	well, white pine is too and is seeding in resulting in significant white pine regen is spots, under aspen regen. stand providing great cover and
	Red Oak	15	Pole	8		Re	d Maple	Medium	5 - 10 feet	Sapling	structural diversity.
	White Pine	75	Log/Pole	12	90	Bigto	oth Aspen	High	5 - 10 feet	Sapling	
	Red Maple	10	Pole/Saplin	g 7		Blac	ck Cherry	Low	5 - 10 feet	Sapling	
61	310 - Herbad	ceous Open	land	Nonsto	ocked	6.6			No		several aspen clones located in opening
62	4130	- Aspen		Sapling	g Well	34.3	10		N/A		Aspen regen growing well, retained white pine concentrated in southern
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	half of stand providing nice vertical structure and some thermal cover.  Timber sale included an opening stand that was incorporated into sale in
	Red Maple	10	Sapling	1		Wh	nite Pine	Low	Variable	Sapling	order to remove woody encroachment, will need to see results of regen to
	Quaking Aspen	10	Sapling	1		Blac	ck Cherry	Low	Variable	Sapling	determine outline of non-forested boundary in order to delineate that
	Bigtooth Aspen	60	Sapling	2	10	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	stand again if desirable.
	White Pine	17	Log/Pole	10							-
	Black Cherry	3	Sapling	1							
63 64	31022 - Warr	m Season G		Nonsto		1.1	0 U	Inspecified	N/A		grassy opening, resulting from old well site.  aspen stand transitioning from pole to log with pockets where aspen is in
04	Canopy Species	% Cover			l Age		nopy Species		Avg. Height	Size	the small log size class. overall fair quality with good diversity, lots of
	Red Maple	8	Pole	8	. , .90		d Maple	Medium	Variable	Sapling	wildlife activity throughout. consider treating stand with final harvest retaining some conifers and other trees for mast and seed. could also
	Red Oak	2	Log/Pole	10			nite Pine	Medium	Variable	Sapling	retain a few islands, especially if entirety of stand is harvested. red pine
	Quaking Aspen	10	Pole	8	60	Blac	ck Cherry	Low	Variable	Sapling	pocket should be an island of retention on south side of Blair townhall rd
	Bigtooth Aspen	58	Pole/Log	9	60					1 0	remove aspen within this island.
	White Pine	15	Pole/Log	8							
	Black Cherry	5	Pole/Log	8							
	Red Pine	2	Pole/Log	9							
65	2113 - Fo	orage Crops	3	Nonsto	ocked	3.9			Managed Op	pening	
66	310 - Herbad	ceous Open	land	Nonsto	ocked	0.9	U	Inspecified			



Stan	Stand Level 4 Cover Type Size			Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
67	4119 - Mixed No	orthern Hard	dwoods P	oletimb	er Wel	l 27.9	42	81-110	N/A		mixed stand with red maple dominant. oaks scattered. good quality.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	sugar maple is of decent quality, white pine concentrated along NW edge. beech are large and scattered throughout, left as mast source from
	Sugar Maple	15	Pole/Sapling	6		Re	ed Maple	Medium	Variable	Sapling	last harvest. aspen in small clones.
	Red Maple	50	Pole/Sap/Log	6	42	Ir	onwood	Low	Variable	Sapling	
	Beech	5	Log	16			Beech	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	5	Log/Pole	10	42						
	White Pine	10	Pole/Log	8							
	Black Cherry	5	Sapling/Pole	4							
	Ironwood	5	Sapling/Pole	4							
	Red Oak	5	Log/Pole	10							
68	6128 - Lowland ( Deci	Coniferous iduous	, Mixed S	awtimb	er Wel	l 12.4	106	81-110	N/A		lowland stand, hemlock and cedar dominant with red maple throughout, concentrated along edges. Traces of spruce, fir and yellow birch present
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	in canopy.
	Red Maple	25	Log/Pole	12		W	hite Pine	Low	Variable	Sapling	
	Quaking Aspen	5	Pole/Log	8		Н	lemlock	Low	Variable	Sapling	
No	orthern White Cedar	30	Pole/Log	9	106	ВІ	ack Ash	Low	< 5 feet	Sapling	
	Hemlock	35	Log/Pole	12	106						
69	6117 - Lowland Coni	Deciduous, iferous	, Mixed Pe	oletimb	er Wel	l 24.7	68		N/A		Lowland stand with some small areas of upland. Traces of cedar, tamarack, red maple in canopy. Medium to high sub canopy shrub layer
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	present. Some species not identified.
	Paper Birch	5	Pole	6		Norther	n White Cedar	Medium	>20 feet	Pole	
	Quaking Aspen	15	Pole/Log	9		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
	White Spruce	10	Log/Pole	12		Unlisted -	See Comments	Medium	5 - 10 feet	Tall Shrub	
	White Pine	10	Log/Pole	12						1	
	Black Ash	20	Pole/Sapling	6							
70		ciation		awtimb				141-170	N/A		Upland red maple stand that also occupies the transition zone between upland and lowland. Overall size decreases as you move toward adjacent stand to the north.
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	otalia to tio hora.
	Red Maple	95	Log/Pole	10	96	Re	ed Maple	Medium	Variable	Sapling	



Stand	d Level 4 C	over Type		Size De	nsity	Acres Stand Age	BA Range	Managed S	Site	General Comments
71	4115 - Y.Biro	h, Hemloc	k NH S	awtimb	er Well	38.8 86	81-110	N/A		unique stand on steep slope leading to board man river. numerous
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Speci	ies Density	Avg. Height	Size	seeps, springs and saturated ground especially towards the base of the slopes, decent quality timber but slopes, sensitive nature of soils and
	Sugar Maple	25	Log/Pole	12		Sugar Maple	Low	Variable	Sapling	unique character preclude any management possibilities.
	Red Maple	35	Log/Pole	12	86	Red Maple	Low	Variable	Sapling	
	Yellow Birch	10	Log/Pole	12		Hemlock	Medium	Variable	Pole	
	Basswood	5	Log/Pole	10						
	White Ash	5	Log/Pole	10						
	Red Oak	5	Log	14						
	Hemlock	10	Log/Pole	12						
	Black Cherry	5	Log/Pole	10						
72	4131 - A	spen, Oak	Р	oletimb	er Well	33.3 35	Immature	N/A		aspen stand with oak and red maple scattered throughout along with white pine. aspen growing well, transitioned into small pole size class
	Canopy Species	% Cover	Size Class	DBH	Age					with wapling component present as well.
	Red Maple	20	Sapling/Pole	4						
	Red Oak	20	Pole/Sapling	5						
	Bigtooth Aspen	50	Pole/Sapling	5	35					
	White Pine	10	Pole/Log	8						
73	4130	- Aspen	Р	oletimb	er Well	16.0 28	Immature	N/A		isolated Aspen stand, small pole, large sap size. decent quality overall, fin
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Speci	ies Density	Avg. Height	Size	scattered throughout understory. small pocket of a few larger oak.
	Red Maple	5	Sapling/Pole	4	28	Balsam Fir	Low	Variable	Sapling	
	Bigtooth Aspen	80	Pole/Sapling	5	28	Black Cherry	Medium	5 - 10 feet	Sapling	
	Black Cherry	15	Sapling	4			1			
74	4130	- Aspen	Р	oletimb	er Well	18.4 58	Unspecified	N/A		fair quality aspen stand with red maple and white pine evenly distributed throughout. white pine sub canopy is well developed, also red maple and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Speci	ies Density	Avg. Height	Size	cherry present in lesser numbers.
	Red Maple	15	Pole/Log	9		Red Maple	Low	Variable	Sapling	
	Red Oak	3	Log/Pole	12		White Pine	High	Variable	Sapling	
	Quaking Aspen	10	Pole/Log	8		Black Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	62	Pole/Log	9	58	Witch Hazel	Low	5 - 10 feet	Tall Shrub	
	White Pine	5	Log/Pole	12						
	Black Cherry	5	Pole/Log	8						



Stan	d Level 4 C	over Type		Size De	ensity	Acres S	tand Age I	BA Range	Managed S	ite	General Comments
75	4130	- Aspen		Saplino	g Well	66.2	10	1-50	N/A		mixed stand of aspen with white pine throughout. black cherry and red maple present as well with red oak also a component. Jack pine present
	Canopy Species	% Cover	Size Class	DBF	I Age	Sub-Cand	py Species	Density	Avg. Height	Size	along eastern edge and occasionally in interior, some browse but overall
	Red Maple	8	Sapling	1		White	e Pine	Low	Variable	Sapling	stand is doing well.
	Red Oak	2	Pole/Log	8		Black	Cherry	Low	Variable	Sapling	
	Quaking Aspen	18	Sapling	1		Witch	Hazel	Low	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	50	Sapling	1	10						
	Black Cherry	5	Pole/Sapling	7							
	White Pine	15	Sapling/Pole	4							
	Jack Pine	2	Sapling/Pole	3							
76	6128 - Lowland Dec	Coniferous iduous	s, Mixed P	oletimb	er Well	47.5	86 l	Jnspecified	N/A		Mixed lowland conifer stand with red maple and aspen scattered throughout. Some small areas of upland, generally more open in nature
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Cand	py Species	Density	Avg. Height	Size	also one area of transition where a grove of larger white pine is present. small creek runs through stand in a northwesterly direction.
	Red Maple	10	Pole/Log	8		Balsa	am Fir	Medium	Variable	Sapling	small creek runs tillough stand in a northwesterly direction.
	Quaking Aspen	20	Pole/Log	7	<u> </u>				I		
	Balsam Fir	29	Pole	7							
N	orthern White Cedar	31	Pole	6	86						
	4120	Acnon		alatimb	or Wall	11.2	20	Immoturo	NI/A		gapes pale/gapling stand, fair quality, just into pale sized averall, includes
77		- Aspen			er Well	11.3		Immature	N/A	Sizo	aspen pole/sapling stand, fair quality. just into pole sized overall, includes a great deal of sapling sized aspen. some indicators of high water table
77	Canopy Species	% Cover	Size Class	DBF	er Well	Sub-Cano	py Species	Density	Avg. Height	Size	a great deal of sapling sized aspen, some indicators of high water table mainly along northern edge of stand, size and quality somewhat variable
77	Canopy Species Red Maple	% <b>Cover</b>	Size Class Sapling/Pole	DBF 4	I Age	Sub-Cano				Size Sapling	a great deal of sapling sized aspen, some indicators of high water table mainly along northern edge of stand, size and quality somewhat variable
77	Canopy Species Red Maple Quaking Aspen	% <b>Cover</b> 15 40	Size Class Sapling/Pole Pole/Sapling	<b>DBH</b> 4 6	28	Sub-Cano	py Species	Density	Avg. Height		a great deal of sapling sized aspen, some indicators of high water table mainly along northern edge of stand, size and quality somewhat variable
77	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen	% Cover 15 40 30	Size Class Sapling/Pole Pole/Sapling Pole/Sapling	<b>DBH</b> 4 6 7	I Age	Sub-Cano	py Species	Density	Avg. Height		a great deal of sapling sized aspen, some indicators of high water table mainly along northern edge of stand, size and quality somewhat variable
77	Canopy Species Red Maple Quaking Aspen	% <b>Cover</b> 15 40	Size Class Sapling/Pole Pole/Sapling	<b>DBH</b> 4 6	28	Sub-Cano	py Species	Density	Avg. Height		a great deal of sapling sized aspen, some indicators of high water table mainly along northern edge of stand, size and quality somewhat variable
77	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen	% Cover 15 40 30 15	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole	<b>DBH</b> 4 6 7	28 28 28	Sub-Cano	py Species	Density	Avg. Height	Sapling	a great deal of sapling sized aspen, some indicators of high water table mainly along northern edge of stand, size and quality somewhat variable
	Canopy Species  Red Maple  Quaking Aspen  Bigtooth Aspen  Black Cherry	% Cover 15 40 30 15 d/Parking L	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole	DBH 4 6 7 4 Nonsto	28 28 28	Sub-Cand Black	py Species Cherry	Density	Avg. Height Variable	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for
78	Canopy Species  Red Maple  Quaking Aspen  Bigtooth Aspen  Black Cherry  122 - Road	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole	DBH 4 6 7 4 Nonsto	28 28 28 ocked	Sub-Cand Black	py Species Cherry	Medium	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn
78	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole Lot Pine P	DBH 4 6 7 4 Nonsto	28 28 28 ocked	Sub-Cand Black	py Species Cherry	Medium	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for
78	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road 42120 - Plan Canopy Species Jack Pine	% Cover  15 40 30 15  d/Parking L	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole  Lot  Pine P Size Class Pole/Log	DBH  4 6 7 4 Nonsto	28 28 28 ocked eer Well I Age 61	Sub-Cand Black	Cherry 61 L	Medium	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn staff on whether they would like to see this cut while RP is cut.  aspen regenerating well, white pine and balsam fir scattered throughout.
78 79	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road 42120 - Plan Canopy Species Jack Pine	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole Lot Pine Pine Pole/Log	DBH  4 6 7 4  Nonsto	28 28 28 ocked eer Well I Age 61	Sub-Cand Black 4.7 2.2	Cherry 61 L	Medium  Unspecified	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn staff on whether they would like to see this cut while RP is cut.
78 79	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road 42120 - Plan Canopy Species Jack Pine	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole Lot Pine Pine Pole/Log	DBH  4 6 7 4  Nonsto	28 28 28 ocked ocked of the ser Well Age 61 g Well	Sub-Cand Black 4.7 2.2	Cherry 61 L	Medium  Unspecified	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn staff on whether they would like to see this cut while RP is cut.  aspen regenerating well, white pine and balsam fir scattered throughout.
78 79	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road 42120 - Plan Canopy Species Jack Pine  4130  Canopy Species	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole Lot Pine P Size Class Pole/Log	DBH  4 6 7 4 Nonsto	28 28 28 ocked ocked of the ser Well Age 61 g Well	Sub-Cand Black 4.7 2.2	Cherry 61 L	Medium  Unspecified	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn staff on whether they would like to see this cut while RP is cut.  aspen regenerating well, white pine and balsam fir scattered throughout.
78 79	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road 42120 - Plan Canopy Species Jack Pine  4130 Canopy Species Red Maple	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole  Lot  Pine P Size Class Pole/Log  Size Class Sapling	DBH  4 6 7 4 Nonsto  DBH 9 Sapling	28 28 28 28 28 28 28 29 20 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	Sub-Cand Black 4.7 2.2	Cherry 61 L	Medium  Unspecified	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn staff on whether they would like to see this cut while RP is cut.  aspen regenerating well, white pine and balsam fir scattered throughout.
78 79	Canopy Species Red Maple Quaking Aspen Bigtooth Aspen Black Cherry  122 - Road 42120 - Plan Canopy Species Jack Pine  4130 Canopy Species Red Maple Quaking Aspen	% Cover	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole  Lot  Pine P Size Class Pole/Log  Sapling Sapling Sapling	4	28 28 28 28 28 28 28 29 20 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	Sub-Cand Black 4.7 2.2	Cherry 61 L	Medium  Unspecified	Avg. Height Variable  Managed Op	Sapling	a great deal of sapling sized aspen. some indicators of high water table mainly along northern edge of stand. size and quality somewhat variable throughput stand, red maple and scattered black cherry throughout.  Small JP stand, starting to break up with normal mortality expected for this age jack pine. See previous comments, need to check with Grawn staff on whether they would like to see this cut while RP is cut.  aspen regenerating well, white pine and balsam fir scattered throughout.

Compartment: 49 Year of Entry: 2022



Stand	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed \$	Site	General Comments
81	429 - Mixed	Upland Cor	nifers \$	Sawtimb	oer Well	23.9	68 1	141-170	N/A		mixed stand, high water table with small opwn pockets containing tag alder and high bush cranberry, pipeline runs through stand. Canopy also
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	contains traces of silver maple, elm, tamarack, black cherry, paper birch.
	Quaking Aspen	15	Pole/Log	9		Unlisted -	See Comments	High	5 - 10 feet	Tall Shrub	
	White Spruce	30	Log/Pole	10							
	White Pine	50	Log/Pole	10	68						
	Red Pine	5	Log/Pole	10							
82	6112 - Lo	wland Aspe	en S	Sapling	Medium	4.6	7 Ir	mmature	N/A		growing fairly well, patchy regen in portions of stand. some pockets of lowland shrubs as well. Stand harvested under tsale contract 061-12-01
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	in winter/spring 2014.
	Quaking Aspen	88	Sapling	1	7	Re	ed Maple	Low	5 - 10 feet	Sapling	
	White Pine	10	Sapling	2		V	iburnum	High	5 - 10 feet	Tall Shrub	
	Balsam Fir	2	Sapling/Pole	4		Dogv	wood (spp.)	Low	< 5 feet	Tall Shrub	
83	2113 - Fo	orage Crop	s	Nonst	ocked	4.8			Managed O	pening	
84	4139 - Aspen,	Mixed Dec	iduous (	Sawtimb	er Well	9.2	66 Ur	nspecified	N/A		small isolated Aspen stand with fir, white pine, red maple and scattered oak, birch present as well.
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	oak. bitch present as well.
	Red Maple	45	Log/Pole	10	66	Re	ed Maple	Low	Variable	Sapling	
	Bigtooth Aspen	45	Pole/Log	9	66	Ва	alsam Fir	Medium	Variable	Sapling	
	Balsam Fir	5	Pole	8		Bla	ck Cherry	Low	Variable	Sapling	
	Black Cherry	5	Pole	7							
85	4130	- Aspen		Sapling	g Well	2.0	28 Ir	mmature	N/A		aspen growing well, transitioning from sap to pole, white pine and balsam
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	fir throughout understory.
	Quaking Aspen	15	Sapling/Pole	3	28	Ba	alsam Fir	Low	Variable	Sapling	
	Bigtooth Aspen	80	Sapling/Pole	4	28	W	hite Pine	Low	5 - 10 feet	Sapling	
	Balsam Fir	2	Pole	7				'	,		
	White Pine	3	Log	14							
86	4130	- Aspen		Saplin	g Well	23.1	14 Ir	mmature	N/A		aspen regenerating well, good form. white pine and oak pole/log sized trees scattered throughout.
	Canopy Species	% Cover	Size Class	DBH	H Age						nees seattered throughout.
	Red Maple	15	Sapling	1	14						
	Red Oak	5	Log/Pole	12							
	Bigtooth Aspen	70	Sapling	2	14						
	White Pine	10	Pole/Sapling	5							
87	42110 - Pla			Sawtimb				141-170	N/A		responding well to most recent thinning, still some defect scattered throughout and BA is in the range where a treatment is desirable,
	Canopy Species		Size Class		H Age		nopy Species	Density	Avg. Height	Size	recommend thinning one more time, a bit heavier and leaving only the
L	Red Pine	100	Log/Pole	10	61		ed Maple	Low	5 - 10 feet	Sapling	best quality log sized trees for aesthetics near prd office. red maple and
							gar Maple	Low	10 - 20 feet	Sapling	white pine understory should respond well and stand should transition into a more natural looking one which should be the goal.
						W	hite Pine	Low	5 - 10 feet	Sapling	The a more flatural roothing one willoff should be the goal.

Sapling

Report 7 - Stands Traverse City Mgt. Unit



Stand	Level 4 Co	Cover Type		Size Density		Acres	Stand Age E	BA Range	Managed \$	Site	General Comments
88	310 - Herbac	eous Ope	nland	Nonst	ocked	1.8	ι	Jnspecified			
89	42110 - Pla	nted Red I	Pine S	awtimb	er Well	29.0	66	111-140	N/A		red pine growing well, ba hovers in the 120-160 range, very little
	Canopy Species	% Cove	r Size Class	DBH	I Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	significant defect. grow stand another yoe and evaluate it and the adjacent client stands for co management of some sort. Stand was
	Red Pine	100	Log/Pole	11	66	Re	ed Maple	Low	Variable	Sapling	harvested under tsale contract 038-12-01 in fall of 2013.
				'		Bla	ick Cherry	Low	Variable	Sapling	
						R	Red Oak	Low	5 - 10 feet	Sapling	
							Beech	Low	5 - 10 feet	Sapling	
						W	hite Pine	Low	< 5 feet	Sapling	
90	2113 - Fo	orage Crop	os	Nonst	ocked	4.5			Managed O	pening	
91	6115 - Lo	owland As	h Po	oletimb	er Well	5.0	56	81-110	N/A		
	Canopy Species	% Cove	r Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Red Maple	20	Pole/Sap/Log	7		Ва	alsam Fir	Low	Variable	Pole	
	Yellow Birch	15	Pole/Log	8		Norther	n White Cedar	Low	Variable	Pole	
	Basswood	5	Log/Pole	10		F	łemlock	Low	Variable	Pole	
	Black Ash	60	Pole/Sapling	5	56	В	lack Ash	Medium	Variable	Sapling	
92	4132 - Asp			Saplin		28.3		Immature	N/A		mixed stand of aspen and Jack pine pockets with other species scattered uniformly throughout.
	Canopy Species	% Cove			l Age		anopy Species		Avg. Height	Size	, ,
	Red Maple	20	Sapling/Pole	2	40	Aut	umn Olive	Low	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	40	Sapling/Pole	3	18						
	Jack Pine	20	Sapling/Pole	4	18						
	Black Cherry	7	Log/Pole	12							
	Sugar Maple	2	Pole/Sap/Log	6							
	Beech	2	Sapling	2							
	Red Pine	4	Sapling/Pole	4							
	Red Oak	5	Sapling	2							
93	623 - Emer	gent Wetla	and	Nonst	ocked	2.5			No		
94		- Aspen	<u> </u>		7	Immature	N/A		a3 stand with significant white pine component along with variable size oak trees left as residual during harvest. balsam fir also scattered		
	Canopy Species		r Size Class		l Age						throughout.
	Red Maple	5	Sapling	1							
	Red Oak		Sapling/Pole/Lo								
	Bigtooth Aspen	70	Sapling	2	7						
	White Pine	5	Pole	8							
	Balsam Fir	3	Sapling/Pole	3							

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Stand	d Level 4 Co	Level 4 Cover Type 4131 - Aspen, Oak				Acres	Stand Age B	A Range	Managed \$	Site	General Comments
95	4131 - A	spen, Oak		Sawtimb	er Well	10.5	65		N/A		mixed stand with aspen and oak dominant. white pine present throughout all layers of the canopy, trace hemlock present as well. could treat with a
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	final harvest and retain a few oaks for mast production. adjacent stand is
	Red Oak	30	Log/Pole	13		Re	ed Maple	Medium	Variable	Sapling	regenerating very well and this can be the expected result of a harvest in
	Quaking Aspen	10	Pole/Log	8		W	hite Pine	Medium	Variable	Sapling	this stand as well.
	Bigtooth Aspen	50	Log/Pole	10	65	Ir	onwood	Medium	5 - 10 feet	Sapling	
	White Pine	10	Log/Pole	11				'	1		
96	4119 - Mixed No	rthern Har	dwoods	Sawtimb	er Well	3.6	108	81-110	N/A		Thinned fall 2012. Small numbers of birch, basswood, beech.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	50	Log/Pole	10	108	H	lemlock	Low	Variable	Pole	
	Red Maple	5	Log	16		Ir	onwood	Medium	Variable	Sapling	
	Red Oak	35	Log/XLog	17							
	Bigtooth Aspen	3	Pole/Log	9							
	Hemlock	2	XLog	22							
	Black Cherry	5	Log/Pole	10							
97	6112 - Lov	vland Aspe	n	Sapling	g Well	9.4	17 I	mmature	N/A		aspen regenerating well overall with some size and stocking variability.
	Canopy Species	% Cover	Size Class	s DBH Age		Sub-Canopy Species		Density	Avg. Height	Size	standing water through much of stand. fir scattered around stand, shrubby component in pockets. Stand contains traces of bur or swamp
	Red Maple	20	Sapling			Pr	ickly Ash	Medium	< 5 feet	Tall Shrub	white oak retained from last harvest.
	Quaking Aspen	75	Sapling	1	17	,		Medium	< 5 feet T	Tall Shrub	
	Balsam Fir	5	Sapling/Pol	e 4		Dogv	vood (spp.)	Low	< 5 feet	Tall Shrub	
				'		Wi	llow spp.	Low	< 5 feet	Tall Shrub	
98	310 - Herbac	eous Open	land	Nonst	ocked	1.9			No		
99	4123 -	Red Oak		Poletimb		2.9	68	111-140	N/A		small oak/aspen stand, fair quality. paper birch scattered throughout with white pine and some deciduous in understory.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	white pine and some deciduous in understory.
	Red Oak	70	Pole/Log	9	68	R	led Oak	Medium	Variable	Sapling	
	Paper Birch	2	Pole/Log	8		W	hite Pine	Low	Variable	Sapling	
	Quaking Aspen	5	Pole/Log	8			Beech	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	23	Pole/Log	9				,	1		
100	6120 - Lov	wland Ceda	ar	Sawtimb	er Well	10.9	96		N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Paper Birch	5	Log/Pole	10		Ва	alsam Fir	High	Variable	Sapling	
	Quaking Aspen	5	Log	12					1		
	Balsam Fir	10	Pole	8							
	Black Spruce	5	Pole	7							
No	orthern White Cedar	65	Log/Pole	10	96						
	Tamarack	5	Log	12							
	51 1 4 1	-	5								

5

Pole

8

Black Ash

DNR DNR

Compartment: 49 Year of Entry: 2022

Stand	d Level 4 C	over Type	S	Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
101	4130	- Aspen	;	Saplin	g Well	9.9	17	Immature	N/A		aspen regen doing very well, fir, oak, cherry and red maple present
	Canopy Species	% Cover	Size Class	DBH	H Age						throughout. traces of white pine, red maple, sugar maple, black cherry, and red oak present in super canopy (retained from previous harvest).
	Red Maple	10	Sapling/Pole	2	17						and rod care process in cupor carropy (rotalined non-processes naivescy).
	Bigtooth Aspen	80	Sapling/Pole	4	17						
	Black Cherry	10	Sapling/Pole	2	17						
102	4130	- Aspen	Po	oletimb	oer Well	10.6	28	Immature	N/A		a6/a3 stand growing well, white pine scattered throughout along with
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	some oaks. balsam fir is starting to fill in spots of the understory.
	Red Maple	5	Sapling/Pole	3		Ва	Isam Fir	Low	< 5 feet	Sapling	
	Red Oak	5	Log/Pole	12				*	,		-
	Quaking Aspen	50	Pole/Sapling	5	28						
	Bigtooth Aspen	30	Pole/Sapling	5	28						
	White Pine	5	Pole/Sap/Log	7							
	Black Cherry	5	Sapling	2							
103	4130	- Aspen		Saplin	g Well	16.1	17	Immature	N/A		white pine and red oak poles and logs present in canopy retained from
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Cai	nopy Species	s Density	Avg. Height	Size	last harvest. aspen regenerating well with oak and red maple present as well. some scattered white pine regen present.
	Red Maple	15	Sapling	2	17	Wh	nite Pine	Low	Variable	Sapling	won. some southered write pine regen present.
	Red Oak	5	Pole/Log	8		Wite	ch Hazel	Low	10 - 20 feet	Tall Shruk	
	Quaking Aspen	65	Sapling	2	17				1		
	Black Cherry	10	Sapling	2	17						
	White Pine	5	Pole/Sapling	5							
104	622 - Lo	wland Shrul	b	Nonst	ocked	20.3			No		lowland stand with alder throughout along with some other lowland shrubs. has small creek that is actually a diversion from the boardman river running through it
105	4130	- Aspen	;	Sapling	g Well	26.6	15	Immature	N/A		Bigtooth mainly in the north, quaking mainly in the southern two thids of
	Canopy Species	% Cover	Size Class	DBH	l Age						stand. White pine heavier in southern part of stand. aspen regenerating well, wide range of pole sized trees present along with some log sized
	Red Maple	10	Pole/Log	8							trees, mainly red oak.
	Red Oak	10	Pole/Log	8							
	Paper Birch	2	Pole	8							
	Quaking Aspen	40	Sapling	2	15						
	Bigtooth Aspen	28	Sapling	2	15						
	White Pine	10	Pole	7							
106	4130	- Aspen	S	awtimb	er Well	41.6	67		N/A		good quality big tooth aspen with red maple, cherry. oak and white pine
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	present as well. more white pine in western lobe. somw decent oak regen in understory along with some fir, white pine and beech. trace sugar
	Red Maple	15	Log/Pole	10		Re	d Maple	Low	Variable	Sapling	malle present. consider treating all or portion of stand with final harvest.
	Bigtooth Aspen	80	Log/Pole	10	67	Bal	Isam Fir	Low	Variable	Sapling	single tree or island retention would be appropriate. Traces of red oak,
	Black Cherry	5	Log/Pole	10		Wh	nite Pine	Low	Variable	Sapling	sugar maple, and paper birch present in canopy.

Low

10 - 20 feet

Witch Hazel

Tall Shrub



	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		General Comments									
4136 - Aspen	n, Mixed Co	onifer Sa	awtimb	er Well	38.1	62		N/A		mixed stand of aspen and conifers, high water table with some of stand		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canop	y Species	Density	Avg. Height	Size	submerged at time of inventory. trace hemlock and very scattered othe hardwood species including basswood and swamp white oak, some op		
Red Maple	20	Log/Pole	10		Red Ma	aple	Low	Variable	Sapling	areas where it looks like flooding has occurred, significant mortality in		
Red Oak	5	Log	16		Balsan	n Fir	Medium	Variable	Sapling	these spots with tag alder beginning to take over.		
Quaking Aspen	40	Log/Pole	10	62	White I	Pine	Medium	Variable	Sapling			
Bigtooth Aspen	10	Log/Pole	10							•		
Balsam Fir	10	Pole	7									
thern White Cedar	5	Pole/Log	8									
White Pine	10	Log/Pole	10									
	ciduous				Poletimber Well		6.6	86		N/A		mixed lowland conifer stand, partially flooded at time of inventory. lots of wildlife use throughout, stand provides excellent cover adjacent to your
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canop	y Species	Density	Avg. Height	Size	upland aspen stands.		
Quaking Aspen	33	Pole	8	56	Balsan	n Fir	Full	Variable	Sapling			
Balsam Fir	15	Pole	8							•		
Black Spruce	5	Pole	7									
thern White Cedar	40	Pole/Log	9	86								
Tamarack	5	Log	12									
6115 - Lo	owland Ash	n ;	Sapling	Poor	32.0	45		N/A				
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canop	y Species	Density	Avg. Height	Size			
Red Maple	15	Sapling/Pole	3		Balsan	n Fir	Low	Variable	Sapling			
Paper Birch	5	Sapling	3		Alde	er	Medium	5 - 10 feet	Tall Shrub			
Quaking Aspen	10	Sapling/Pole	3		Dogwood	(spp.)	Medium	5 - 10 feet	Tall Shrub			
Black Ash	70	Sapling/Pole	3	45	Willow	spp.	Medium	5 - 10 feet	Tall Shrub			
4130	- Aspen	:	Sapling	Well	11.7	17 Ir	nmature	N/A		stand regenerating very well, fair amount of stand along northern edge		
Canopy Species	% Cover	Size Class	DBH	Age						under water, likely resulting from beaver activity. lots of sign within star of beavers cutting saplings down. scattered fir, white pine and a small		
Red Maple	10	Sapling	1	17						pocket of a dozen or so swamp white oaks retained from harvest.		
Quaking Aspen	20	Sapling	1	17								
Bigtooth Aspen	65	Sapling	1	17								
Black Cherry	5	Sapling	1	17								
t	Canopy Species Red Maple Red Oak Quaking Aspen Bigtooth Aspen Balsam Fir thern White Cedar White Pine 6128 - Lowland Dec Canopy Species Quaking Aspen Balsam Fir Black Spruce thern White Cedar Tamarack 6115 - Lo Canopy Species Red Maple Paper Birch Quaking Aspen Black Ash 4130 Canopy Species Red Maple Quaking Aspen	Canopy Species         % Cover           Red Maple         20           Red Oak         5           Quaking Aspen         40           Bigtooth Aspen         10           Balsam Fir         10           thern White Cedar         5           White Pine         10           6128 - Lowland Coniferous Deciduous           Canopy Species         % Cover           Quaking Aspen         33           Balsam Fir         15           Black Spruce         5           thern White Cedar         40           Tamarack         5           Canopy Species         % Cover           Red Maple         15           Paper Birch         5           Quaking Aspen         10           Black Ash         70           4130 - Aspen           Canopy Species         % Cover           Red Maple         10           Quaking Aspen         10           Quaking Aspen         20	Canopy Species       % Cover       Size Class         Red Maple       20       Log/Pole         Red Oak       5       Log         Quaking Aspen       40       Log/Pole         Bigtooth Aspen       10       Log/Pole         Balsam Fir       10       Pole/Log         White Pine       10       Log/Pole         Canopy Species       % Cover       Size Class         Quaking Aspen       33       Pole         Balsam Fir       15       Pole         Black Spruce       5       Pole         thern White Cedar       40       Pole/Log         Tamarack       5       Log     Canopy Species  We Cover  Size Class  Red Maple  15 Sapling/Pole  Black Ash  To Sapling/Pole  Black Ash  To Sapling/Pole  A130 - Aspen  Canopy Species  Red Maple  10 Sapling  Canopy Species  Red Maple  20 Sapling  Canopy Sapling  Canopy Sapling  Canopy Sapling  Canopy Species  Red Maple  20 Sapling  Canopy Sapling  Can	Canopy Species         % Cover         Size Class         DBH           Red Maple         20         Log/Pole         10           Red Oak         5         Log         16           Quaking Aspen         40         Log/Pole         10           Bigtooth Aspen         10         Log/Pole         10           Balsam Fir         10         Pole         7           thern White Cedar         5         Pole/Log         8           White Pine         10         Log/Pole         10           6128 - Lowland Coniferous, Mixed Deciduous         Poletimb         Poletimb           Canopy Species         % Cover Size Class         DBH           Quaking Aspen         33         Pole         8           Balsam Fir         15         Pole         8           Black Spruce         5         Pole         7           thern White Cedar         40         Pole/Log         9           Tamarack         5         Log         12           6115 - Lowland Ash         Sapling           Canopy Species         % Cover         Size Class         DBH           Quaking Aspen         10         Sapling/Pole         3	Canopy Species         % Cover         Size Class         DBH Age           Red Maple         20         Log/Pole         10           Red Oak         5         Log         16           Quaking Aspen         40         Log/Pole         10         62           Bigtooth Aspen         10         Log/Pole         10         62           Balsam Fir         10         Pole/Log         8         44           White Pine         10         Log/Pole         10         44           Balsam Fir         10         Log/Pole         10         44           Canopy Species         % Cover         Size Class         DBH Age         45           Balsam Fir         15         Pole         8         56           Black Spruce         5         Pole         7         4           Black Spruce         5         Pole         7         4           Black Spruce         5         Pole         7         4           Black Spruce         5         Log         12         4           Black Spruce         5         Log         12         4           Canopy Species         % Cover         Size Class         DBH A	Canopy Species         % Cover         Size Class         DBH Age         Sub-Canop           Red Maple         20         Log/Pole         10         Red M.           Red Oak         5         Log         16         Balsam           Quaking Aspen         40         Log/Pole         10         62           Bigtooth Aspen         10         Log/Pole         10         White I           Balsam Fir         10         Pole         7         Total Control Contro	Canopy Species         % Cover Size Class         DBH Age Red Maple         Sub-Canopy Species           Red Maple         20         Log/Pole         10         Red Maple         Mittee Pine         White Pine         White Pine         In Unite Pine         In Unite Pine         Red Maple         Sub-Canopy Species         Balsam Fir         Sub-Canopy Species         Red Maple         Red Maple         Sapling/Pole         3         Sub-Canopy Species         Red Maple         In I	Canopy Species         % Cover Size Class         DBH Age Red Maple         Sub-Canopy Species         Density           Red Maple         20         Log/Pole         10         Red Maple         Low           Red Oak         5         Log         16         Red Maple         Low           Quaking Aspen         40         Log/Pole         10         62           Balsam Fir         10         Pole         7         Total Medium           Balsam Fir         10         Log/Pole         10         White Pine         Medium           6128 - Lowland Coniferous, Mixed Deciduous         Pole/Log         8         Bealsam Fir         6.6         86           Canopy Species         % Cover Size Class         DBH Age Deciduous         Sub-Canopy Species         Density           Canopy Species         % Cover Size Class         DBH Age Deciduous         Sub-Canopy Species         Density           Balsam Fir         15         Pole         8         56           Balsam Fir         15         Pole         7           thern White Cedar         40         Pole/Log         9         86           Tamarack         5         Sapling         9         86           Red Maple <td< td=""><td>  Canopy Species   % Cover   Size Class   DBH   Age   Red Maple   20   Log/Pole   10   Red Maple   Red Maple   20   Log/Pole   10   Balsam Fir   Medium   Variable   White Pine   White Pine   Medium   Variable   White Pine   White Pine   Medium   Variable   White Pine   White Pine   White Pine   Medium   Variable   White Pine   White Pine   White Pine   White Pi</td><td>Canopy Species  % Cover Size Class DBH Age Red Maple</td></td<>	Canopy Species   % Cover   Size Class   DBH   Age   Red Maple   20   Log/Pole   10   Red Maple   Red Maple   20   Log/Pole   10   Balsam Fir   Medium   Variable   White Pine   White Pine   Medium   Variable   White Pine   White Pine   Medium   Variable   White Pine   White Pine   White Pine   Medium   Variable   White Pine   White Pine   White Pine   White Pi	Canopy Species  % Cover Size Class DBH Age Red Maple		

Traverse City Mgt. Unit Report 7 – Stands

Compartment: 49 Year of Entry: 2022



Stand		el 4 Cover Type 4130 - Aspen	;	Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
113	4130	- Aspen		Sapling	g Well	6.0	15	Immature	N/A		red oak and white pine poles retained from harvest distributed throughout, bulk of canopy consists of aspen and oak regen with some
	Canopy Species	% Cover	Size Class	DBH	I Age						white pine saplings.
	Red Maple	5	Sapling	1							
	Red Oak	15	Sapling/Pole	3							
	Bigtooth Aspen	70	Sapling	2	15						
	Black Cherry	5	Sapling	1							
	White Pine	5	Pole/Sapling	5							
114	6112 - Lo	wland Aspe	n F	Poletimb	er Wel	I 52.5	65		N/A		
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	anopy Species	s Density	Avg. Height	Size	
	Red Maple	10	Pole/Log	8		W	hite Pine	Low	Variable	Sapling	
	Quaking Aspen	65	Pole	8	65	Unlisted -	See Commen	nts Medium	< 5 feet	Tall Shrub	
	White Pine	20	Pole/Log	8							1
	Black Cherry	5	Pole/Log	9							
115	310 - Herbad	ceous Open	land	Nonsto	ocked	1.9			No		
116	623 - Eme	rgent Wetla	nd	Nonsto	ocked	6.6			No		
117	623 - Eme	rgent Wetla	nd	Nonsto	ocked	18.0			No		
118	4130	- Aspen		Sapling Wel		14.0	15	Immature	N/A		aspen stand with overstory oak retained at time of harvest along with
	Canopy Species	% Cover	Size Class	DBH	I Age						scattered white pine and fir.
	Red Maple	7	Sapling	2	15						
	Red Oak	15	Log/Pole	12							
	Paper Birch	2	Pole	8							
	Quaking Aspen	5	Sapling	2	15						
	Bigtooth Aspen	65	Sapling	3	15						
	White Pine	3	Pole	7							
	Balsam Fir	3	Sapling/Pole	4							
119	4131 - /	Aspen, Oak	S	Sawtimb	er Wel	l 36.2	69	Unspecified	N/A		mixed stand of aspen/oak with red maple throughout. advanced
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	s Density	Avg. Height	Size	understory of beech and ironwood in places along with a fair amount of red oak regen. consider treatment to remove aspen and retain some oak
	Red Maple	19	Pole	8			ed Maple	Low	Variable	Sapling	for mast. BRT and S2S trail run through center of stand. Stand includes
	Red Oak	36	Log/Pole	12	101		Beech	Medium	Variable	Sapling	portion of slope towards Jaxon creek and stand 134 where aspen begins
	Bigtooth Aspen	45	Log/Pole	10	69	F	Red Oak	Medium	Variable	Sapling	to mix with hemlock and large white pine. This area should be excluded from treatment area, along with potentially the southern finger of stand to
											inom treatment area, along with potentially the southern linger of stand to

Low

Ironwood

Variable

Sapling

for mast. BRT and S2S trail run through center of stand. Stand includes portion of slope towards Jaxon creek and stand 134 where aspen begins to mix with hemlock and large white pine. This area should be excluded from treatment area, along with potentially the southern finger of stand to account for aesthetics, setback and water quality concerns. Consider retaining western 1/2 of stand until next YOE since many of the stands around this portion of stand 119 were cut in the last two entry periods. Stand provides a good source of acorns in proximity to adjacent aspen clearcuts. Traces of paper birch in canopy.



Stand	,		S	Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
120	6120 - Lov	wland Ceda	ar Po	oletimb	er Well	480.0	81		N/A		Expansive lowland cedar stand with obvious variability throughout in
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	terms of size stocking and species composition. lowland with much of the stand having standing water throughout.
	Red Maple	10	Pole	7		Ва	alsam Fir	Medium	Variable	Sapling	and stand harming standing mater unbegineau
	Paper Birch	10	Pole/Sapling	7		BI	ack Ash	Medium	Variable	Sapling	
	Balsam Poplar	3	Pole	8							
	Balsam Fir	5	Pole	7							
	Black Spruce	5	Pole	7							
Nor	rthern White Cedar	55	Pole/Log	7	81						
	Tamarack	5	Pole	7							
	White Pine	2	Log	16							
	Black Ash	5	Pole/Sapling	7							
122	310 - Herbac	- Herbaceous Openland			Nonstocked				No		
123	6120 - Lov	wland Ceda	Sawtimber Well			104	111-140	N/A		lowland stand with standing water throughout much of stand. scattered	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	large white pine, occasional pockets of blow down where balsam fir has regenerated, paper birch is concentrated in pockets with some scattered
	Red Maple	10	Log/Pole	10		ВІ	ack Ash	Medium	Variable	Sapling	individuals.
	Quaking Aspen	10	Log/Pole	10							-
	Balsam Fir	10	Pole/Log	9							
	White Spruce	5	Pole/Log	9							
Nor	rthern White Cedar	50	Log/Pole	10	104						
	Tamarack	5	Log/Pole	12							
	White Pine	5	Log/Pole	12							
	Paper Birch	5	Pole	8							
124	4130	- Aspen	:	Saplin	g Well	40.9	28	mmature	N/A		aspen stand, transitioning to pole sized but not quite there yet. growing well. fair quality. white pine scattered throughout stand along with oak.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Traces of balsam fir poles present in canopy.
	Red Oak	2	Log/Pole	10		Re	ed Maple	Medium	5 - 10 feet	Sapling	
	Quaking Aspen	30	Sapling/Pole	4	28	Bla	ck Cherry	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	65	Sapling/Pole	4	28						-
	White Pine	3	Log/Pole	10							
125	4119 - Mixed No	orthern Har	dwoods Sa	awtimb	er Well	22.9	90	111-140	N/A		mixed hardwood stand of mediocre quality, variable in terms of size and
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stocking, significant understory throughout stand. There are a few log size hemlocks in the stand.
	Sugar Maple	20	Log/Pole	12		Re	ed Maple	Low	10 - 20 feet	Sapling	
	Red Maple	50	Pole/Log	9	90		Beech	High	5 - 10 feet	Sapling	
	Beech	5	Log	15		Ir	onwood	High	5 - 10 feet	Sapling	
	Red Oak	15	Log	15				'			-
	Bigtooth Aspen	10	Pole/Log	8							



Stand		over Type	;	Size De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
26	4130	- Aspen		Saplin	g Well	14.6	9	Immature	N/A		aspen regenerating well, scattered red maple and oak along with balsam
	Canopy Species	% Cover	Size Class	DBH	l Age						fir and white pine evenly distributed throughout.
	Red Maple	15	Sapling	1							
	Red Oak	5	Log	12							
	Bigtooth Aspen	70	Sapling	2	9						
	White Pine	5	Sapling/Pole	4							
	Balsam Fir	5	Sapling/Pole	3							
27	429 - Mixed l	-		wtimbe	Medium	n 28.4	96	51-80	N/A		Stand occupies an upland sandy ridge surrounded by lowland types.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	15	Log	12							
	Paper Birch	15	Pole	7							
	Bigtooth Aspen	10	Log	14							
	Balsam Fir	5	Pole	7							
	White Pine	55	Log/Pole	12	96						
29	4119 - Mixed No					26.8			N/A		red maple stand with scattered oak, aspen, white pine and trace other species - tamarack, spruce, and balsam fir. balsam fir understory is quit
	Canopy Species		Size Class		I Age				Avg. Height	Size	thick, classified stand as upland lowland, significant signficant areas
	Red Maple	73	Log/Pole	12	75		ed Maple	Low	Variable	Sapling	where water and/or saturated soils are present especially along southerr edges. trace hemlock also present in over and understory.
	Paper Birch	5	Pole/Log	9			Ilsam Fir	High	Variable	Sapling	eages. trace hermock also present in over and understory.
	Quaking Aspen thern White Cedar	10 5	Log/Pole	10	L	VVI	nite Pine	Low	5 - 10 feet	Sapling	
IVOI	White Pine	2	Pole/Log Log/XLog	17							
	Red Oak	5	Log/XLog Log/XLog	17							
	Reu Oak	3	L0g/AL0g	17							
30	4136 - Asper			Sapling		6.1	9	Immature	N/A		regenerating fairly well, some less stocked portions. Stand was harveste under tsale contract 610241201 in spring of 2012.
	Canopy Species		Size Class	DBH	l Age						and of todic contract of 0241201 in spring of 2012.
	Red Maple	10	Sapling	1							
	Quaking Aspen	50	Sapling	1	9						
	Bigtooth Aspen	15	Sapling	1							
	White Pine	10	Pole/Log/Sap	9							
	Black Cherry	5	Sapling	1							
		10	Pole/Sapling	5							



Stand			Size De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments	
131	4199 - Other Mixe	ed Upland D	eciduous	Sawtimb	er Well	28.8	94	81-110	N/A		oak/aspen stand with other scattered hardwoods present. Stand slopes
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	to the north on the northern edge but is mainly upland and dry.
	Sugar Maple	15	Log/Pole	12			Beech	Low	Variable	Sapling	
	Red Maple	20	Pole/Log	8		W	hite Pine	Low	Variable	Sapling	
	Beech	10	Pole/Log	8		Ir	onwood	Low	Variable	Sapling	
	Red Oak	35	Log/Pole	12	94						-
	Bigtooth Aspen	20	Pole/Log	9							
132	4130	- Aspen		Sapling	ı Well	42.5	15	Immature	N/A		Good aspen regeneration throughout stand, growing well and fully
	Canopy Species	% Cover	Size Class	DBH	Age						stocked. Stand includes small strip of aspen along eastern edge that was retained at time of harvest to account for retention and also to
	Red Maple	10	Sapling	1	15						provide a buffer to stand 134, accounting for setback from Jaxon Creek.
	Bigtooth Aspen	75	Sapling	2	15						Traces of red oak, red maple, white pine, black cherry poles and logs
	Black Cherry	10	Sapling	1							(retained from previous harvest). Traces of white pine saplings present in canopy.
	Red Oak	5	Log/Pole	10							сапору.
133	Asso	Maple, Beech, Cherry Association		Sawtimber W		24.1	117 111-140		N/A		unique stand with very steep slopes and numerous seeps and springs present joining to form a small creek at northern edge of stand.  origins/springs are surrounded by cedar on upper reaches of slopes.
	Canopy Species						nopy Species		Avg. Height	Size	Traces of black cherry and yellow birch present in canopy.
	Sugar Maple	65	Log/Pole		117	Н	lemlock	Medium	Variable	Pole	
	Red Maple	15	Log/Pole	12							
	Basswood Beech	5	Log/Pole								
	beecn	5	Log/Pole	13							
134	6120 - Lo	wland Ceda	ır	Poletimb	er Well	49.8	110		N/A		Jaxon creek flows through this narrow stand, steep slopes down to creek present with numerous seeps feeding creek for the length of the stand.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Some blow down in spots where trees are undermined by springs
	Red Maple	10	Log/Pole	10		Ba	alsam Fir	Low	Variable	Sapling	creating a tangle of CWD and excellent wildlife cover. Trace oak on
	Bigtooth Aspen	10	Pole/Log	9		W	hite Pine	Low	Variable	Sapling	upper reaches of slopes along with birch. Typed as overall size of pole but could be considered small log, some large trees present.
No	rthern White Cedar	50	Pole/Log	8	110	Н	lemlock	Medium	Variable	Pole	but could be considered small log, some large frees present.
	White Pine	20	Log/Pole	10							
	Hemlock	10	Pole/Log	9							
135	310 - Herbac	eous Open	land	Nonsto	cked	7.9			No		
							nopy Species	Density	Avg. Height	Size	
						Re	ed Maple	Low		Pole	
							king Aspen	Low		Pole	
							hite Pine	Medium		Pole	
						Bla	ck Cherry	Low		Sapling	



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
136	6120 - Lo	wland Ceda	ır Ş	Sawtimb	er Well	15.0	112		N/A		Observed one canopy gap where balsam fir regeneration was extremely
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	dense, but this was not typical of the rest of the stand.
	Paper Birch	5	Pole	8		Ва	lsam Fir	Low	Variable	Sapling	
	Balsam Fir	20	Pole/Log	9							
	White Spruce	5	Pole/Log	9							
Nor	thern White Cedar	60	Log/Pole	12	112						
	Black Ash	10	Pole/Log	9							
137	310 - Herbac	eous Open	land	Nonst	ocked	1.3			No		
138	4130 - Aspen Pole		Poletimber Well			I 24.1 69 111-140		N/A		some stocking variability within stand, most notably in northern portion.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	white pine present in all levels of canopy, more open grown form in north where canopy closure is closer to 60-70%. could treat stand by removing
	Red Maple	15	Pole/Log	9		Wh	nite Pine	Medium	Variable	Sapling	canopy and retaining multiple size classes of white pine and red oak
	Quaking Aspen	17	Pole/Log	8		Blac	k Cherry	Low	Variable	Sapling	scattered throughout stand. Traces of red oak in canopy. Traces of red
	Bigtooth Aspen	50	Pole/Log	9	69	E	Beech	Low	5 - 10 feet	Sapling	oak and beech in sub-canopy.
	White Pine	10	Pole/Log	9		Red Oak		Low	5 - 10 feet	Sapling	
	Black Cherry	5	Pole/Log	9							
	Red Oak	3	Log/Pole	10							
139	3202 - Autumn	Olive/Honey	/suckle	Nonst	ocked	2.3			No		Old well site planted to autumn olive.
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Autu	ımn Olive	High		Tall Shrub	
140	4130	- Aspen		Sapling	g Well	2.8	28	Immature	N/A		aspen stand growing well, still sapling sized but some small pole sized trees present. overstory white pine scattered throughout with some regen
	Canopy Species	% Cover	Size Class		l Age		nopy Species	Density	Avg. Height	Size	present.
	Bigtooth Aspen	95	Sapling	3	28		Isam Fir	Medium	Variable	Sapling	
	Balsam Fir	2	Pole/Sapling			Wh	nite Pine	Low	5 - 10 feet	Sapling	
	White Pine	3	Log/Pole	10							
141	4130	- Aspen	F	Poletimb		22.8	48 L	Inspecified	N/A		consider treating stand with a final harvest to regenerate aspen. density is variable in spots as is average dbh. quaking aspen growth seems to
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	have stagnated, regen harvest will allow aspen to reflush and hopefully
	Red Oak	10	Pole	6			ed Oak	Medium	Variable	Sapling	gain more vigor. retain some over and understory of conifer and oak
	Quaking Aspen	53	Pole	8	48		nite Pine	Medium	Variable	Sapling	component for cover and mast production. Canopy also contains traces of red oak sawlogs and some paper birch.
	Bigtooth Aspen	30	Pole/Log	9		Blac	k Cherry	Low	Variable	Sapling	or roa oak oamogo and some paper biron.
	White Pine	2	Log/Pole	10							
	Red Maple	5	Log/Pole	12							

' - Stands Compartment: 49
Year of Entry: 2022

DNR MICHIGAN

	d Level 4 Co	over Type	Type Size Density Acres Stand Age BA Range Managed Site		ite	General Comments MICHIGAN					
142							86		N/A		There are a few log sized red maple and black ash trees scattered throughout the stand. Also some large snags. Lots of CWD, blow down.
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	No reportable sub-canopy, because significant portions of the stand are
	Red Maple	30	Log/Pole/Sap	10	86	Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	sapling sized and are actually part of the canopy. Standing water
	Yellow Birch	10	Pole/Log	9							throughout much of stand along with some alder and switchgrass in spots.
	Balsam Fir	5	Pole/Sapling	6							эрого.
No	orthern White Cedar	20	Pole/Sapling	7							
	White Pine	15	Log/XLog/Pole	16							
	Black Ash	20	Sapling	2							
143	4130	- Aspen	5	Sapling	y Well	14.1	15	Immature	N/A		Traces of red oak sawlogs, red maple and white pine poles in canopy.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	18	Sapling	1							
	Bigtooth Aspen	80	Sapling	1	15						
	White Pine	2	Sapling	2							
144	3105 - Mixed Սր	oland Herb	aceous 1	Nonsto	ocked	16.0			No		
145	4130	4130 - Aspen			er Well	20.0 38			N/A		Variable sized aspen throughout with larger white pine scattered. Some
				ze Class DBH Age		Sub-Canopy Species					standing water most notably along western edge. Retain til next YOE o
_	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	, , ,
	Canopy Species Bigtooth Aspen	<b>% Cover</b> 95	Size Class Pole/Sapling	<b>DB</b> F	38 38		nopy Species Isam Fir	<b>Density</b> Low	Avg. Height Variable	Size Sapling	the following.
											, , ,
146	Bigtooth Aspen White Pine	95 5	Pole/Sapling Log/Pole	6							the following.  consider treating stand by final harvest retaining all conifers in over and
146	Bigtooth Aspen White Pine	95 5 Hardwood	Pole/Sapling Log/Pole	6 10 wtimb	38	24.9	Isam Fir	Low 111-140	Variable		the following.  consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10
146	Bigtooth Aspen White Pine 4116 - Mixed N.	95 5 Hardwood	Pole/Sapling Log/Pole - Aspen Sa	6 10 wtimb	38 er Well	24.9 <b>Sub-Ca</b>	lsam Fir	Low 111-140	Variable N/A	Sapling	the following.  consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10
146	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species	95 5 Hardwood % Cover	Pole/Sapling Log/Pole - Aspen Sa Size Class	6 10 wtimb	er Well	24.9  Sub-Ca	72 nopy Species	111-140  Density	Variable  N/A  Avg. Height	Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger
146	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple	95 5 Hardwood Cover	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole	6 10 wtimb DBH	er Well	24.9  Sub-Ca  Re	72 nopy Species d Maple	Low  111-140  Density  Medium	Variable  N/A  Avg. Height  Variable	Sapling  Size  Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger
146	White Pine  4116 - Mixed N.  Canopy Species  Red Maple  Red Oak	95 5 Hardwood % Cover 55 5	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log	6 10 wtimb DBH 10 9	er Well	24.9  Sub-Ca  Re	72 nopy Species d Maple Isam Fir	111-140  Density  Medium  Low	Variable  N/A  Avg. Height  Variable  Variable	Sapling  Size  Sapling  Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger
146	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch	95 5 Hardwood ** Cover 55 5 2	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole	6 10 wtimb DBH 10 9 7	er Well	24.9  Sub-Ca  Re	72 nopy Species d Maple Isam Fir	111-140  Density  Medium  Low	Variable  N/A  Avg. Height  Variable  Variable	Sapling  Size  Sapling  Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger
146	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen	95 5 Hardwood % Cover 55 5 2 10	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log	6 10 wtimb DBH 10 9 7 8	er Well	24.9  Sub-Ca  Re	72 nopy Species d Maple Isam Fir	111-140  Density  Medium  Low	Variable  N/A  Avg. Height  Variable  Variable	Sapling  Size  Sapling  Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger
146	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen	95 5 Hardwood % Cover 55 5 2 10 20	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Pole/Log Pole/Log	6 10 DBH 10 9 7 8 9	er Well	24.9  Sub-Ca  Re	72 nopy Species d Maple Isam Fir	111-140  Density  Medium  Low	Variable  N/A  Avg. Height  Variable  Variable	Sapling  Size  Sapling  Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger
146	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen White Pine Black Cherry	95 5 Hardwood % Cover 55 5 2 10 20 3	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Pole/Log Log/Pole Pole/Log Log/Pole Pole/Log	6 10 DBH 10 9 7 8 9 11	er Well Age 72	24.9  Sub-Ca  Re	72 nopy Species d Maple lsam Fir emlock	111-140  Density  Medium  Low	Variable  N/A  Avg. Height  Variable  Variable	Sapling  Size  Sapling  Sapling	the following.  consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger age class stand regenerating aspen and red maple.
	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen White Pine Black Cherry	95 5 Hardwood % Cover 55 5 2 10 20 3 5	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Pole/Log Log/Pole Pole/Log Log/Pole Pole/Log	6 10 DBH 10 9 7 8 9 11 9 Sapling	er Well Age 72	24.9  Sub-Ca  Re  Ba  H	72 nopy Species d Maple lsam Fir emlock	111-140  Density  Medium  Low  Low	Variable  N/A  Avg. Height  Variable  Variable  Variable  Variable	Sapling  Size  Sapling  Sapling	the following.  consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger age class stand regenerating aspen and red maple.  aspen growing well, good stems per acre with mix of red maple, bc and scattered conifer components providing diversity. transitioning from
	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen White Pine Black Cherry	95 5 Hardwood % Cover 55 5 2 10 20 3 5	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Pole/Log Log/Pole Pole/Log Log/Pole Pole/Log	6 10 DBH 10 9 7 8 9 11 9 Sapling	er Well Age 72 Well	24.9  Sub-Ca  Re Ba H	72 nopy Species ad Maple Isam Fir emlock	111-140  Density  Medium  Low  Low	Variable  N/A  Avg. Height  Variable  Variable  Variable  N/A	Size Sapling Sapling Sapling Pole	the following.  consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger age class stand regenerating aspen and red maple.
	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen White Pine Black Cherry  4130  Canopy Species	95 5 Hardwood % Cover 55 5 2 10 20 3 5 - Aspen % Cover	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Pole/Log Log/Pole Pole/Log Size Class	6 10 wtimb 10 9 7 8 9 11 9 Sapling	er Well Age 72 Well	24.9  Sub-Ca  Re Ba H	72 nopy Species d Maple lsam Fir emlock	111-140  Density  Medium  Low  Low  Low  Density	Variable  N/A  Avg. Height  Variable  Variable  Variable  Variable	Size Sapling Sapling Sapling Pole	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger age class stand regenerating aspen and red maple.  aspen growing well, good stems per acre with mix of red maple, bc and scattered conifer components providing diversity. transitioning from
	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen White Pine Black Cherry  4130  Canopy Species Red Maple	95 5 Hardwood % Cover 55 5 2 10 20 3 5 - Aspen % Cover 5	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Log/Pole Pole/Log Size Class Sapling	6	er Well Age 72 9 Well Age	24.9  Sub-Ca  Re Ba H	72 nopy Species ad Maple Isam Fir emlock  28 nopy Species nite Pine	Low  111-140  Density  Medium  Low  Low  Low  Immature  Density  Low	N/A  Avg. Height Variable Variable Variable  N/A  Avg. Height Variable	Sapling  Size Sapling Pole  Size Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger age class stand regenerating aspen and red maple.  aspen growing well, good stems per acre with mix of red maple, bc and scattered conifer components providing diversity. transitioning from
	Bigtooth Aspen White Pine  4116 - Mixed N.  Canopy Species Red Maple Red Oak Paper Birch Quaking Aspen Bigtooth Aspen White Pine Black Cherry  4130  Canopy Species Red Maple Quaking Aspen	95 5 Hardwood % Cover 55 2 10 20 3 5 - Aspen % Cover 5 50	Pole/Sapling Log/Pole  - Aspen Sa Size Class Log/Pole Pole/Log Pole Pole/Log Log/Pole Pole/Log Size Class Sapling Sapling/Pole	6	er Well Age 72 Well Age 1 Age 28	24.9  Sub-Ca  Re Ba H	72 nopy Species ad Maple Isam Fir emlock  28 nopy Species nite Pine	Low  111-140  Density  Medium  Low  Low  Low  Immature  Density  Low	N/A  Avg. Height Variable Variable Variable  N/A  Avg. Height Variable	Sapling  Size Sapling Pole  Size Sapling	consider treating stand by final harvest retaining all conifers in over and understory. in addition retain pockets of red maple, oak and birch 5-10 trees/pocket for seed source and aesthetics. goal is to create a younger age class stand regenerating aspen and red maple.  aspen growing well, good stems per acre with mix of red maple, bc and scattered conifer components providing diversity. transitioning from



Stand	Level 4 Cover Type 310 - Herbaceous Openland			Size De	nsity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
148	310 - Herbad	ceous Open	ıland	Nonsto	ocked	1.5	ι	Jnspecified			
149	42110 - Pla	anted Red P	ine S	awtimb	er Well	12.5	65	51-80	N/A		recommend retaining stand as buffer along Jaxon creek and drainage
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	ditch that originates in lowland flooding to the SE, on the south side of Balir Townhall Rd, aspen pocket in southern tip has declined significantly
	Red Pine	92	Log	12	65		d Maple	Low	< 5 feet	Sapling	and understory seems to be converting to red maple with oak component
	Quaking Aspen	5	Pole/Sapling	6		R	ed Oak	Low	< 5 feet	Sapling	here along with under red pine which occupies majority of stand. aspen
	White Pine	3	Pole	7		Ва	lsam Fir	Low	5 - 10 feet	Sapling	and white pine are concentrated in small pockets and along creek riparian areas. Area retained at time of RPP clearcut of adjacent stand to
						White Pine		Low	5 - 10 feet	Sapling	the west to provide some buffering of Jaxon Creek and drainage ditch that joins Jaxon Cr.
150	4130 - Aspen		I30 - Aspen		er Well	5.7 63		Jnspecified	N/A		retained when surrounding aspen was cut, left as long term retention
	anopy Species % Cover Size Class				l Age		nopy Species	<u> </u>	Avg. Height	Size	from stand 62 surrounding WLD managed opening.
	Red Maple	10	Pole/Log	8	Age		nite Pine	Low	Variable	Sapling	
	Quaking Aspen	10	Pole	7			ck Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	75	Pole/Log	9	63		ch Hazel	Low	5 - 10 feet	Tall Shrub	
	White Pine	2	Log/Pole	10		****		2011	0 101001	Tall Office	1
	Black Cherry	3	Pole/Log	8							
151	42111 - Planted Dec	d Red Pine, ciduous	Mixed	Sapling	y Well	33.5	9	Immature	N/A		red pine growing well, some pockets of jack pine regen along with a fair amount of deciduous regen throughout most notably in southern half of
	Canopy Species	% Cover	Size Class	DBH	l Age						stand. consider mechanical release one more time.  Planted in 2012 - year 1 survey results unavailable. It was determined
	Red Pine	75	Sapling	2	9						the site needs to be replanted but we should herbicide the site to reduce
	Red Maple	15	Sapling	1							competition first. Site was release sprayed in 2013, replanted in 2014.
	Jack Pine	5	Sapling	2							The yr1 replant survey was completed in 2015 - 633TPA with 291 volunteer TPA, along with 222 TPA of deciduous species - year 3 regen
	Red Oak	5	Sapling	1							survey of the replant was done in 2017 - 707 TPA planted, 304 volunteer
											TPA (1011TPA) and non-target TPA 957. Recommend when reinventoried that it be determined whether this stand/planting needs any further treatments to ensure success of plantation. Could not update treatment steps through this process so am spelling it out in the MiFI stand specific comments and have entered a monitoring treatment for the stand to keep it on the radar prior to the re-inventory cycle.
152	310 - Herbad	ceous Open	land	Nonsto	ocked	1.7			No		
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Blac	ck Cherry	Low		Sapling	
						Re	d Maple	Low		Pole	
						Quak	king Aspen	Low		Pole	
						WI	nite Pine	Medium		Pole	



Stand	d Level 4 C	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		, ite	General Comments						
153	42110 - Pla	nted Red P	rine Sa		er Well			141-170	N/A		
	Canopy Species	% Cover			l Age		nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	5	Pole/Sap/Log	5	28		d Maple	High	10 - 20 feet	Sapling	
	Red Pine	95	Log/Pole	10	65		oth Aspen	Medium	10 - 20 feet	Sapling	
							sam Fir	Low	< 5 feet	Sapling	
						Blac	k Cherry	Low	5 - 10 feet	Sapling	
						Wh	ite Oak	Low	5 - 10 feet	Sapling	
154		- Aspen	;	Saplino		25.7	8		N/A		Stand regenerating to aspen quite well following harvest. Good diversity throughout, with white pine and red oak evenly distributed.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	nopy Species	Density	Avg. Height	Size	tinoughout, with write pine and red oak evenly distributed.
	Red Maple	10	Sapling/Pole	2		Red	d Maple	Low	5 - 10 feet	Sapling	
	Red Oak	10	Log/Pole	12		Wh	ite Oak	Low	Variable	Sapling	
	Bigtooth Aspen	70	Sapling	1	8	Wh	ite Pine	Low	Variable	Sapling	
	White Pine	10	Sapling	1		Blac	k Cherry	Low	Variable	Sapling	
						Witc	ch Hazel	Low	5 - 10 feet	Tall Shrub	
155		eous Open	lialiu	NONSI	ocked	2.1	U	nspecified			
155 156	42110 - Pla			awtimb	er Well	3.3	63	141-170	N/A		retained from original stand as long term retention and some conifer
	42110 - Pla Canopy Species	nted Red P	ine Sa	awtimb <b>DB</b> F		3.3 Sub-Can	63	•	Avg. Height	Size	retained from original stand as long term retention and some conifer thermal cover. dominated by red pine but white pine and aspen are a significant component.
156	42110 - Pla Canopy Species Red Maple	nted Red P  % Cover  5	rine Sa Size Class Pole	awtimb DBH	er Well	3.3 Sub-Can	63	141-170		Size Sapling	thermal cover. dominated by red pine but white pine and aspen are a
156	42110 - Pla Canopy Species Red Maple Quaking Aspen	nted Red P  % Cover  5  5	rine Sa Size Class Pole Pole	DBH 6 5	er Well	3.3 Sub-Can	63	141-170 <b>Density</b>	Avg. Height		thermal cover. dominated by red pine but white pine and aspen are a
156	42110 - Pla Canopy Species Red Maple Quaking Aspen Red Pine	nted Red P  **Cover* 5 5 85	Size Class Pole Pole Log/Pole	<b>DBH</b> 6 5 10	er Well	3.3 Sub-Can	63	141-170 <b>Density</b>	Avg. Height		thermal cover. dominated by red pine but white pine and aspen are a
156	42110 - Pla Canopy Species Red Maple Quaking Aspen	nted Red P  % Cover  5  5	rine Sa Size Class Pole Pole	DBH 6 5	er Well	3.3 Sub-Can	63	141-170 <b>Density</b>	Avg. Height		thermal cover. dominated by red pine but white pine and aspen are a
156	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,	nted Red P  % Cover  5  5  85  5	Size Class Pole Pole Log/Pole Log/Pole	DBH 6 5 10 10	er Well	3.3 Sub-Can	63	141-170 <b>Density</b>	Avg. Height		lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in
156	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,	nted Red P  % Cover  5  5  85  5  85  5	rine Sa Size Class Pole Pole Log/Pole Log/Pole Degrey Sa	DBF 6 5 10 10 awtimb	er Well Age 63	3.3 Sub-Can Bal:	63 nopy Species sam Fir	141-170  Density  Low	Avg. Height Variable		lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between
156	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso	nted Red P % Cover 5 5 85 5 85 5 Beech, Chociation	rine Sa Size Class Pole Pole Log/Pole Log/Pole Degrey Sa	DBF 6 5 10 10 awtimb	er Well	3.3  Sub-Can  Bal:  18.1  Sub-Can	63 nopy Species sam Fir 86	141-170  Density  Low  81-110	Avg. Height Variable  N/A	Sapling	thermal cover. dominated by red pine but white pine and aspen are a significant component.  lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in
156	42110 - Plate Canopy Species Red Maple Quaking Aspen Red Pine White Pine  4112 - Maple, Asso	nted Red P  % Cover  5  5  85  5  Beech, Crociation  % Cover	Size Class Pole Pole Log/Pole Log/Pole erry Sa	DBH  6 5 10 10 awtimb	er Well 63 er Well	3.3  Sub-Can  Bals  18.1  Sub-Can	63 nopy Species sam Fir  86 nopy Species	141-170  Density  Low  81-110  Density	Avg. Height Variable  N/A  Avg. Height	Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between
156	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple	nted Red P  % Cover  5  5  85  5  8eech, Crociation  % Cover  75	Size Class Pole Pole Log/Pole Log/Pole Size Class Log/Pole	DBH   6	er Well 63 er Well	3.3  Sub-Can  Bal:  18.1  Sub-Can  Rec  Yello	63 nopy Species sam Fir  86 nopy Species d Maple	141-170  Density  Low  81-110  Density  Low	Avg. Height Variable  N/A  Avg. Height Variable	Sapling  Size  Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between
156	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch	nted Red P  Cover  5  85  5  86  5  Beech, Chociation  Cover  75  10	size Class Pole Pole Log/Pole Log/Pole Size Class Log/Pole Log/Pole Log/Pole	DBH	er Well 63 er Well	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello	63 nopy Species sam Fir  86 nopy Species d Maple ow Birch	141-170  Density  Low  81-110  Density  Low  Low  Low	Avg. Height Variable  N/A  Avg. Height Variable 10 - 20 feet	Size Sapling Sapling Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between
156	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch	nted Red P  Cover  5  85  5  86  5  Beech, Chociation  Cover  75  10	size Class Pole Pole Log/Pole Log/Pole Size Class Log/Pole Log/Pole Log/Pole	DBH	er Well 63 er Well	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello	63 nopy Species sam Fir  86 nopy Species d Maple bw Birch seech	Density  81-110  Density  Low  Low  Low  Low  Medium	Avg. Height Variable  N/A  Avg. Height Variable  10 - 20 feet 10 - 20 feet	Size Sapling Sapling Sapling Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between
156	42110 - Plat  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch  Beech	nted Red P  Cover  5  85  5  86  5  Beech, Chociation  Cover  75  10	Size Class Pole Pole Log/Pole Log/Pole Derry Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH    6	er Well 63 er Well	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello  B  He	63 nopy Species sam Fir  86 nopy Species d Maple bw Birch seech	Density  81-110  Density  Low  Low  Low  Low  Medium	Avg. Height Variable  N/A  Avg. Height Variable  10 - 20 feet 10 - 20 feet	Size Sapling Sapling Sapling Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between upland and lowland.
156	42110 - Plat  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch  Beech	nted Red P  % Cover  5  85  85  5  Beech, Crociation  % Cover  75  10  15	Size Class Pole Pole Log/Pole Log/Pole Derry Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH    6	63 er Well Age 63 er Well Age 86	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello  B  He	63 nopy Species sam Fir  86 nopy Species d Maple ow Birch seech emlock	141-170  Density  Low  81-110  Density  Low  Low  Medium  Medium  51-80	Avg. Height Variable  N/A  Avg. Height Variable 10 - 20 feet 10 - 20 feet Variable	Size Sapling Sapling Sapling Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between upland and lowland.  aspen stand with white pine, red maple and cherry present throughout. stand is variable in terms of size with 6-8" being the overall average.
157	42110 - Plat  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch  Beech	nted Red P  % Cover  5  85  85  5  Beech, Crociation  % Cover  75  10  15	Size Class Pole Pole Log/Pole	DBH    6	63 63 Fer Well Age 86	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello  B  He  163.0  Sub-Can	63 nopy Species sam Fir  86 nopy Species d Maple ow Birch seech emlock 38	141-170  Density  Low  81-110  Density  Low  Low  Medium  Medium  51-80	Avg. Height Variable  N/A  Avg. Height Variable  10 - 20 feet 10 - 20 feet Variable  N/A	Size Sapling Sapling Sapling Sapling Pole	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between upland and lowland.  aspen stand with white pine, red maple and cherry present throughout. stand is variable in terms of size with 6-8" being the overall average. some pockets where diameter of aspen is higher, if aspen is needed from this age class a portion of stand could be treated, ~40 acres would be the
157	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple, Asso  Canopy Species  Red Maple  Yellow Birch  Beech  4130  Canopy Species	nted Red P  % Cover  5  85  85  5  Beech, Chociation  % Cover  75  10  15  - Aspen  % Cover	rine Sa  Size Class  Pole Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Size Class	DBH   6	63 63 63 68 69 69 69 69 69 69 69 69 69 69 69 69 69	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yella  B  He  163.0  Sub-Can	63 nopy Species sam Fir  86 nopy Species d Maple ow Birch seech emlock 38 nopy Species	141-170  Density  Low  81-110  Density  Low  Low  Medium  Medium  51-80  Density	Avg. Height Variable  N/A  Avg. Height Variable 10 - 20 feet 10 - 20 feet Variable  N/A  Avg. Height	Size Sapling Sapling Sapling Sapling Pole	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone betweer upland and lowland.  aspen stand with white pine, red maple and cherry present throughout. stand is variable in terms of size with 6-8" being the overall average. some pockets where diameter of aspen is higher, if aspen is needed fror this age class a portion of stand could be treated, ~40 acres would be the max recommended based on small overall size. understory consists
156 157 158	42110 - Pla  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch  Beech  4130  Canopy Species  Quaking Aspen	Second   S	Size Class Pole Pole Log/Pole Log/Pole Derry Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Pole Size Class Pole/Sapling	DBH	63 63 68 69 69 69 69 69 69 69 69 69 69 69 69 69	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello  B  He  163.0  Sub-Can  Rec  Bals	63 nopy Species sam Fir  86 nopy Species d Maple ow Birch seech emlock 38 nopy Species d Maple	141-170  Density  Low  81-110  Density  Low  Low  Medium  Medium  51-80  Density  Medium	Avg. Height Variable  N/A  Avg. Height Variable 10 - 20 feet 10 - 20 feet Variable  N/A  Avg. Height Variable	Size Sapling Sapling Sapling Sapling Pole Size Sapling	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone betweer upland and lowland.  aspen stand with white pine, red maple and cherry present throughout. stand is variable in terms of size with 6-8" being the overall average. some pockets where diameter of aspen is higher, if aspen is needed fror this age class a portion of stand could be treated, ~40 acres would be the max recommended based on small overall size. understory consists mainly of red maple, balsam fir, white pine and scattered birch, sugar
156 157 158	42110 - Plan  Canopy Species  Red Maple  Quaking Aspen  Red Pine  White Pine  4112 - Maple,  Asso  Canopy Species  Red Maple  Yellow Birch  Beech  4130  Canopy Species  Quaking Aspen  Bigtooth Aspen	nted Red P  % Cover  5  85  85  5  Beech, Crociation  % Cover  75  10  15  - Aspen  % Cover  65  20	Size Class Pole Pole Log/Pole Log/Pole Derry Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH   10   10     DBH   DBH   DBH   6   7	63 63 68 69 69 69 69 69 69 69 69 69 69 69 69 69	3.3  Sub-Can  Bals  18.1  Sub-Can  Rec  Yello  B  He  163.0  Sub-Can  Rec  Bals  Bals	63 nopy Species sam Fir  86 nopy Species d Maple ow Birch seech emlock 38 nopy Species d Maple sam Fir	141-170  Density  Low  81-110  Density  Low  Low  Medium  Medium  51-80  Density  Medium  Low	Avg. Height Variable  N/A  Avg. Height Variable 10 - 20 feet 10 - 20 feet Variable  N/A  Avg. Height Variable  Variable  Variable  Variable	Size Sapling Sapling Sapling Sapling Pole Size Sapling Pole	lower quality red maple/beech dominated stand with overall lower BA of merchatable sized trees. scattered hemlock throughout mainly in understory/intermediate canopy. Stand occupies transition zone between upland and lowland.  aspen stand with white pine, red maple and cherry present throughout. stand is variable in terms of size with 6-8" being the overall average. some pockets where diameter of aspen is higher, if aspen is needed fron this age class a portion of stand could be treated, ~40 acres would be the max recommended based on small overall size. understory consists



Compartment: 49

Year of Entry: 2022

Stand	Level 4 Co	evel 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments						
159	429 - Mixed U	Jpland Con	ifers F	Poletiml	ber Well	9.0	48	81-110	N/A		Traces of hemlock in sub canopy. white pine dominant, aspen growing
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	anopy Species	s Density	Avg. Height	Size	fairly well throughout stand. hemlock in mid canopy with some small seedlings scattered along edge and in adjacent red pine plantation.
	Quaking Aspen	40	Pole/Sapling	6	38	Ba	alsam Fir	Medium	Variable	Sapling	standing water in spots. some blueberry and trace leather leaf in
	White Pine	45	Log/Pole	10	48	W	hite Pine	Low	Variable	Sapling	understory.
	Hemlock	10	Log/Pole	10		Bla	ck Cherry	Low	Variable	Sapling	
	Red Pine	5	Pole	8					,		-
160	Deciduous  Canopy Species % Cover Size Cla		Mixed	Saplin	g Well	37.8	9	Immature	N/A		red pine growing well, 5-10' in height, stocking is good, deciduous species are definitely a component and will be as stand advances. red
											maple has been browsed heavily keeping its height in check, aspen is 10 20' in height and present in pockets. recommend closing treatments and
	Red Pine			2	9						allowing stand to advance as it will given the size of the red pine saplings
	Bigtooth Aspen	10	Sapling	1							and the other species present. Stand was clearcut under contract
	Red Maple	10	Sapling	1							#610410901 (red pine project). Sale was completed June 2011. Stand is
	White Pine	5	Sapling	1							prescribed for trenching and replanting to red pine. Planted in 2012 - yea 1 survey results unavailable. It was determined the site needs to be
	Black Cherry	5	Sapling	1							replanted but we should herbicide the site to reduce competition first.
											with 534 TPA of deciduous species - year 3 regen survey of the replant was done in 2017 - 664 TPA planted, 86 volunteer TPA (750TPA) and non-target TPA 932. Recommend when reinventoried that it be determined whether this stand/planting needs any further treatments to ensure success of plantation. Could not update treatment steps through this process so am spelling it out in the MiFI stand specific comments and have entered a monitoring treatment for the stand to keep it on the radar prior to the re-inventory cycle.
161	4130 -	- Aspen	F	Poletiml	ber Well	29.1	38		N/A		aspen stand with in some areas dense white pine and autumn olive in
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	anopy Species	s Density	Avg. Height	Size	understory. overall small diameter, noticeably smaller in dbh and height than adjacent stand 158, note that stands were harvested at same time.
	Quaking Aspen	95	Pole/Sapling		38	W	hite Pine	Medium	Variable	Sapling	recommend reviewing next yoe for potential harvest.
	White Pine	5	Pole/Sapling	5		Aut	umn Olive	Medium	5 - 10 feet	Tall Shrub	
162	310 - Herbaco	eous Open	land	Nonst	ocked	6.6			No		
163	42200 - Natural White Pine Sawtimber Wel	oer Well	5.0	85	81-110	N/A		Small white pine stand providing variability from surrounding aspen and of the stand. White pine is			
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	anopy Species	s Density	Avg. Height	Size	type stands. Some standing water in portions of stand. White pine is fairly good quality, red maple is of ok quality. Recommend retaining
	Red Maple	20	Log/Pole	10		W	hite Pine	Low	10 - 20 feet	Sapling	stand long term to provide some structural diversity along with species
	Milette Dise	00	L:/D - L-	4.4	0.5					•	diversity in this area

diversity in this area.

White Pine

80

Log/Pole

11 85



Stand	Level 4 C	over Type		Size Density		Acres	Stand Age B	A Range	Managed Site		General Comments  somewhat lower quality aspen stand, variable in terms of stocking and		
164	4130	- Aspen		Poletimber Well		l 43.8	52		N/A				
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	Sub-Canopy Species De	Density	Density Avg. Height	Size	size/quality in spots. aspen seems to have stagnated with some mortali occurring specifically in quaking aspen. white pine understory is		
	Red Maple	10	Pole	7		Re	d Maple	Medium	Variable	Sapling	advanced in spots and will likely continue to be a major component of		
	Red Oak	2	Log/Pole	12		WI	nite Pine	Medium	Variable	Sapling	stand if overstory is removed. red maple present in understory,		
(	Quaking Aspen	20	Pole	8	52	Blac	ck Cherry	Low	Variable	Sapling	intermediate layer of canopy and in overstory. could consider treating all or portion of stand with final harvest, retaining individual trees along with		
	Bigtooth Aspen	63	Pole	8	52	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	small islands for retention. small overall diameter and low stocking would		
	White Pine	2	Log/Pole	10				'		1	be reason to allow to go one more yoe.		
	Black Cherry	3	Pole	7									
165 4130 - Aspen Sapling Well					Well	1 20.9	8		N/A		Stand is regenerating well, good mix of aspen with a conifer component		
	Canopy Species	% Cover	Size Class	DBH	Age						scattered throughout.  Long term retention islands providing nice variation throughout stand and		
	Red Oak	2	Log/Pole	12							some vertical structure. Stand was harvested in fall of 2013 under tsale		
(	Quaking Aspen	15	Sapling	1							contract 011-12-01 by Dan Bundy LoggingPC		
	Bigtooth Aspen	72	Sapling	1	8								
	White Pine	8	Log/Pole/Sap	10									
	Black Cherry	3	Pole	7									
166	4130		Sapling Well		26.5 8	mmature	N/A	N/A	Stand was harvested in fall of 2013 under tsale contract 011-12-01 by				
	Canopy Species	% Cover	Size Class	DBH	Age						Dan Bundy LoggingPC		
	Quaking Aspen	65	Sapling	1	8								
	Bigtooth Aspen	20	Sapling	1									
	White Pine	10	Pole/Sapling	7									
	Black Cherry	5	Pole/Log	8									
167 4130 - Aspen Poletimber V		er Well	19.0	52	N/A			fair quality aspen, some pockets of big tooth are very nice and larger dbh					
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	than the overall average. trembling aspen is smaller dbh overall and shorter height on average. white pine is decent quality. some larger trees		
	Red Maple	5	Pole	7		WI	nite Pine	Medium	Variable	Sapling	present and a fair amount of regen working it's way up in the understory.		
(	Quaking Aspen	38	Pole	8	52	Blac	ck Cherry	Low	Variable	Sapling	red maple generally clumpy in nature. some decent red oak stems		
	Bigtooth Aspen	40	Pole/Log	9	52	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	scattered throughout. could harvest portion or all of stand, adjacent regenerating stand that was originally part of this stand is growing we		
	White Pine	10	Log/Pole/Sap	10		Re	d Maple	Low	10 - 20 feet	Sapling	expect same results from harvesting this portion.		
	Black Cherry	5	Pole/Log	8									
	Red Oak	2	Pole/Log	8									
168	4311 - Pin	e, Aspen M	apling Medium		7.0	7.0 7 li	mmature	N/A		Slightly lower stocking than adjacent stand 41 which is also more			
	Canopy Species	% Cover	Size Class	DBH	Age						uniformly aspen regen.  Portions of this stand are marginally lowland. Stand occupies a drainage		
	Jack Pine	50	Sapling	1	7						and margins.		
	Quaking Aspen	50	Sapling	1	7								

Report 7 – Stands

Compartment: 49

Year of Entry: 2022

DNR DNR	1000
DNR DNR	1
MICHIGAN	

Stand	Level 4 C	Level 4 Cover Type		Size Density		Acres	Stand Age	BA Range	Managed Site		General Comments			
169	4130	- Aspen	Poletimber W		er Well	8.5	58	Unspecified	N/A		Fair quality aspen stand - Stand has nice overstory and understory			
С	anopy Species	% Cover	Size Class	DBH Age		Sub-Ca	nopy Species	s Density	Avg. Height 10 - 20 feet	Size Sapling	conifer component providing a great deal of cover for wildlife. Scatte oak saplings in understory along with some witch hazel.			
Bi	igtooth Aspen	80	Pole/Log	9	58	Balsam Fir		Medium			oak sapings in understory along with some witch hazer.			
	White Pine	10	Log/Pole	10		W	hite Pine	Low	10 - 20 feet	Sapling				
	Red Maple	10	Pole/Log	8		Red Oak		Low	5 - 10 feet	Sapling				
	,			'		Witch Hazel		Low	5 - 10 feet	Tall Shrub				
170	4130	30 - Aspen		Sapling	y Well	7.2	7 li	Immature	N/A		aspen regenerating very well, 10-20' in height. Traces of red oak, sugar			
С	anopy Species	% Cover	Size Class	DBH	l Age						maple, and paper birch present in canopy.			
Bi	igtooth Aspen	80	Sapling	2	7									
	Red Maple	10	Pole/Sap/Log	6										
	Balsam Fir	10	Pole/Sapling	6										
75 4112 - Maple, Beech, Cherry Poletin Association					er Well	13.1	13.1 70 81-1		110 N/A		Northern portion of stand was harvested under tsale contract 050-12-01 completed in fall/winter 2014 by Zoscsak Logging. What is now stand			
Canopy Species		% Cover	Size Class											
C	allopy Species	/0 OOVCI	Size Class	DRF	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	175 is generally a bit smaller diameter and could benefit from one more			
	Sugar Maple	50	Pole	8 DBF	70		<b>nopy Specie</b> Beech	Medium	Avg. Height < 5 feet	Size Sapling	entry period of growth before management.			
5											,			
5	Sugar Maple	50	Pole	8		Н	Beech	Medium	< 5 feet	Sapling	,			
5	Sugar Maple Red Maple	50 35	Pole Pole	8 7		Н	Beech lemlock	Medium Low	< 5 feet >20 feet	Sapling Pole	,			