

Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61056 Entry Year 2023 Acreage: 3,068

County Grand Traverse

Management Area: Manistee River Valley

Revision Date: 2021-06-02

Stand Examiner: Patrick Cotant

Legal Description:

T25N - R9W - Sections 10, 15, 16, 20, 21, 22

Identified Planning Goals:

General management goals for this compartment are to provide timber products; maintain or enhance wildlife habitat; protect areas of unique character, threatened, endangered and special concern species; and provide for forest-based recreational uses.

Timber management goals include continuing aspen management to maintain early successional habitat for hunting and other wildlife related recreational opportunities, increasing regeneration of oak and a focus on increasing the red pine age class structure through final harvests of older stands and re-planting.

Soil and topography:

Rubicon with Rifle peat and Lupton muck in low areas. The area is level to very slightly rolling.

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

Ownership is private to the north and west with State Forest ownership to the south and east. There is light residential development around the compartment. There has been some relatively recent residential construction along the north and west along Sparling Road. Pugsley Correctional Facility (currently not operational) is located just west of the compartment in section 20.

Unique Natural Features:

There are a few small pothole lakes and bogs scattered throughout the compartment. No MNFI concerns listed in database - there are however pine barrens identified just outside of compartment boundary along the west edge of section 20.

Archeological, Historical, and Cultural Features:

None known, none identified in HAL database.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

There are several small pothole lakes and lowland depressions in Compartment 56. For timber treatments adjacent to these waterbodies, an adequate buffer should left in place to protect sensitive soils and to account for aesthetic concerns.

Wildlife Habitat Considerations:

A portion of this compartment (section 10 more or less) falls on a ground moraine. The ground moraine represents some of the better soils in this area. Consequently, farms and settlements have replaced presettlement northern hardwood dominated forests. The fraction of this land type association occupied by state lands and private forested lands, which have a history of management, represent an ecologically insignificant fragment of these landscapes. Existing mixes of oak/pine/aspen forest should be maintained with small patch cuts and thinnings, retaining snags and other habitat elements as much as possible. Tops should be left onsite, unchipped, and in scattered piles for habitat. Some succession to mature white pine forest would be desirable in the long run. Small bogs should be buffered from cuts to maintain adjacent cover.

The remainder of this compartment falls on a flat, excessively well drained outwash plain, which was historically prone to frequent burning and harbored mixed pine forests, barrens, and some components of oak, and hardwoods. This landscape should continue to be managed for a variety of successional stages of pine-oak-aspen forest and grass-shrub openings, with some mid to late successional forest in places. There is a successional momentum toward white pine over much of the compartment. Several stands could be allowed to gradually succeed to mixed white pine forest, while others should be set back through timber harvesting. Such harvesting should incorporate residual live trees (preferably in

patches), snags, brush piles, and some down logs to replicate within-stand habitat structure left after wildfires. Oak is a very important component of forests here and should be maintained or regenerated as much as possible. Prescribed burning will maintain barrens habitat in some stands. Pine plantations should incorporate tree species and structural diversity as much as possible. Future management of pine stands should consider incorporating small (2-5 acre) islands that are left relatively un-thinned within mature stands to provide winter roosting cover for turkeys.

Species associated with pine, oak and aspen mixed upland forests and openland habitats, such as badger, wild turkey, scarlet tanager, hog-nosed snake, ruffed grouse, Cooper's hawk, red-backed salamander, and gray squirrel will benefit from management here.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till along the northwest edge. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Mississippian Marshall Sandstone and Coldwater Shale. The Marshall has been used as a building stone. The nearest gravel pits are in Sections 16 and 20. Gravel potential in the compartment is considered good, especially along the northwest edge. This area is located six miles southeast of the Guelph (Niagaran) reef trend. This Compartment and adjacent lands have been nominated for the May 2011 oil & gas lease auction. The Antrim Shale has not been developed in this area, and is probably too deep to be productive with current technology.

Vehicle Access:

Access to compartment area is good. Some forest trails are grown over and are generally considered abandoned to vehicle traffic. Some of these trails are eventually opened up for management activities. There are some RDR concerns within the compartment, these are currently in the RDR database and are unresolved at this time.

Survey Needs:

None known at this time.

Recreational Facilities and Opportunities:

North Country Trail and the Fife Lake loop/spur of the NCT, Shore to Shore Riding and Hiking Trail, MCCCT motorcycle trail, ORV Route, Boardman Valley Snowmobile Trail.

Fire Protection:

This compartment is located in a zone dispatch area for priority DNR response. The area is heavy to fire prone cover types such as jack pine, red pine, and pin oak. There are many roads and trails in this compartment which makes access easy and it is located near US 131, M-113, and M-186 which not only surrounds the compartment but also provides for rapid response from nearby DNR fire units in Traverse City, Manton, and Kalkaska. Local volunteer fire department coverage is provided by Grand Traverse Rural Fire volunteers from Fife Lake and Kingsley.

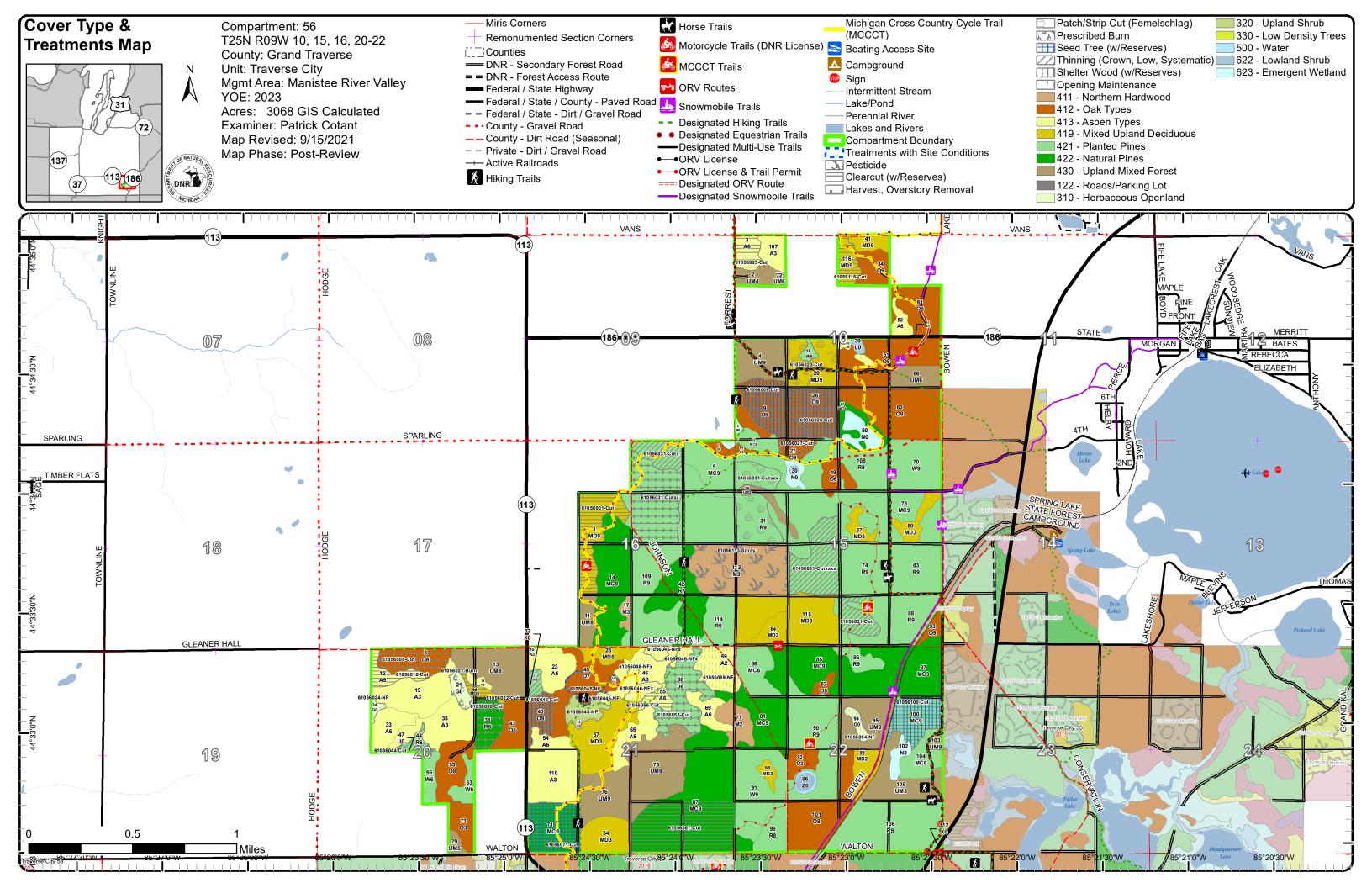
Additional Compartment Information:

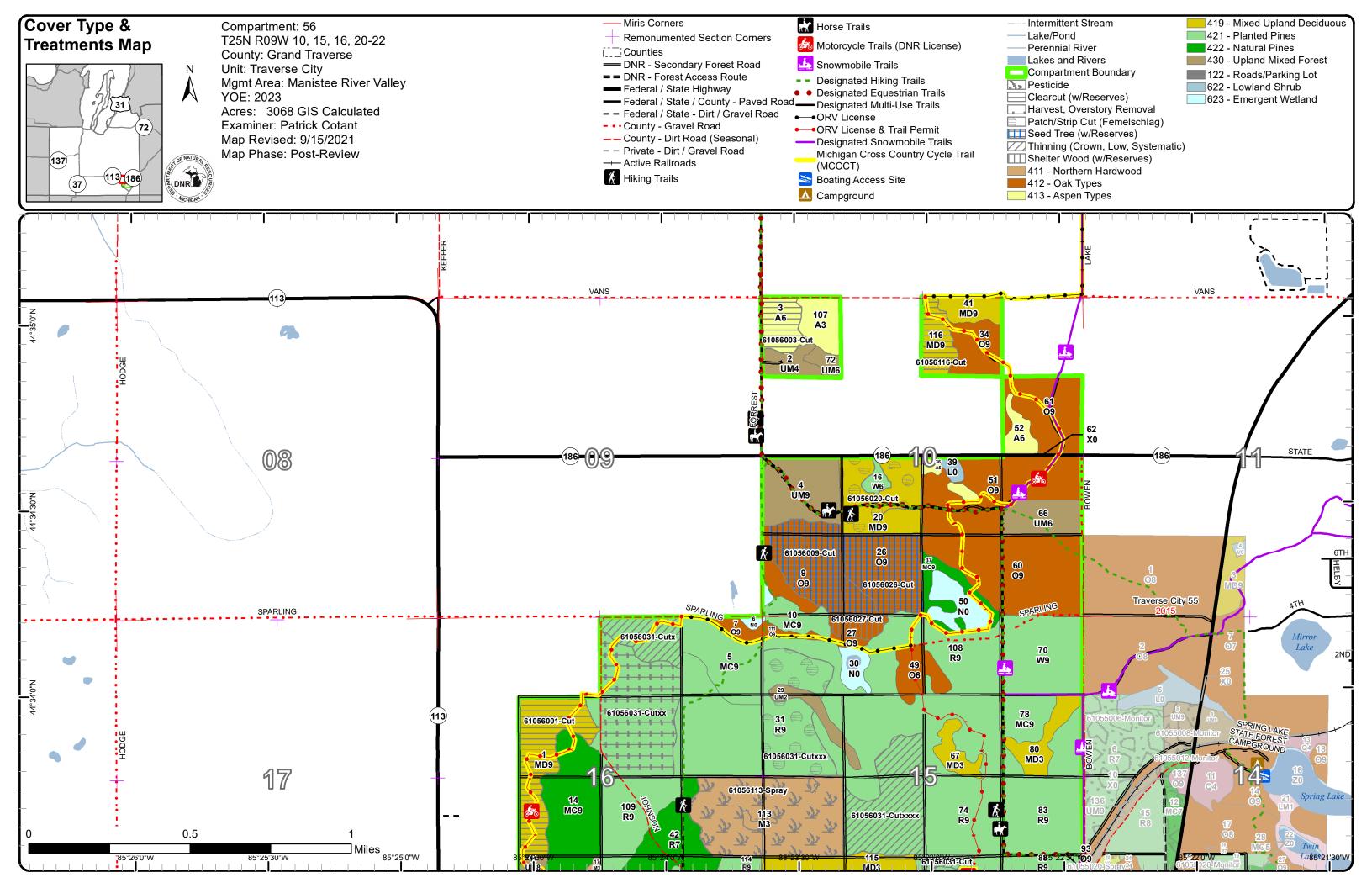
The following reports from the Inventory are attached:

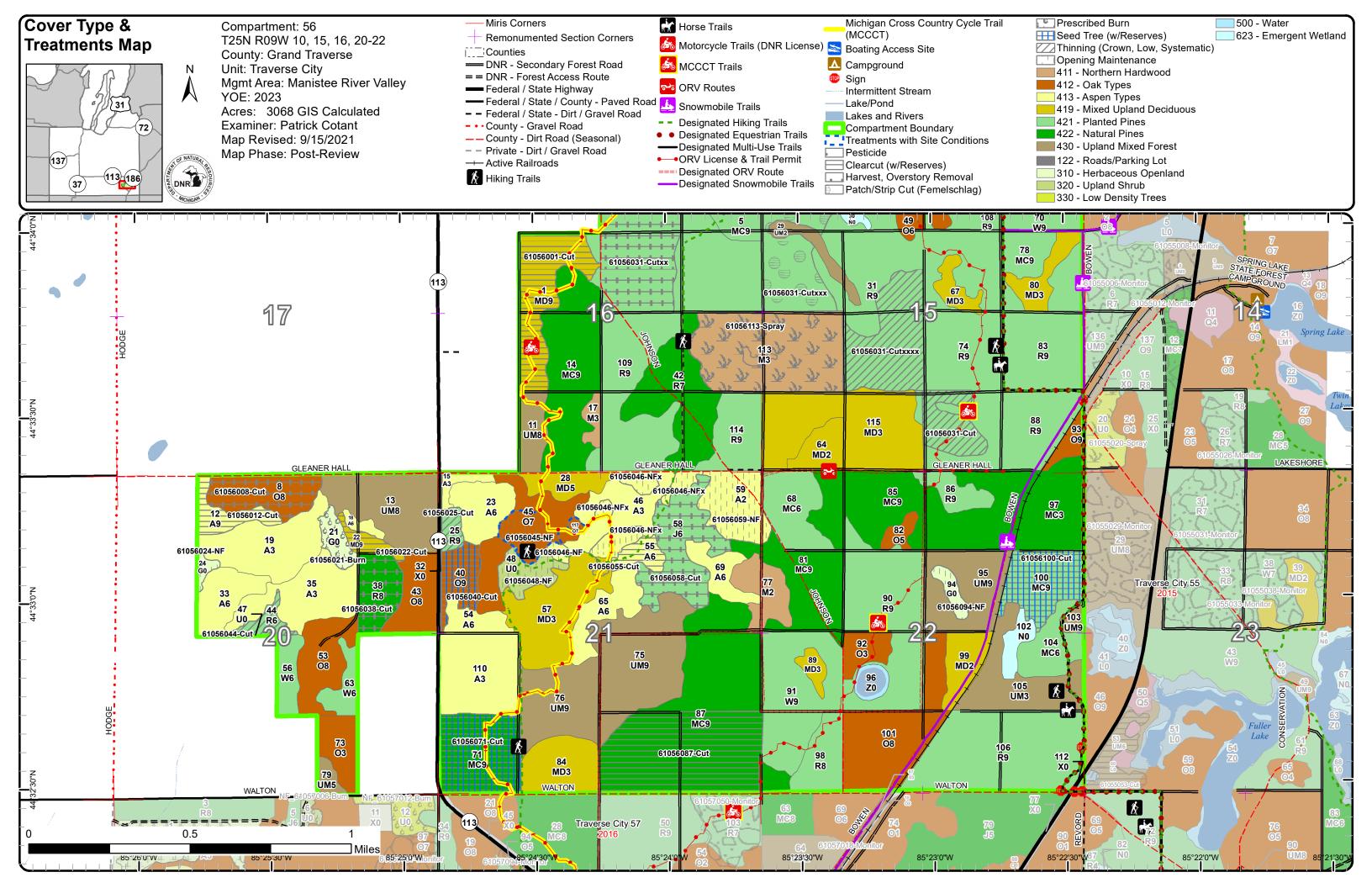
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

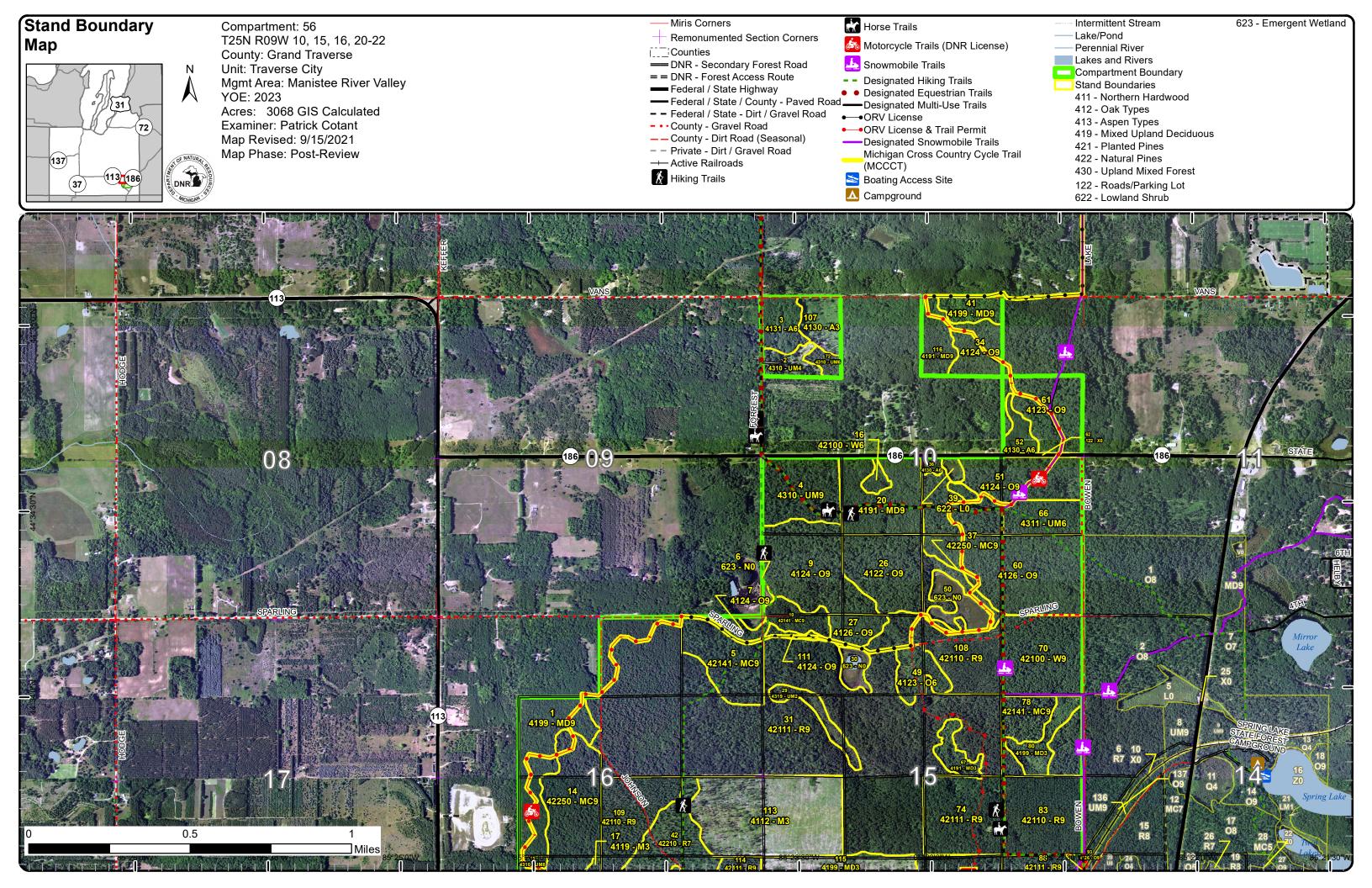
The following information is displayed, where pertinent, on the attached compartment maps:

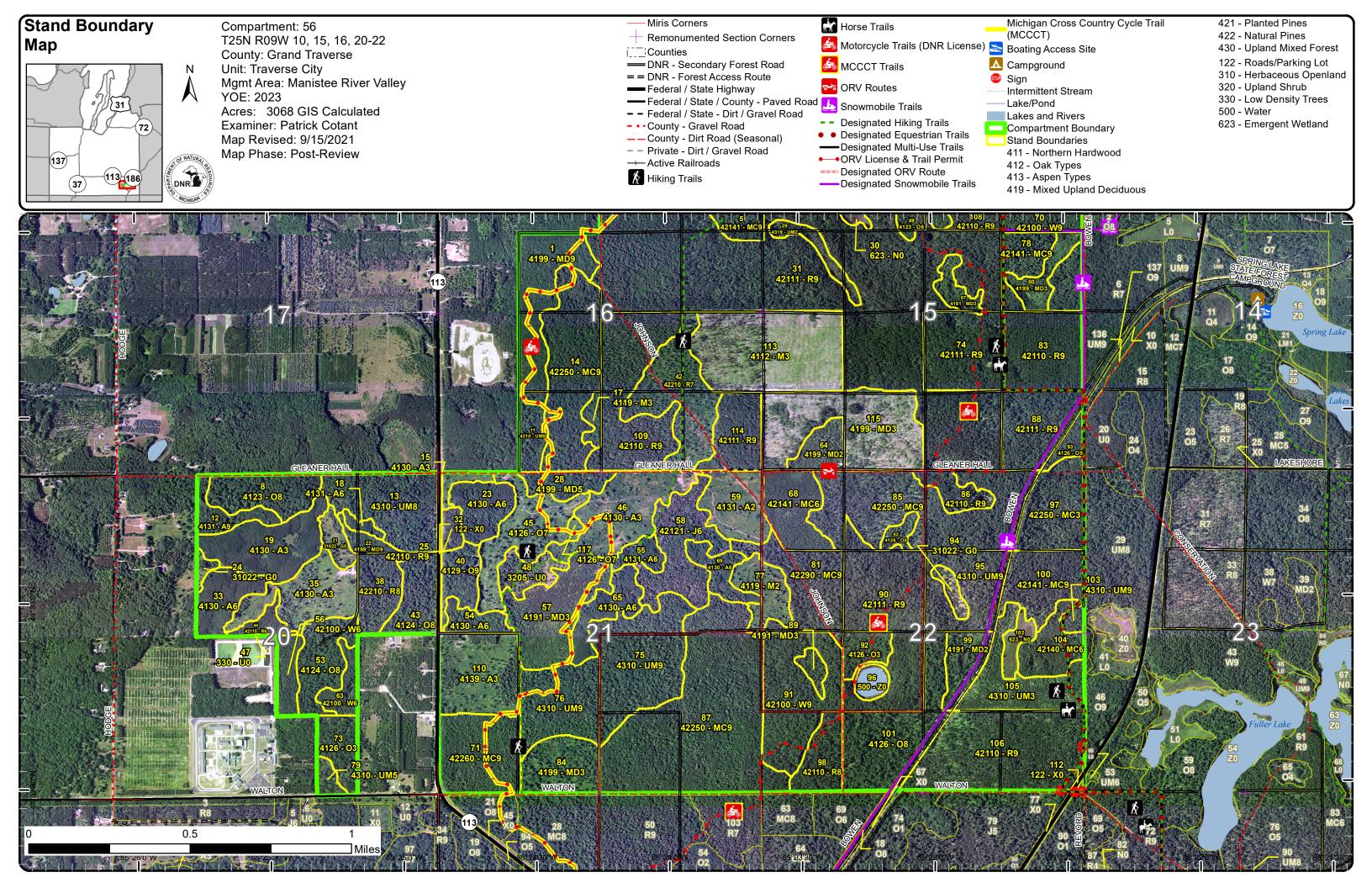
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

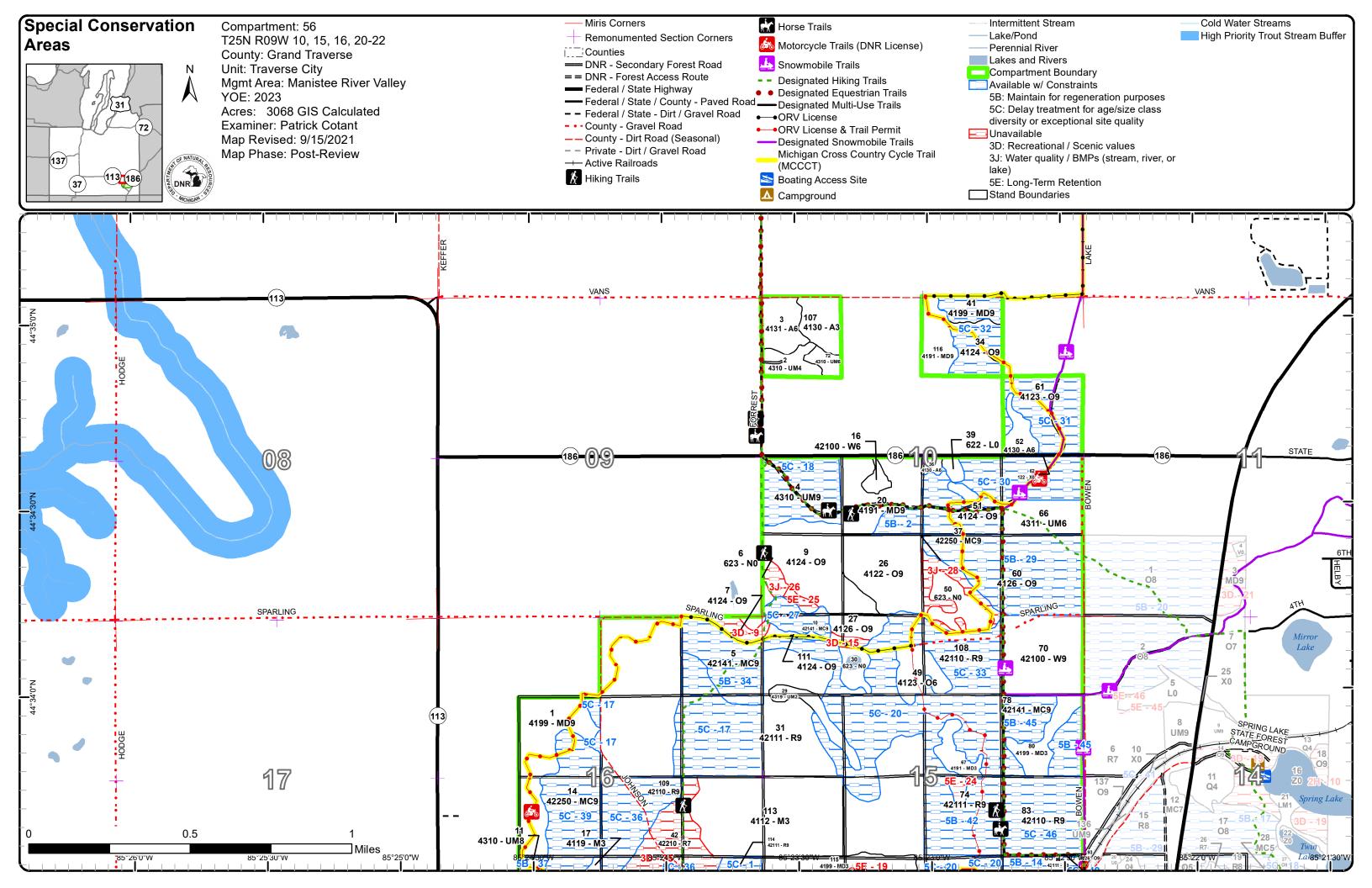


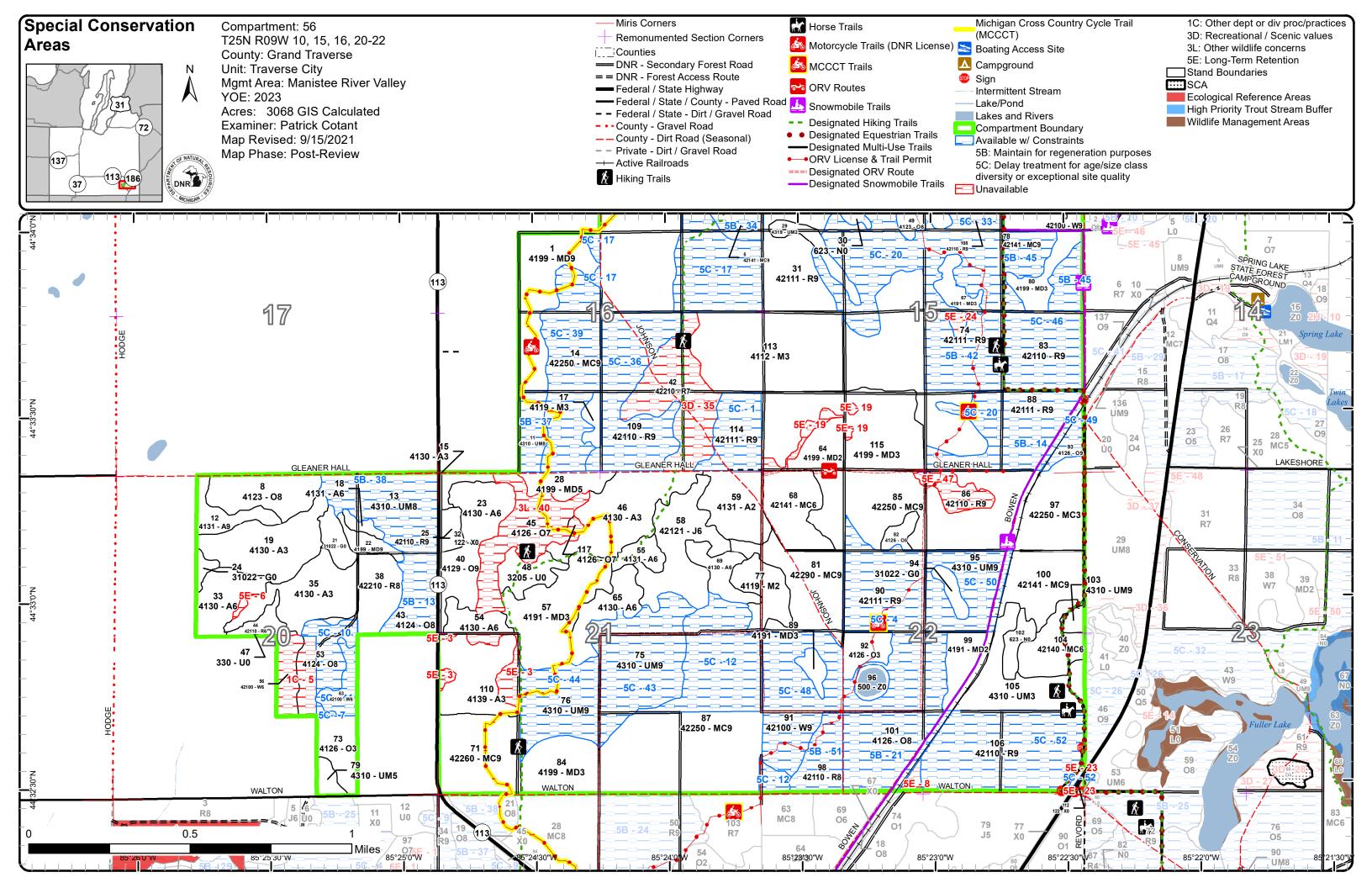












Compartment 56

Year of Entry 2023

Traverse City Mgt. Unit
Patrick Cotant: Examiner



Age Class

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Aspen	0	158	0	37	63	28	13	12	7	0	0	0	0	0	0	0	0	0	318
Herbaceous Openland	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Jack Pine	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	38
Low-Density Trees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lowland Shrub	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Marsh	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Mixed Upland Deciduous	0	90	0	55	29	12	14	6	39	36	0	0	10	0	0	0	0	13	304
Natural Mixed Pines	0	0	0	0	32	0	0	81	0	0	269	0	11	0	0	0	0	0	393
Northern Hardwood	0	89	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
Oak	0	26	0	0	0	18	0	0	0	0	10	65	227	99	0	0	0	38	481
Planted Mixed Pines	0	0	0	0	44	0	0	0	0	0	68	27	0	0	0	0	0	0	139
Red Pine	0	0	0	0	0	6	0	5	0	0	588	222	0	0	0	0	0	0	821
Upland Mixed Forest	0	0	0	34	0	9	21	14	0	0	142	0	3	73	0	0	0	0	296
Upland Shrub	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
White Pine	0	0	0	0	0	0	0	21	0	43	0	51	0	0	0	0	0	0	115
Total	72	363	0	131	168	73	48	139	84	79	1077	365	251	172	0	0	0	51	3071



Report 2 – Treatment Summary

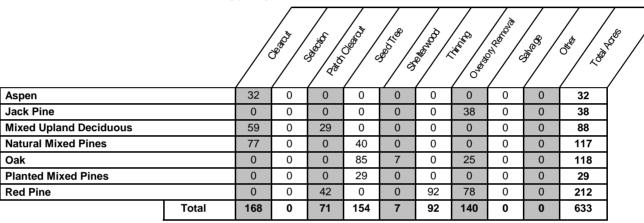
Traverse City Mgt. Unit Year of Entry: 2023

Acres of Harvest

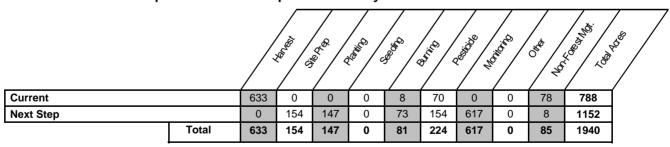
Compartment 56
Total Compartment Acres: 3,068

Commercial Harvest - 633 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 56 Year of Entry: 2023

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Treatment Name

Acres

Stand CoverType

Size Density Stand Age

BA Range **Treatment** Type

Treatment Method

Cover Type Objective

Age Structure Habitat Cut

Approved Treatments:

61056001-Cut 39.3 4199 - Other Mixed Sawtimber 75 111-Harvest Clearcut with 4121 - Oak, Even-Aged No Upland Deciduous Well 140 Retention Aspen

Prescription Final harvest areas of stand where aspen is more uniformly dispersed, namely in northern 1/2 of treatment area. In remainder of stand, and Specs:

along MCCCT trail, retain white oak and red pine and consider leaving some red oak depending on forest health concerns at time of sale preparation. Retention could also include some small islands scattered throughout treatment area, focused near trail and PVT interface. Place islands away from areas where aspen is concentrated in order to maximize aspen regen. Use appropriate specs to protect rec trails.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056003-Cut 13.2 4131 - Aspen, Oak Poletimber 111-Harvest Clearcut with 413 - Aspen Even-Aged No Retention 140

Prescription Final harvest aspen, retain some larger white pine and well formed white oak for stand diversity and also mast and seed production. Be conscious of NCT along west edge of stand, some retention should be focused in this area of stand. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056008-Cut 24.9 4123 - Red Oak Sawtimber 119 51-80 Harvest Overstory 4122 - Oak, Pine Two-Aged No Medium Removal

Prescription Remove all oak aside from a few scattered individuals for mast production with the goal of releasing existing regen and promoting oak stump Specs: sprout regeneration. Retain most if not all red and white pine for a seed source in the hopes that these species will continue to seed in and add diversity to stand, these trees will also provide some aesthetic relief.

Next Step Treatments:

Acceptable Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 56 Year of Entry: 2023

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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 9 61056009-Cut 37.7 4124 - Red with Sawtimber 111-Harvest Seed Tree with 4122 - Oak, Pine Even-Aged Nο White Oak Well Retention 140 Seed tree stand retaining 10-20 BA of white oak and conifers species for mast and seed source. In addition, retain some scattered islands less than 1 acre/island throughout stand. Advanced regeneration should be protected as much as possible. Slope leading to wetland area Specs: in SW corner of stand has been excluded, determine at time of sale prep if more area is needed for slope protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable oaks, pines, red maple, aspen.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

11.5 4131 - Aspen, Oak Sawtimber 4131 - Aspen, Two-Aged 61056012-Cut 60 111-Harvest Clearcut with Nο 140 Retention Oak

Prescription Final harvest stand, retaining some scattered larger diameter white pine along with some well formed oak trees for mast production. Treat in

conjunction with adjacent stand 8. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, oak species, red maple and white pine are to be expected and are acceptable.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056020-Cut 28.8 4191 - Mixed Sawtimber 88 81-110 Harvest Strip/Patch/Gap 4311 - Pine, Two-Aged No **Upland Deciduous** Well Aspen Mix Cut with Conifer (Femelschlag)

Specs:

Prescription Treat area north of and southwest of NCT removing all oak and Aspen aside from retaining scattered good quality white oak - also retain clumps of larger white pine where aspen component is less abundant and white pine component is more uniform, leave red pine individuals and protect some white pine advanced regen/intermediate canopy where possible. Along NCT/equine, retain a higher percentage of overstory white pine and white oak within a 1/2 chain N and S of trail ROW.

Could make this a subunit and remove only aspen in this strip. On average ~10-20BA of residual overall would be appropriate with pockets lower and some areas where clumps of white pine are retained, a bit higher. Use appropriate sale specs to protect hiking/equine pathway.

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Expect aspen, oak, white pine and red maple regen evenly distributed throughout.

Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 56 S Year of Entry: 2023 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 21 61056021-7.9 31022 - Warm Nonstocked Burn Opening 31022 - Warm No Season Grass Season Grass Burn Prescription Burn on a rotational basis. The goal of prescribed burning is to restore and/or maintain a grassland/barrens ecosystem. The timing and Specs: frequency of the burns will be based on currents needs of restoration such as reducing woody encroachment or promoting grasses versus forbs. Remove exotics as needed by herbiciding or other methods. Maintain as needed with mowing, seeding of native grasses and forbs, planting native mast bearing shrubs or trees, burning, or removal of woody encroachment. Next Step NonForestMgt, Herbaceous/Crop/Grass Planting Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2022 22 61056022-Cut 6.1 4199 - Other Mixed Sawtimber 111-Harvest Clearcut with 4139 - Aspen, Even-Aged No **Upland Deciduous** Well Mixed 140 Retention Deciduous Prescription Final harvest stand, retaining most or all of red pine along with some of the larger white pine. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Aspen, oak species, red maple and red and white pine. Regen: Other Comment: Site Condition

Proposed Start Date: 10/1 /2022

24 61056024-NF 2.8 31022 - Warm Nonstocked NonForestMgt Brush Cutting 3204 - Mast No Season Grass Producing Shrub

<u>Prescription</u> This opening is part of an MNFI barrens community. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, <u>Specs:</u> burning, or removal of woody encroachment.

Next Step Treatments:

Acceptable

Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 56 Year of Entry: 2023 S ŧ а **Treatment** Stand Size Stand BA **Treatment** Treatment **Cover Type** Acres Age Habitat n Method Age Objective Name CoverType Density Range Type Structure Cut d 25 61056025-Cut 5 1 42110 - Planted Sawtimber 141-Harvest Low Thinning 4211 - Planted Even-Aged Nο Red Pine Red Pine Well 170 Prescription Thin red pine removing approximately 1/3 of overall volume focusing on removing suppressed, forked or otherwise poorly formed individual Specs: Next Step Treatments: <u>Acceptable</u> Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2022 61056026-Cut 33.6 4122 - Oak, Pine Sawtimber 120 81-110 Harvest Seed Tree with 4122 - Oak, Pine Even-Aged Nο Retention Prescription Seed tree stand leaving 10-20 BA of a combination of white oak and conifer species. In addition, leave a few scattered islands of Specs: representative species throughout stand, less than one acre/island. Protect as much advanced regeneration as possible during harvest, with the goal being to release this regeneration while still retaining mast and seed sources. Treat in conjunction with stand 9, with essentially the same treatment method. Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable oaks, conifer species, aspen and red maple. Regen: Other Comment: Site Condition

Proposed Start Date: 10/1 /2022

27 61056027-Cut 7.4 4126 - White, Sawtimber 96 111- Harvest Shelterwood 4122 - Oak, Pine Even-Aged No Black, N. Pin Oak Well 140

Prescription Shelterwood stand removing all red oak/n. pin oak trees and retaining white oak and conifers throughout. In areas where red pine poles are more prevalent, specifically in western area of stand attempt to release pine component by not retaining much of the oak component. BA of residual will be variable but should average approximately 30-40 sq ft/ac overall.

<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u>

Acceptable regeneration of red maple, oak species and red pine is expected.

Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 56 S Year of Entry: 2023 t а **Treatment** Stand Size Stand BA **Treatment** Treatment **Cover Type** Acres Age Habitat n Density Method Objective Age Structure Name CoverType Range Type Cut d 31 61056031-Cut 18.3 42111 - Planted Sawtimber 111-Harvest Crown Thinning 4211 - Planted Even-Aged Nο Red Pine Red Pine, Mixed Well 140 Deciduous Prescription Thin red and white pine removing approximately 1/3 to 1/2 of overall BA focusing removal on suppressed, forked or otherwise poorly formed individuals. BA throughout stand 31 is variable with stocking ranging from 80-200+ sg ft/ac, this pocket is relatively fully stocked with BA's Specs: hovering in the 170-210 range. Retain some white oak for mast but otherwise most oak present should be removed, where removed might be good locations for canopy gaps within this treatment area. Use appropriate sale specs to protect MCCCT trail. Next Step Treatments: <u>Acceptable</u> Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2022 61056031-18.0 42111 - Planted Sawtimber 4211 - Planted 31 96 111-Harvest Crown Thinning Even-Aged Nο Cutx Red Pine, Mixed Well 140 Red Pine Deciduous Prescription Thin red pine in this treatment area, starting BA averages 140-160 sq ft/ac, remove approximately 1/3 of overall volume focusing removal on suppressed, forked or otherwise poorly formed individuals. Remove all red/n, pin oak, retain and create canopy gaps around some scattered Specs: large crowned white oak for mast production. Protect MCCCT trail during timber sale operations with appropriate specs. Next Step Treatments: <u>Acceptable</u> Regen: Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056031-58.8 42111 - Planted Sawtimber 96 111-Harvest 4122 - Oak, Pine Even-Aged Overstory No Removal Cutxx Red Pine, Mixed Well 140 Deciduous

Specs:

Prescription Remove overstory of red pine and oaks in order to release existing advanced regeneration of red maple and oak species. Retain scattered overstory trees of representative species including red pine and white oak, do not retain any merchantable red/n. pin oak. Some retention should be prioritized along MCCCT with higher residual being left directly adjacent to trail. In addition, treatment area should buffer Fife Lake Loop of the NCT by 1/2 chain or so with this area being excluded from treatment. 1-2 interior islands of red pine should be delineated as well for a seed source - these should be ~1 acre in size.

Next Step Treatments:

Acceptable Regen:

Other

Comment:

Site Condition

Traverse	City	Mgt.	Unit

Report 3 -- Treatments

Compartment: 56	
Year of Entry: 2023	

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a n d	Treatment Name	Acres	Stand CoverType		tand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
31	61056031- Cutxxx	42.3	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	96	111- 140	Harvest	Strip/Patch/Gap Cut (Femelschlag)	4310 - Pine, Oak Mix	Two-Aged	No

Specs:

S

Prescription Treat stand by removing majority of oak species with the exception of some scattered, well formed white oak for mast production. In areas of treatment that are heavier to red pine, mark to thin red pine to release well formed individual trees while also allowing for operability and oak removal - some red pine may need to be marked in areas of stand where red pine density isn't that high for these same reasons.

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

Acceptable Oak species, red maple, white pine, red pine and scattered aspen are expected and acceptable.

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056031-44.5 42111 - Planted Sawtimber 111-Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine, Mixed Red Pine Well 140 Cutxxxx Deciduous

Specs:

Prescription This treatment area that is part of stand 31 while still variable has a higher average BA than the majority of the stand, averaging in the 160-180 sq ft/ac range with pockets higher and some areas a bit lower. Thin this treatment area removing approximately 1/3 to closer to 1/2 of overall BA. In areas where dense, advanced regeneration is present, open stand up a bit more to release this regen and monitor response. Focus removal on suppressed, forked or otherwise poorly formed individual trees. Adjust thinning technique in portions of stand where topography is significant but generally these areas should be excluded if deemed necessary during sale set up.

Next Step Treatments:

<u>Acceptable</u>

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

42210 - Natural 61056038-Cut 18.8 Sawtimber 94 51-80 Harvest Overstory 4319 - Mixed Even-Aged No Red Pine Medium Removal **Upland Forest**

Prescription Remove red pine overstory, retaining scattered individual trees mainly along north, west and southern edges of stand. Encourage or require Specs: short wood operation with the intention being to limit damage as much as possible to existing advanced regeneration.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition

Traverse City Mgt. Unit

Report 3 -- Treatments Compartment: 56 Year of Entry: 2023

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

40 61056040-Cut 14 1 4129 - Mixed Oak Sawtimber 115 81-110 Harvest Seed Tree 4121 - Oak. Two-Aged Nο Well Aspen

Prescription Seed tree stand retaining white oak and white pine only as overstory retention for mast and seed production. Focus retention close to 113, Specs: retaining no more that 10-20 BA on average throughout stand area.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen:

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t

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056044-Cut 6.3 42110 - Planted Poletimber 48 171-Harvest Systematic 4211 - Planted Even-Aged Nο Red Pine Well 200 Thinning Red Pine

Prescription Row thin red pine, remove aspen and other deciduous species where needed for operability otherwise retain to discourage regeneration. Specs:

Next Step Treatments:

<u>Acceptable</u>

Regen: Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056045-NF 13.9 4126 - White, Sawtimber 114 51-80 NonForestMgt **Brush Cutting** 330 - Low-No Black, N. Pin Oak **Density Trees** Poor

Prescription Brush hog (or hand fell) around select leave trees and/or patches. 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. Protect with wire Specs: cages or tubex. Considering adding native herbaceous/forbs ground cover for wildlife food source.

Next Step

Burn, Opening **Treatments:**

Acceptable Regen:

Other Comment: This timber harvest was originally conducted to reduce canopy closure and promote a barrens type community. Much of the original stand has significant forest regen. The portion delineated by this treatment is likely still salvageable for opening management.

Use appropriate methods to protect recreational trail and its surface during project implementation.

Site Condition Wildlife Concerns Proposed Start Date: 10/1 /2022

61056046-NF Immatu NonForestMgt 3204 - Mast 46 2.1 4130 - Aspen Sapling **Brush Cutting** No Well Producing Shrub

Prescription Brush hog (or hand fell) around select leave trees and/or patches. 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. Protect with wire Specs: cages or tubex. Considering adding native herbaceous/forbs ground cover for wildlife food source.

Next Step **Treatments:**

Acceptable Regen:

Other This treatment delineates a poorly stocked part of the parent forested stand and displays multiple non-forested habitat components.

Comment: Use appropriate methods to protect recreational trail and its surface during project implementation.

Site Condition

Nο

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

46 61056046-NFx 16.9 4130 - Aspen Sapling 7 Immatu NonForestMgt Brush Cutting 3205 - Mixed Well re Upland Shrub

<u>Prescription</u>
Specs:
Brush hog (or hand fell) around select leave trees and/or patches. 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. Protect with wire

cages or tubex. Considering adding native herbaceous/forbs ground cover for wildlife food source.

Next Step Burn, Opening Treatments:

Acceptable Regen:

Other This treatment delineates a poorly stocked part of the parent forested stand and displays multiple non-forested habitat components.

<u>Comment:</u> Use appropriate methods to protect recreational trail and its surface during project implementation.

Site Condition

Proposed Start Date: 10/1 /2022

48 61056048-NF 11.9 3205 - Mixed Nonstocked NonForestMgt Brush Cutting 3205 - Mixed No Upland Shrub Upland Shrub

<u>Prescription</u>
Specs:
Brush hog (or hand fell) around select leave trees and/or patches. 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. Protect with wire

cages or tubex. Considering adding native herbaceous/forbs ground cover for wildlife food source.

Next Step Burn, Opening Treatments:

Acceptable Regen:

Other This stand was treated last entry period under a hydro axe contract.

Comment: Use appropriate methods to protect recreational trail and its surface during project implementation.

Site Condition

Proposed Start Date: 10/1 /2022

55 61056055-Cut 7.4 4131 - Aspen, Oak Poletimber 75 81-110 Harvest Clearcut 4131 - Aspen, Even-Aged No Well Oak

Prescription Final harvest stand, retaining a couple large white oak for mast source. Also buffer Fife Lake NCT for aesthetics, treat with adjacent stand

Specs: 58. Recommend no area retention due to small size of stand.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen and oak with some white pine regen.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

58 61056058-Cut 37.6 42121 - Planted Poletimber 79 51-80 Harvest Overstory 4122 - Oak, Pine Even-Aged No Removal

Deciduous

<u>Prescription</u> Harvest all jack pine and other merchantable overstory trees aside from red pine and larger white pine individuals that are present in order to <u>Specs:</u> Harvest all jack pine and other merchantable overstory trees aside from red pine and larger white pine individuals that are present in order to release advanced regeneration, protect advanced regen where possible. Buffer Fife Lake NCT loop for aesthetics.

Next Step Treatments:

<u>Acceptable</u> Expect oak, red maple, aspen, jack pine, red pine white pine to regenerate.

Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 56 Year of Entry: 2023

Nο

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

59 61056059-NF 24.8 4131 - Aspen, Oak Sapling Immatu NonForestMgt **Brush Cutting** 3205 - Mixed Medium Upland Shrub

Prescription Brush hog (or hand fell) around select leave trees and/or patches. Leave scattered mast producing trees and shrubs and/or conifers for Specs: wildlife food and cover. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Protect with wire

cages or tubex. Considering adding native herbaceous/forbs ground cover for wildlife food source.

Next Step Burn, Opening

Treatments:

S

t

Acceptable Regen:

Other This site was treated under a hydro axe contract last entry period.

Use appropriate methods to protect recreational trail and its surface during project implementation. Comment:

Site Condition

Proposed Start Date: 10/1 /2022

42260 - Natural 90 141-4319 - Mixed 61056071-Cut 39.7 Sawtimber Harvest Seed Tree with Two-Aged Nο Pine, Mixed Well 170 Retention **Upland Forest** Deciduous

Prescription Harvest stand using a combination of island and individual tree (seed tree) retention, focusing retention areas near 113, the MCCCT trail and along the eastern edge near the Fife Lake Loop of the NCT. Island should be relatively small in size, ~an acre each with 5-6 scattered Specs:

throughout stand, generally avoiding any of the areas where aspen is present in order to maximize that species regeneration. Individual seed tree retention should be white oak, white pine and red pine for mast and seed production purposes, with Approximately 10 BA or less

retained on average throughout stand. Use appropriate VMS specs to protect rec trails.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

61056087-Cut 76.9 42250 - Pine, Oak Sawtimber 95 81-110 Harvest Clearcut 4211 - Planted Even-Aged No Well Red Pine

Prescription Final harvest stand and replant to red pine. Stand should be chip harvested with a 1" spec on all trees. Potential for significant site prep exists for this stand to be successfully planted to red pine and requiring chipping is one step we can take to attain a more successful Specs: plantation. Buffer motorcycle trail in eastern corner of treatment area, also retain a few scattered trees along western edge of treatment area to account for aesthetics along ORV route. No area based retention in treatment area in order to be able to conduct aerial spraying for site

prep. Retention will be applied throughout remainder of stand if/when treated.

Next Step SitePrep, Roller Chopping; Pesticide, Aerial - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, Aerial - Release; Monitoring, Artificial Regen(3yr)

Treatments:

<u>Acceptable</u> Red pine at plantation spacing. Oak, red maple and scattered jack pine are expected to regenerate as volunteers as well but should be controlled with herbicide spraying. Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3
S
t

Report 3 -- Treatments Compartment: 56
Year of Entry: 2023

DNR MICHIGAN

a n d	Treatment Name	Acres	Stand CoverType	Size Stand Density Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
94	61056094-NF	5.1	31022 - Warm Season Grass	Nonstocked		NonForestMgt	Brush Cutting	3205 - Mixed Upland Shrub		No
Pre Spe				ect leave trees and it site appropriate na						

cages or tubex. Considering adding native herbaceous/forbs ground cover for wildlife food source.

Next Step Burn, Opening

Acceptable
Regen:
Other

Treatments:

Comment:
Site Condition

Proposed Start Date: 10/1 /2022

95 4310 - Pine. 100 61056100-Cut 42141 - Planted Harvest Seed Tree with 29.1 Sawtimber 111-Two-Aged Nο Mixed Pine, Mixed 140 Retention Oak Mix Deciduous

Prescription Specs:
Seed tree harvest stand retaining ~10 BA of a mixture of white oak, red pine and white pine evenly scattered throughout stand. In addition, retain a couple small islands along eastern edge for aesthetics along horse trail - within islands, all red oak species and jack pine should be removed. Protect rec trail along eastern edge using sale specs. Somewhat difficult hauling access, recommend establishing temporary skid/haul route to the NE through stand 29 in adjacent compartment 55. Stand has orange marked trees throughout from last YOE sale that was set up, did not sell and was withdrawn.

<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) Treatments:

Acceptable white pine, red pine, oak species, red maple, aspen and jack pine are expected and acceptable. Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Sapling 113 61056113-69.8 4112 - Maple, Immatu Pesticide **ERROR** 42111 - Planted Even-Aged No Beech, Cherry Well Red Pine, Spray Association Mixed Deciduous

Prescription Specs: Aerial spray to reduce deciduous competition then plant red pine at plantation spacing. Trenches should be reevaluated after spraying. 3 small islands of advanced regen consisting of red maple, oak species, red pine and jack pine have been excluded from treatment area regen in these islands is approximately 10-20' in height.

<u>Next Step</u> Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Planting, Initial Plant <u>Treatments:</u>

Acceptable Sand was trenched, deciduous regen has established in much of stand area and is 3-5' tall on average. Recommend aerial spray at this time then immediate planting if trenches are still deemed acceptable.

Other Percent to Treat = 100% Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 56 S Year of Entry: 2023 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Objective Structure Density Name CoverType Age Range Type Cut d 61056116-Cut 13.6 4191 - Mixed Sawtimber 111-Harvest Clearcut with 413 - Aspen Even-Aged No **Upland Deciduous** Well 140 Retention with Conifer Prescription Final harvest aspen and retain some good quality white pine and oak species, preferably white oak. Do not cut any hemlock regardless of Specs: size. Use appropriate retention and sale specs along snowmobile trail and near ORV/cycle trail that traverses stand but is not mapped in MIFI. Corners present needed to establish PVT boundary lines, SW corner is pin w/ cap buried ~6", should have pink flagging attached. Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Aspen, white pine, red maple and oak species are expected. Regen: Other

Total Treatment 788.2 Acreage Proposed:

Proposed Start Date: 10/1 /2022

Comment:
Site Condition

Compartment: 56

Traverse City Mgt. Unit

Patrick Cotant : Examiner Year of Entry: 2023

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres		Domina	nt Site	Cone	dition	s		
Acres	Available	With Condition	Not Available		5B	5C	1C	3D	3J	3L	5E
317	306	0	12	Aspen							12
16	16	0	0	Herbaceous Openland							
38	38	0	0	Jack Pine							
0	0	0	0	Low-Density Trees							
3	3	0	0	Lowland Shrub							
29	29	0	0	Marsh							
303	280	17	6	Mixed Upland Deciduous	7	10					6
393	266	116	11	Natural Mixed Pines	0	116			11		
94	94	0	0	Northern Hardwood							
481	166	254	60	Oak	132	122	9	7	4	38	2
139	73	66	0	Planted Mixed Pines	56	10					
822	214	545	62	Red Pine	86	459		45			18
294	80	214	0	Upland Mixed Forest	54	160					
12	12	0	0	Upland Shrub							
6	6	0	0	Urban	0	0					0
6	6	0	0	Water							
115	43	61	11	White Pine		61	11				
3,068	1,633	1,272	163	Total Forested Acres	335	937	20	52	15	38	38
-	53%	41%	5%	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.

Α	Available	EC: Delay treetment for					
		5C: Delay treatment for age/size class diversity or exceptional site quality	23	Unspecified	Unspecified	Unspecified	Unspecified
Comm	nents:						

Traverse City Mgt. Unit

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2	Available	5B: Maintain for regeneration purposes	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	5E: Long-Term Retention	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	67	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	1C: Other dept or div proc/practices	20	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Pugsley Fence sur	rounds stand, was not supposed	d to be a	ound this area of state la	nd apparently?		
6	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:	and oak species, excluded from					

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9	Unavailable	3D: Recreational / Scenic values	5	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
C	comments:						
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	57	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
13	Available	5B: Maintain for regeneration purposes	20	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
14	Available	5B: Maintain for regeneration purposes	32	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
15	Unavailable	3D: Recreational / Scenic values	2	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	comments:						

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Patrick Cotant : Examiner

17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	51	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	31	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
19	Unavailable	5E: Long-Term Retention	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
20	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	111	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
21	Available	5B: Maintain for regeneration purposes	51	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
23	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Portion of stand 10	06 that was not treated - horse tr	ail travels	s in area excluded from n	nost recent treatment in sta	and 106 and US131.	

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Compartment: 56
Year of Entry: 2023

24 Unspecified Unspecified Unspecified Unspecified Unavailable 5E: Long-Term Retention 3 Comments: 25 Unavailable 5E: Long-Term Retention 2 Unspecified Unspecified Unspecified Unspecified Comments: 3J: Water quality / BMPs Unspecified Unspecified Unspecified Unspecified 26 Unavailable 4 (stream, river, or lake) Comments: Unspecified Unspecified Unspecified Unspecified 27 **Available** 5C: Delay treatment for 10 age/size class diversity or exceptional site quality **Comments:** 28 3J: Water quality / BMPs 11 Unspecified Unspecified Unspecified Unspecified Unavailable (stream, river, or lake) **Comments:** 29 **Available** 5B: Maintain for 61 Unspecified Unspecified Unspecified Unspecified regeneration purposes Comments:

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30	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	53	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
31	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	31	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
32	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	26	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
33	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	37	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
34	Available	5B: Maintain for regeneration purposes	29	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
35	Unavailable	3D: Recreational / Scenic values	45	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						

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36	Available	Available 5C: Delay treatment for age/size class diversity or exceptional site quality		Unspecified	Unspecified	Unspecified	Unspecified	
С	omments:							
37	Available	5B: Maintain for regeneration purposes	13	Unspecified	Unspecified	Unspecified	Unspecified	
С	omments:							
38	Available	5B: Maintain for regeneration purposes	42	Unspecified	Unspecified	Unspecified	Unspecified	
С	omments:							
39	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	59	Unspecified	Unspecified	Unspecified	Unspecified	
С	omments:							
40	Unavailable	3L: Other wildlife concerns	38	Unspecified	Unspecified	Unspecified	Unspecified	
	omments: otential for barrer	ns burn by WLD on this stand in	conjuncti	ion with stands or portior	ns of to the east.			
41	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified	

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42	Available	5B: Maintain for regeneration purposes	37	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						
43	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	58	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						
44	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	37	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						
45	Available	5B: Maintain for regeneration purposes	27	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
46	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
47	Unavailable	5E: Long-Term Retention	11	Unspecified	Unspecified	Unspecified	Unspecified
	comments: lec trail and small	wet areas within stand, along w	th steep	topography.			

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48	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	51	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
49	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
50	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	34	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
51	Available	5B: Maintain for regeneration purposes	18	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
52	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	74	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



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

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Traverse City Mgt. Unit Compartment: 56
Year of Entry 2023



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.

Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.	Conserva Area	tion Type	Description	HCVA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
	ERA	•	identified as Element Occurrences (EOs) by the context of their natural community classification s (Excellent) or B (Good) and a Global (G) or State threatened (2), or rare (3) serve as an initial base the State. The system is comprised of individual managed for restoration and maintenance of nature (EOs) by the local services (EOs) by the local state (EOs) by the local services (EOs) by the	Michigan Natural Features Inventory (MNFI) within the system. Element Occurrences with viability ranks of A (S) element (rarity) ranking of endangered (1), e of ERAs. They may be located upon any ownership in or associations of natural community types that are ural ecological processes and values. The public may

ort 7 – Stands Compartment: 56
Year of Entry: 2023

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Stand	Level 4 C	over Type		Size De	nsity	Acres Stand Age I	3A Range	Managed S	Site	General Comments			
1	4199 - Other Mixed Upland Deciduous			Sawtimber Well		39.3 75	111-140	N/A		mixed stand of oak, Aspen and pine, Aspen seems to be more prevalent in Northern 1/2 of stand and red pine more common in Southern 1/2.			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	overall quality is good, oak seems to be true red oak, white oak is fa quality, possible opportunity to regenerate Aspen and remove red o			
	Red Maple	15	Pole	7		Red Maple	Low	Variable	Sapling				
	Red Oak	35	Log/Pole	10	75	White Pine	Low	Variable	Sapling	especially with mortality pocket that is likely oak wilt in Southern portion			
	White Oak	10	Log/Pole	10		Witch Hazel	Low	5 - 10 feet	Tall Shrub	of stand. consider treating by retaining some white oak and red pine, with islands in which Aspen and red oak would be removed. protect v			
F	Bigtooth Aspen	25	Pole/Log	9	75					pine regen where possible. trail bisects stand as well which will need to			
	Red Pine	15	Log/Pole	11	75					be protected.			
										Possible pocket of oak wilt in some older red oaks near southwest corner of stand. See OFS for exact location.			
2	4310 - Pi	ne, Oak Mix	x	Poletimb	er Poor	8.8 66	1-50	N/A		previously typed as opening however there are white pine, red and white			
	Canopy Species	% Cover	Size Class	DBH	Age					oak and red pine of varying sizes throughout much of stand area, albeit in generally low density. approximately 50% canopy cover on average.			
	White Oak	35	Pole/Log	8						white pine and red pine saplings beginning to fill in much of more open			
	White Pine	40	Pole/Sap/Lo	g 7	66					area, along with understory of areas dominated by oak species.			
	Red Oak	15	Log/Pole	10									
	Red Pine	10	Log/Pole	10									
3	4131 - A	spen, Oak		Poletimb	er Well	13.2 50	111-140	N/A		decent quality Aspen staff with oak and pine present throughout. central			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	portion of stand is heavier to oak and pine. treat by final harvesting, retaining conifers and some scattered white oak for mast and seed. be			
	Red Maple	5	Log/Pole	10		Red Maple	Low	Variable	Sapling	conscious of nct along western edge of stand. ?Pocket of white pine			
	Red Oak	10	Log	14		Red Oak	Low	Variable	Sapling	log/pole plantation with white oak pole/log and some natural jack pine in			
	White Oak	10	Log	12		White Pine	Low	Variable	Sapling	se portion, should be separated. also contains small amount of red oak and bta. 80ba med stocked beech and red maple regen			
F	Bigtooth Aspen	67	Pole/Log	9	50								
	White Pine	8	Log/Pole	12									
4	4310 - Pi	ne, Oak Mix	x	Sawtimb	er Well	31.1 120	111-140	N/A		mixed oak pine stand with pockets heavier to pine. nct runs through			
	C C												
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	stand and trailhead is located in nw corner. regen is advanced in areas or			
	Red Oak	% Cover	Size Class Log/Pole	DBH	Age 120	Sub-Canopy Species Red Maple	Density Medium		Size Sapling				
								Avg. Height	1	stand and trailhead is located in nw corner. regen is advanced in areas or			
	Red Oak	30	Log/Pole	13		Red Maple	Medium	Avg. Height 10 - 20 feet	Sapling	stand and trailhead is located in nw corner. regen is advanced in areas or			
	Red Oak White Oak	30 28	Log/Pole	13 12		Red Maple Beech	Medium Low	Avg. Height 10 - 20 feet 5 - 10 feet	Sapling Sapling	stand and trailhead is located in nw corner. regen is advanced in areas or			
	Red Oak White Oak White Pine	30 28 30	Log/Pole Log/Pole Log/Pole	13 12 12		Red Maple Beech Bigtooth Aspen	Medium Low Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet	Sapling Sapling Sapling	stand and trailhead is located in nw corner. regen is advanced in areas or			
5	Red Oak White Oak White Pine Red Pine 42141 - Planted	30 28 30 12	Log/Pole Log/Pole Log/Pole Log	13 12 12	120	Red Maple Beech Bigtooth Aspen White Pine	Medium Low Low Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable	Sapling Sapling Sapling Pole	stand and trailhead is located in nw corner. regen is advanced in areas o stand with white pine, red maple and beech most numerous. mixed stand of pine and oak resulting from past treatment - verify. some variability in stocking but generally 70-120 ba overall. understory is quite			
	Red Oak White Oak White Pine Red Pine 42141 - Planted	30 28 30 12 Mixed Pine	Log/Pole Log/Pole Log/Pole Log	13 12 12 14 Sawtimb	120	Red Maple Beech Bigtooth Aspen White Pine White Oak	Medium Low Low Low Medium 81-110	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable < 5 feet	Sapling Sapling Sapling Pole	stand and trailhead is located in nw corner. regen is advanced in areas o stand with white pine, red maple and beech most numerous. mixed stand of pine and oak resulting from past treatment - verify. some variability in stocking but generally 70-120 ba overall. understory is quite advanced throughout much of stand, any treatments will likely set a fair			
	Red Oak White Oak White Pine Red Pine 42141 - Planted Dec	30 28 30 12 Mixed Pine iduous	Log/Pole Log/Pole Log/Pole Log	13 12 12 14 Sawtimb	120 er Well	Red Maple Beech Bigtooth Aspen White Pine White Oak 29.1 96	Medium Low Low Low Medium 81-110	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable < 5 feet N/A	Sapling Sapling Sapling Pole Sapling	stand and trailhead is located in nw corner. regen is advanced in areas o stand with white pine, red maple and beech most numerous. mixed stand of pine and oak resulting from past treatment - verify. some variability in stocking but generally 70-120 ba overall. understory is quite advanced throughout much of stand, any treatments will likely set a fair amount of regen back but stand may be a good candidate to treat to release regen and remove large, old oak and pine. or could retain stand			
	Red Oak White Oak White Pine Red Pine 42141 - Planted Dec Canopy Species	30 28 30 12 Mixed Pine iduous % Cover	Log/Pole Log/Pole Log/Pole Log Size Class	13 12 12 14 Sawtimb	120 er Well	Red Maple Beech Bigtooth Aspen White Pine White Oak 29.1 96 Sub-Canopy Species	Medium Low Low Low Medium 81-110 Density	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable < 5 feet N/A Avg. Height	Sapling Sapling Sapling Pole Sapling	stand and trailhead is located in nw corner. regen is advanced in areas o stand with white pine, red maple and beech most numerous. mixed stand of pine and oak resulting from past treatment - verify. some variability in stocking but generally 70-120 ba overall. understory is quite advanced throughout much of stand, any treatments will likely set a fair amount of regen back but stand may be a good candidate to treat to release regen and remove large, old oak and pine. or could retain stand			

Report 7 - Stands



Stand	Level 4 Co	over Type	e Size Density Acres Stand Age BA Range Managed Site		Site	General Comments				
6	623 - Emergent Wetland			Nonsto	ocked	2.8		No		
7	4124 - Red v	4124 - Red with White Oak		Sawtimb	er Well	5.0 107	111-140	N/A		oak pine stand originally part of stand 111, however this new stand is
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	much more of a steep slope leading down to pond/wetland area, should be hard factored and retained. Also has a hemlock component on north
	Red Maple	3	Pole	7		Red Maple	Low	Variable	Sapling	facing slope.
	Red Oak	43	Log	14	107	White Pine	Low	Variable	Sapling	
	White Oak	25	Log/Pole	12		Witch Hazel	Low	5 - 10 feet	Tall Shrub	
E	Bigtooth Aspen	7	Log	16			·			
	Red Pine	12	Log/Pole	12						
	White Pine	5	Log	12						
	Hemlock	5	Log/Pole	10						
8	4123 -	Red Oak	Sa	awtimber	Mediu	m 24.9 119	51-80	N/A		red oak stand with red and white pine throughout, often concentrated in
,	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	small pockets. trace sugar maple in northwestern portion of stand, also some Aspen along western edge of stand. understory consists mainly of
	Red Oak	88	Log	16	119	Red Maple	High	10 - 20 feet	Sapling	red maple, white pine and ironwood. could do an overstory removal
	White Pine	5	Log	14		Bigtooth Aspen	Low	10 - 20 feet	Sapling	retaining conifer species in an attempt to regenerate oak via stump
	Red Pine	5	Log	14		White Pine	Medium	10 - 20 feet	Sapling	sprouts.
	Sugar Maple	2	Pole/Log	8		Ironwood	Medium	< 5 feet	Sapling	
						Witch Hazel	Low	5 - 10 feet	Tall Shrub	
9	4124 - Red v	vith White (Oak S	Sawtimb	er Well	45.8 120	111-140	N/A		Oak overstory with pole sized red pine in the intermediate canopy.
	4124 - Red v	vith White (er Well	45.8 120 Sub-Canopy Species		N/A Avg. Height	Size	Dense regeneration in places from cut that took place 2 entry periods
					l Age				Size Sapling	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height		Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine
	Canopy Species Red Oak	% Cover 55	Size Class Log/Pole	DB H	l Age	Sub-Canopy Species Red Maple	Density Medium	Avg. Height 10 - 20 feet	Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white
	Canopy Species Red Oak White Oak	% Cover 55 30	Size Class Log/Pole Log/Pole	DB H 14 12	l Age	Sub-Canopy Species Red Maple Beech	Density Medium Low	Avg. Height 10 - 20 feet 5 - 10 feet	Sapling Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine
	Canopy Species Red Oak White Oak	% Cover 55 30	Size Class Log/Pole Log/Pole	DB H 14 12	l Age	Sub-Canopy Species Red Maple Beech Bigtooth Aspen	Medium Low Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet	Sapling Sapling Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white
	Canopy Species Red Oak White Oak	% Cover 55 30	Size Class Log/Pole Log/Pole	DB H 14 12	l Age	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine	Medium Low Low Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable	Sapling Sapling Sapling Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white
	Canopy Species Red Oak White Oak Red Pine	% Cover 55 30 15	Size Class Log/Pole Log/Pole Pole	DB H 14 12	1 Age 120	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine Red Pine White Oak	Medium Low Low Low Medium	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable >20 feet	Sapling Sapling Sapling Sapling Pole	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white pine dominating the subcanopy. mixed stand of red and white pine with oak present throughout much of stand. south 1/2 is white pine while northern 1/2 is dominated by red
10	Canopy Species Red Oak White Oak Red Pine	% Cover 55 30 15 Mixed Pine iduous	Size Class Log/Pole Log/Pole Pole	DBH 14 12 8	1 Age 120	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine Red Pine White Oak	Medium Low Low Low Medium Low Medium Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable >20 feet Variable	Sapling Sapling Sapling Sapling Pole	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white pine dominating the subcanopy. mixed stand of red and white pine with oak present throughout much of stand. south 1/2 is white pine while northern 1/2 is dominated by red pine. could thin stand removing 1/3 of volume focusing removal on
10	Canopy Species Red Oak White Oak Red Pine 42141 - Planted Deci	% Cover 55 30 15 Mixed Pine iduous	Size Class Log/Pole Log/Pole Pole	DBH	1 Age 120 120 er Well	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine Red Pine White Oak	Medium Low Low Low Medium Low Medium Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable >20 feet Variable N/A Avg. Height Variable	Sapling Sapling Sapling Sapling Pole Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white pine dominating the subcanopy. mixed stand of red and white pine with oak present throughout much of stand. south 1/2 is white pine while northern 1/2 is dominated by red pine. could thin stand removing 1/3 of volume focusing removal on defected and low quality trees, in addition, remove all red oak species, retain some white oak. rr grade running diagonally through stand, also
10	Canopy Species Red Oak White Oak Red Pine 42141 - Planted Deci	% Cover 55 30 15 Mixed Pine iduous % Cover	Size Class Log/Pole Log/Pole Pole , Mixed	DBH 14 12 8 Sawtimb	1 Age 120 120 er Well	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine Red Pine White Oak 10.2 96 Sub-Canopy Species	Medium Low Low Low Medium Low Low Medium Low Medium Low Density	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable >20 feet Variable N/A Avg. Height	Sapling Sapling Sapling Sapling Pole Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white pine dominating the subcanopy. mixed stand of red and white pine with oak present throughout much of stand. south 1/2 is white pine while northern 1/2 is dominated by red pine. could thin stand removing 1/3 of volume focusing removal on defected and low quality trees, in addition, remove all red oak species, retain some white oak. rr grade running diagonally through stand, also small wet pocket in center of stand on 40 line. See older management
10	Canopy Species Red Oak White Oak Red Pine 42141 - Planted Deci Canopy Species Red Maple	% Cover 55 30 15 Mixed Pine iduous % Cover 5	Size Class Log/Pole Log/Pole Pole A Mixed Size Class Pole/Log	DBH	1 Age 120 120 er Well	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine Red Pine White Oak 10.2 96 Sub-Canopy Species Red Maple	Medium Low Low Low Medium Low Medium Low Medium Low Density Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable >20 feet Variable N/A Avg. Height Variable	Sapling Sapling Sapling Sapling Pole Sapling Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white pine dominating the subcanopy. mixed stand of red and white pine with oak present throughout much of stand. south 1/2 is white pine while northern 1/2 is dominated by red pine. could thin stand removing 1/3 of volume focusing removal on defected and low quality trees, in addition, remove all red oak species, retain some white oak. rr grade running diagonally through stand, also
10	Canopy Species Red Oak White Oak Red Pine 42141 - Planted Deci Canopy Species Red Maple Red Oak	% Cover 55 30 15	Size Class Log/Pole Log/Pole Pole , Mixed Size Class Pole/Log Log	DBH 14 12 8 Sawtimb DBH 9 16	1 Age 120 120 er Well	Sub-Canopy Species Red Maple Beech Bigtooth Aspen White Pine Red Pine White Oak 10.2 96 Sub-Canopy Species Red Maple	Medium Low Low Low Medium Low Medium Low Medium Low Density Low	Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable >20 feet Variable N/A Avg. Height Variable	Sapling Sapling Sapling Sapling Pole Sapling Sapling	Dense regeneration in places from cut that took place 2 entry periods ago. Consider overstory removal or a shelterwood/seed tree harvest to release advanced regen and get some of the oak off the top. Very simila to adjacent stand to the east except that this stand has planted red pine dominating the sub canopy and the adjacent stand has planted white pine dominating the subcanopy. mixed stand of red and white pine with oak present throughout much of stand. south 1/2 is white pine while northern 1/2 is dominated by red pine. could thin stand removing 1/3 of volume focusing removal on defected and low quality trees, in addition, remove all red oak species, retain some white oak. rr grade running diagonally through stand, also small wet pocket in center of stand on 40 line. See older management



Stand	Stand Level 4 Cover Type Size Density		nsity	Acres	Stand Age B	tand Age BA Range		Site	General Comments					
11	Canopy Species % Cover Size Class DBH Age DBH Age Northern Pin Oak 30 Log 14 100					dense deciduous regen throughout dominated by red maple. red pin, n								
C			Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pin and white oak make up canopy with red maple and other regen soon to be filling in gaps and be considered as canopy species. ba is variable					
Nor			100	Re	d Maple	Full	10 - 20 feet	Sapling	ranging from 0-80. *compare with stanf 14 and cutting records, might					
,	White Oak	25	Log	14		ı	Beech	Low	5 - 10 feet	Sapling	be able to merge?			
	Red Pine	45	Log/Pole	12	96	Blac	ck Cherry	Low	10 - 20 feet	Sapling				
						North	ern Pin Oak	Medium	10 - 20 feet	Sapling				
12	4131 - A	spen, Oak	S	Sawtimbe	er Well	11.5	60	111-140	N/A		Aspen decent quality, growing fairly well, classified as log pole, just large			
C	anopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	enough on average to make this call. oak is in good condition, large diameter, large white pine scattered throughout. consider final harvest			
	Red Maple	15	Pole/Log	8		Re	d Maple	Low	Variable	Sapling	retaining scattered large white pine for aesthetics and some large			
	Red Oak	30	Log	16		R	ed Oak	Low	Variable	Sapling	crowned oak for mast production.			
Biç	gtooth Aspen	50	Log/Pole	10	60	WI	nite Pine	Medium	Variable Sapling					
1	White Pine	5	Pole	8		Wit	ch Hazel	Low	10 - 20 feet	Tall Shrub				
13	4310 - Piı	ne, Oak Mix	k Sa	wtimber	Medium	n 41.7	125	51-80	N/A		Harvested under tsale contract 016-17-01 in late summer of 2018. Oak			
C			DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	wilt was present within stand, all red oak was removed along with aspen, beech and any remaining live ash. All dead standing red oak was				
	White Oak	50	Log	14	125		Beech	Low	Variable	Sapling	removed as well. Overall sub-canopy density is high.			
1	White Pine	25	Log	16		R	ed Oak	Low	Variable	Sapling	, , , ,			
	Red Pine	25	Log/Pole	13		Bigto	oth Aspen	Low	10 - 20 feet	Sapling				
						WI	nite Pine	Medium	Variable	Sapling				
						Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub				
						Re	d Maple	High	10 - 20 feet	Sapling				
14	42250 -	Pine, Oak	S	Sawtimbe	er Well	58.7	96	81-110	N/A		Stand was harvested in 03-04 and current stand is a pine oak mix with			
C	anopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	significant advanced regen throughout. Northern portion of stand has higher density of red pine while southern area contains more of a			
Nor	rthern Pin Oak	15	Log	14		Re	d Maple	High	10 - 20 feet	Sapling	concentrated oak component, with red pine still distributed throughout.			
1	White Oak	20	Log	14		I	Beech	Low	5 - 10 feet	Sapling	Overall average BA is in the 80-100 range. MCCCT trail passes through			
	Red Pine	65	Log/Pole	12	96	North	ern Pin Oak	Medium	Variable	Sapling	areas of stand along western edge.			
				'		WI	nite Pine	Low	10 - 20 feet	Sapling				
15	4130	- Aspen	Sapling Well		4.5	7	mmature	N/A		stand seed tree harvested last year with oak and pine retention near 113,				
C	anopy Species	% Cover	Size Class	DBH	Age						all Aspen removed. Aspen is regenerating well along with some oak species and red maple. white pine also present.			
	Red Maple	10	Sapling	1							,			
	Red Oak	5	Log	14										
,	White Oak	5	Log	14										
Biç	gtooth Aspen	75	Sapling	1	6									
	White Pine	5	Sapling/Pole	2										

Traverse City Mgt. Unit Report 7 - Stands



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	iite	General Comments
16	42100 - Plar	ited White	Pine F	Poletimb	er Well	3.3	88	111-140	N/A		Small pocket of relatively dense white pine, variable size but generally pole, small log. Stand lies in small draw, if adjacent stand 20 is
	Canopy Species	% Cover	Size Class		l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	harvested this stand will provide good aesthetic relief along 186 for
	Red Oak	3	Log	14		Re	ed Maple	High	Variable	Sapling	surrounding harvest.
	White Oak	2	Log/Pole	12							
E	Bigtooth Aspen	10	Log	14							
	White Pine	85	Pole/Log	9	88						
17	4119 - Mixed No	orthern Har	dwoods	Sapling	y Well	4.7	22	1-50	N/A		Small stand of deciduous regen with some overstory retention.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	50	Sapling	2	22	Re	ed Maple	Medium	10 - 20 feet	Sapling	
	White Oak	5	Sapling	2		Bla	ck Cherry	Low	10 - 20 feet	Sapling	
	White Oak	5	Log	14		Oa	ak (spp.)	Medium	10 - 20 feet	Sapling	
N	orthern Pin Oak	5	Log	14							
N	orthern Pin Oak	15	Sapling	2							
	Red Pine	10	Log/Pole	11	96						
	Black Cherry	10	Sapling	2							
18	4131 - <i>A</i>	spen, Oak	F	Poletimb	er Well	3.1	30	Immature	N/A		Aspen stand just into pole size, typed spe is as pole sapling. growing
	Canopy Species	% Cover	Size Class	DBH	l Age						well, red maple evenly scattered throughout.
	Red Maple	20	Sapling/Pole	3	30						
	Red Oak	2	Sapling	2							
	White Oak	18	Sapling	2							
E	Bigtooth Aspen	55	Pole/Sapling	5	30						
	Black Cherry	5	Sapling	2							
19	4130	- Aspen		Sapling	y Well	36.6	21	Immature	N/A		Aspen stand growing well, other deciduous species scattered throughout
	Canopy Species	% Cover	Size Class	DBF	l Age						in lower numbers. some 5-10' white pine regen present as well.
	Red Maple	18	Sapling	3	21						
	Red Oak	2	Sapling	2	21						
(Quaking Aspen	50	Sapling/Pole	4	21						
E	Bigtooth Aspen	20	Sapling/Pole	4	21						
	Black Cherry	10	Sapling	2	21						
20	4191 - Mixed Upl	and Decidu onifer	ous with	Sawtimb	er Well	35.8	88	81-110	N/A		pine oak stand with some variability in species composition. overall decent quality, Aspen more prevalent in western and northern 1/2 of
	Canopy Species	% Cover	Size Class	DBF	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand. Trace red pine scattered throughout stand. nct runs e/w through center of stand, consider treating entire stand or area north of and
	Red Maple	10	Pole	7		Re	ed Maple	Low	Variable	Sapling	southwest of NCT removing all oak and Aspen aside from retaining
	Red Oak	25	Log/Pole	12		WI	hite Pine	Medium	Variable	Sapling	scattered good quality white oak - also retain clumps of larger white pine
	White Oak	20	Log/Pole	10							where aspen component is less abundant, leave red pine individuals and
E	Bigtooth Aspen	15	Pole/Log	9							protect white pine advanced regen and intermediate canopy white pine where possible. On average ~10-20BA of residual overall would be
	White Pine	30	Log/Pole/Sap	10	88						appropriate with pockets lower and some areas where clumps of white
		- 00	_59/1 5/5/64F								pine are retained, a bit higher.



Stand	Level 4 C	over Type	ver Type Size Density Season Grass Nonstocked	nsity	Acres Stand Age E	BA Range	Managed S	ite	General Comments	
21	31022 - Warr	n Season G	Grass	Nonsto	cked	7.9		Managed Op	pening	Little bluestem, blueberry, sweetfern, poverty grass, cladonia, rice grass, Wild Bergamont, prairie willow, sedge, strawberry. NICE OPENING. Scattered black cherry, jack pine, quaking askpen, juneberry, white pine.
22	4199 - Other Mixe	d Upland D	eciduous	Sawtimbe	er Well	6.1 60	111-140	N/A		mixed stand of Aspen, oak, red maple and red pine with scattered white
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	pine. consider final harvest to regenerate deciduous species, retaining some scattered well formed red pine.
	Red Maple	20	Pole/Log	8		Red Maple	Low	Variable	Sapling	F
	Red Oak	22	Log	14	125	Red Oak	Low	< 5 feet	Sapling	
	White Oak	20	Log/Pole	12		White Oak	Low	< 5 feet	Sapling	
	Bigtooth Aspen	30	Pole/Log	9	60	White Pine	Low	Variable	Sapling	
	White Pine	2	Log/Pole	12			'			•
	Red Pine	6	Log/Pole	12						
23	4130	- Aspen		Poletimbe	er Well	18.5 46		N/A		good density/stocking throughout, still quite a bit of variability in terms of
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	size however. overall, for the age of this stand the overall average dbh is relatively low. 8" on average and 5-6 sticks. could treat thos year if age
	Red Maple	10	Pole/Sapling	g 7		White Oak	Low	10 - 20 feet	Sapling	class acres are needed, if not consider waiting for more volume and treat
	Bigtooth Aspen	80	Pole	8	46	White Pine	Low	5 - 10 feet	Sapling	next yoe.
	Black Cherry	5	Sapling/Pol	е 3						
	White Pine	5	Pole/Sapling	g 7						
24	31022 - Warr	n Season G	Grass	Nonsto	cked	2.8		No		Part of Pine Barrens ERA. Monitor for health of site and treat according
						Sub-Canopy Species	Density	Avg. Height	Size	to needs. Private land is adjacent.
						Black Cherry	Low		Pole	
						Bigtooth Aspen	Medium		Log	
25	42110 - Pla	nted Red P	ine	Sawtimbe	er Well	5.1 65	141-170	N/A		stand treated last yoe, responding well to thinning and overall good
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	quality. could consider treating by thinning again. removing 1/3 of volume focusing on removal of defect and suppressed trees.
	Red Pine	100	Log/Pole	11	65	Red Maple	Medium	5 - 10 feet	Sapling	Tooldaning on removal or defect and suppressed frees.
						Beech	Low	5 - 10 feet	Sapling	
		,				<u>'</u>	Low	5 - 10 feet 5 - 10 feet		
26	4122 -	Oak, Pine		Sawtimbe		Beech			Sapling	treated two entry periods ago with stands to the west and northwest,
26	4122 - Canopy Species	Oak, Pine		Sawtimbe DBH	Age	Beech White Pine	Low 81-110	5 - 10 feet	Sapling	advanced regen of red maple, white pine and oaks present throughout
26						Beech White Pine	Low 81-110	5 - 10 feet N/A	Sapling Sapling	advanced regen of red maple, white pine and oaks present throughout much of stand understory. ba is variable but averages around 100. some decent quality white oak present, white pine is decent as well. trace
26	Canopy Species	% Cover	Size Class	DBH	Age	Beech White Pine 33.6 120 Sub-Canopy Species	81-110 Density	5 - 10 feet N/A Avg. Height	Sapling Sapling	advanced regen of red maple, white pine and oaks present throughout much of stand understory. ba is variable but averages around 100. some decent quality white oak present, white pine is decent as well. trace beech in understory. could seed tree stand, leaving white oak and white
26	Canopy Species Red Oak	% Cover 40	Size Class Log/Pole	DBH	Age	Beech White Pine 33.6 120 Sub-Canopy Species Red Maple	81-110 Density High	5 - 10 feet N/A Avg. Height 10 - 20 feet	Sapling Sapling Size Sapling	advanced regen of red maple, white pine and oaks present throughout much of stand understory. ba is variable but averages around 100. some decent quality white oak present, white pine is decent as well. trace



	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
7	4126 - White, E	Black, N. Pi	n Oak S	awtimb	er Well	9.7	96	111-140	N/A		oak stand with some red and trace white pine in canopy, overall fair
С	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	quality, some oak decline and mortality. South and Western portion of stand has more of a pine component. if treated, could seed tree white
	Red Maple	10	Pole	7		Wh	ite Pine	Low	Variable	Sapling	oak, remove all red oak and focus on retaining and releasing pine whe
	Red Oak	25	Log/Pole	11		Wite	ch Hazel	Low	5 - 10 feet	Tall Shrub	its density is higher.
	White Oak	57	Log/Pole	10	96	Re	d Maple	Low	10 - 20 feet	Sapling	
	Red Pine	8	Pole/Log	9							-
8	4199 - Other Mixe	d Upland D	eciduous Po	letimbe	r Medium	12.1	46	51-80	N/A		mixed stand of variable sized trees with stocking variability ad well. in
С	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	general overall stand size is small with some larger pin oak and white pine present.
	Red Maple	20	Pole/Sap/Log	6		Re	d Maple	Medium	Variable	Sapling	
Q	uaking Aspen	25	Sapling/Pole	4	46	Wh	ite Pine	Low	Variable	Sapling	
No	orthern Pin Oak	30	Pole/Log	8	46	Blac	k Cherry	Medium	Variable	Sapling	
	White Pine	5	Pole	6		Wite	ch Hazel	Low	10 - 20 feet	Tall Shrub	
Е	Black Cherry	15	Sapling/Pole	4		Oa	k (spp.)	Low	Variable	Sapling	
	Jack Pine	5	Pole/Sapling	5							1
	Canopy Species	% Cover	Size Class	DBH	l Age						red pine. Small trees are present but generally vigor is indicative of fr pocket with some mortality present. Bumped stand to pole size, albei
	Red Maple	10	Sapling/Pole								overall quite small in average dbh.
	Jack Pine	50	Pole/Sapling	5	46						overall quite small in average dbh.
E	Jack Pine Black Cherry	50 30	Pole/Sapling Sapling	5	46						
E	Jack Pine	50	Pole/Sapling	5	46						overall quite small in average dbh.
E	Jack Pine Black Cherry	50 30 10	Pole/Sapling Sapling Sapling	5		6.5			No		overall quite small in average dbh.
E No	Jack Pine Black Cherry orthern Pin Oak 623 - Emer	50 30 10 rgent Wetlan	Pole/Sapling Sapling Sapling	5 3 2 Nonsto		6.5	96	111-140	No N/A		overall quite small in average dbh. See management comments. add water as separate stand This is a large area dominated by red pine that was planted in 1925. There exists significant variability throughout stand resulting from past
No 0	Jack Pine Black Cherry orthern Pin Oak 623 - Emer	30 10 rgent Wetland I Red Pine, iduous	Pole/Sapling Sapling Sapling	5 3 2 Nonsto	ocked	345.2	96 nopy Species			Size	overall quite small in average dbh. See management comments. add water as separate stand This is a large area dominated by red pine that was planted in 1925. There exists significant variability throughout stand resulting from past treatments with some areas having higher stocking, a lighter understored.
0 1	Jack Pine Black Cherry orthern Pin Oak 623 - Emer 42111 - Planted Dec	30 10 rgent Wetland I Red Pine, iduous	Pole/Sapling Sapling Sapling nd Mixed S	5 3 2 Nonsto	ocked er Well	345.2 Sub-Ca i			N/A	Size Sapling	overall quite small in average dbh. See management comments. add water as separate stand This is a large area dominated by red pine that was planted in 1925. There exists significant variability throughout stand resulting from past treatments with some areas having higher stocking, a lighter understo and few deciduous species present in the overstory while other portion
0 1	Jack Pine Black Cherry orthern Pin Oak 623 - Emer 42111 - Planted Dec	30 10 gent Wetland Red Pine, iduous	Pole/Sapling Sapling Sapling Mixed Size Class	5 3 2 Nonsto	ocked er Well	345.2 Sub-Ca	nopy Species	Density	N/A Avg. Height		overall quite small in average dbh. See management comments. add water as separate stand This is a large area dominated by red pine that was planted in 1925. There exists significant variability throughout stand resulting from past treatments with some areas having higher stocking, a lighter understo and few deciduous species present in the overstory while other portion have lower stocking with more significant advanced regen present and more overstory oak species evenly distributed throughout. Furthermo
0 1	Jack Pine Black Cherry orthern Pin Oak 623 - Emer 42111 - Planted Decice Canopy Species Red Maple	30 10 gent Wetland Red Pine, iduous % Cover 5	Pole/Sapling Sapling Sapling Mixed Size Class Pole	5 3 2 Nonsto	ocked er Well	345.2 Sub-Car Re	nopy Species d Maple	Density Medium	N/A Avg. Height 10 - 20 feet	Sapling	overall quite small in average dbh. See management comments. add water as separate stand This is a large area dominated by red pine that was planted in 1925. There exists significant variability throughout stand resulting from past treatments with some areas having higher stocking, a lighter understor and few deciduous species present in the overstory while other portion have lower stocking with more significant advanced regen present and more overstory oak species evenly distributed throughout. Furthermost there are portions of stand where the prevalence of white pine is
0 1	Jack Pine Black Cherry orthern Pin Oak 623 - Emer 42111 - Planted Deci Canopy Species Red Maple Red Oak	30 10 gent Wetland Red Pine, iduous % Cover 5 10	Pole/Sapling Sapling Sapling Ind Mixed Size Class Pole Log	5 3 2 Nonsto	ocked er Well	345.2 Sub-Car Re	nopy Species d Maple ed Oak	Density Medium Medium	N/A Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	overall quite small in average dbh. See management comments. add water as separate stand This is a large area dominated by red pine that was planted in 1925. There exists significant variability throughout stand resulting from past treatments with some areas having higher stocking, a lighter understorn and few deciduous species present in the overstory while other portion have lower stocking with more significant advanced regen present and more overstory oak species evenly distributed throughout. Furthermore



Stand	d Level 4 C	over Type	:	Size De	nsity	Acres	Stand Age I	BA Range	Managed S	iite	General Comments
33	4130	- Aspen	Р	oletimb	er Well	18.8	31	Immature	N/A		decent quality big tooth Aspen stand, small pole sized on average with
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pockets of slightly higher dbb as well as areas more dominated by saplings, considering size variability and smaller overall average
	Red Maple	15	Sapling/Pole	4	31	Re	ed Maple	Medium	Variable	Sapling	recommend treating next yoe by final harvesting to regenerate Aspen.
	Quaking Aspen	20	Pole/Sapling	5	31	Bla	ck Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	55	Pole/Sapling	6	31						-
	Black Cherry	10	Sapling/Pole	3	31						
34	4124 - Red	with White (Oak S	Sawtimb	er Well	16.5	115	111-140	N/A		oak/pine stand with Aspen present along western edge and scattered
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	throughout remainder of stand in low numbers. white pine regenerating fairly well in portions of understory. stocking and size variability in
	Red Maple	10	Pole/Log	8		Re	ed Maple	Medium	Variable	Sapling	portions of stand, along with variability in species composition
	Beech	2	Pole	8			Beech	Low	Variable	Sapling	throughout. Separated potion of stand that was heavier to white
	Red Oak	50	Log/Pole	12	115	W	nite Pine	Medium	Variable	Sapling	pine/aspen, treating that area this YOE. Consider treating this stand new YOE to break up treatments along snow trail and increase age diversity
	White Oak	20	Log/Pole	12		Н	emlock	Low	Variable	Pole	in this area of the compartment.
	Bigtooth Aspen	6	Pole/Log	8	58						•
	White Pine	10	Log	14							
	Red Pine	2	Log	14							
35	4130	- Aspen		Sapling	y Well	33.8	8	1-50	N/A		regenerating well overall, some area of significant browse on red maple
	Canopy Species	% Cover	Size Class	DBH	Age						sprouts but not too extensive in terms of area. lots of wildlife use throughout. white pine was retained and is in fine shape. Stand was
	Red Oak	2	Log	16							harvested in winter of 2014 under tsale contract 057-13-01 by Mulberg
	White Oak	2	Log	14							FP/PCAPC
	Bigtooth Aspen	84	Sapling	1	8						
	White Pine	10	Log	12							
	Red Pine	2	Log	12							
36	4130	- Aspen	Р	oletimb	er Well	4.1	31	Immature	N/A		Small multi-part aspen stand, variable size with pole and sapling sized
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	trees present but determined average dbh to be in line with pole size class, albeit small pole.
	Bigtooth Aspen	100	Pole/Sapling	5	31	W	nite Pine	Low	Variable	Sapling	orado, albor omali poro.
						Bla	ck Cherry	Low	< 5 feet	Sapling	
37	42250 -	Pine, Oak	S	Sawtimb	er Well	11.4	111	81-110	N/A		New stand separated from stand 26. This stand area occupies slopes leading to lowland bog stand 50. Consists of mixed pine and oak, some
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	large individuals present. Recommend retaining long term for aesthetic
	Red Oak	15	Log/Pole	12		Re	ed Maple	Low	10 - 20 feet	Sapling	and water quality/sensitive soil issues.
	White Oak	15	Log/Pole	12		W	hite Pine	Medium	Variable	Pole	
	White Pine	55	Log/Pole	10	111	W	hite Oak	Low	5 - 10 feet	Sapling	
	Red Pine	10	Log	13							
	Red Maple	5	Pole/Log	8							



Ctor	d Level 4 Cover Type Size Den	noitu	Aoros	Stand Age B	A Banga	Managad S	ito.	General Comments			
Stand							Stand Age B		Managed S	onte	
38	42210 - Na				Medium		94	51-80	N/A		red pine retained and Aspen, red maple and some oak are regenerating densely throughout understory or mid canopy as its represent in canopy
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	table. removing overstory red pine would be difficult without sacrificing
	Red Pine	94	Log/Pole	11	94		ooth Aspen	High	10 - 20 feet	Sapling	advanced regen but should be removed while still viable. could consider
	Red Oak	2	Log	12			ed Maple	High	10 - 20 feet	Sapling	this yoe or next.
	White Pine	2	Log	12			ted Oak	Medium	10 - 20 feet	Sapling	
	White Oak	2	Log	12		W	hite Oak	Medium	10 - 20 feet	Sapling	
39	622 - Lo	wland Shrul	b	Nonsto	cked	2.6			No		
40	4129 -	Mixed Oak	S	awtimb	er Well	14.1	115	81-110	N/A		mixed stand of oak with pine component along with Aspen clones of
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	variable size, average pole size but definitely some areas of small poles and large saplings, same goes for red maple component. with proximity
	Red Maple	20	Pole/Log	8		Re	ed Maple	Medium	Variable	Sapling	to 113, stand would be a good candidate to seed tree or shelterwood fo
	Red Oak	25	Log	16	115	W	hite Pine	Low	Variable	Sapling	aesthetic purposes, while also getting Aspen regen where clones are
	White Oak	38	Log/Pole	12	115	Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	present. if treated, remove all red oak species.
	Bigtooth Aspen	12	Pole	8		W	hite Oak	Medium	Variable	Sapling	
	White Pine	5	Pole	9							-
41	4199 - Other Mixe	ed Upland D	Deciduous S	awtimb	er Well	9.6	110	81-110	N/A		mixed deciduous stand with pine scattered throughout, trace Aspen
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	present. Vernal pond in center portion of stand and spring/seep along vans rd. stand was thinned 3 entry periods ago. regen is advanced and
	Red Maple	21	Log/Pole	10		Re	ed Maple	High	10 - 20 feet	Sapling	well established. could treat by removing all beech and majority of large
	Beech	20	Log/Pole	12			Beech	Medium	10 - 20 feet	Sapling	red oak and red maple. retain pine component and scattered white and
	Red Oak	35	Log	16	110	W	hite Pine	Low	Variable	Sapling	red oak, exclude areas surrounding wet areas.
	White Oak	20	Log/Pole	12				,			-
	Red Pine	2	Log	15							
	Hemlock	2	Log/Pole	12							
42	42210 - Na	tural Red P	Pine S	awtimb	er Poor	44.7	99	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Oak	20	Pole/Sap/Log	8		W	hite Oak	Medium	5 - 10 feet	Sapling	
	Red Pine	80	Log/Pole	12	98	North	ern Pin Oak	High	5 - 10 feet	Sapling	
						Ja	ack Pine	Low	5 - 10 feet	Sapling	
						Re	ed Maple	Low	5 - 10 feet	Sapling	



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
43	4124 - Red v	vith White C	Dak Sa	wtimbe	Medium	20.0	125	51-80	N/A		mixed stand of oak and pine, thinned 2 entries ago. regeneration is
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	advanced and good quality, will be difficult to remove ovsrstory at this time without sacrificing a significant amount of the regen present, similar
	Red Oak	50	Log/Pole	12	125		Beech	Low	5 - 10 feet	Sapling	to adjacent stand to the west.
	White Oak	20	Log/Pole	10		Bigto	ooth Aspen	High	10 - 20 feet	Sapling	
	Bigtooth Aspen	5	Pole	8		W	hite Pine	Medium	5 - 10 feet	Sapling	
	Red Pine	25	Pole/Log	8		R	ed Pine	Low	5 - 10 feet	Sapling	
						Wi	tch Hazel	Low	10 - 20 feet	Tall Shrub	
						W	hite Oak	Medium	10 - 20 feet	Sapling	
44	42110 - Plar	nted Red Pi	ine F	Poletimb	er Well	6.3	48	171-200	N/A		R6 stand, has not been thinned. previous inventory says not yet 3 sticks
	Canopy Species	% Cover	Size Class	DBH	Age						however majority of stand is 5-6 sticks with 8" average dbh, with the exception of portions of the southernmost rows where aspen is more
	Red Pine	95	Pole/Log	8	48						prevalent and red pine size is generally smaller, third row thin this entry
	Bigtooth Aspen	5	Pole	8							period.
45	4126 - White, E			Sawtimb	er Poor	36.7	114	51-80	N/A		Treated last YOE with a seed tree/shelterwood harvest. Regen is filling in well in some spots and is sparse in other areas of the stand.
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	Overstory trees that were retained are in good shape and producing good
	Red Oak	28	Log	16	114	Re	ed Maple	Medium	5 - 10 feet	Sapling	crops of acorns. Some browse on regen in places.
	White Oak	70	Log/Pole	12	114	W	hite Pine	Low	Variable	Sapling	
	Bigtooth Aspen	2	Log/Pole	12		Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	
						North	ern Pin Oak	Medium	5 - 10 feet	Sapling	
						Bigto	ooth Aspen	Medium	5 - 10 feet	Sapling	
46	4130	- Aspen		Sapling	y Well	41.1	7	Immature	N/A		stand regenerating well overall with Aspen, red maple, jack pine, cherry,
	Canopy Species	% Cover	Size Class	DBH	Age						white pine and oak present throughout. merge with 45, both have same characteristics in terms of stocking and species composition. Stand
	Quaking Aspen	66	Sapling	1	6						treated under tsale contract 031-13-01, residual trees were marked to
ı	Northern Pin Oak	2	Sapling/Pole	3							leave along NCT which travels along east edge of stand. Also some
	White Pine	2	Pole	7							minimal residual scattered throughout stand.
	Black Cherry	10	Sapling/Pole	4							
	Jack Pine	10	Sapling/Pole	2							
	Red Maple	10	Sapling/Pole	2							
47	330 - Low-D	Density Tree	es	Nonsto	ocked	0.4	0		No		Narrow sliver along Pugsley fenceline. Low density oak and red maple present along with some red and white pine.
48	3205 - Mixed	Upland Sh	ırub	Nonst	cked	11.9			No		New stand added. Hydro-axed via contract in summer of 2018.



Stand	d Level 4 C	over Type	S	Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
49	4123 -	Red Oak	P	oletimb	er Well	12.8	40	51-80	N/A		small diameter pole stand of mixed species, composition variability throughout, overall fair quality, some areas more open than others.
	Canopy Species	% Cover	Size Class	DBH	l Age						throughout. Overall fall quality, some areas more open than others.
	Red Oak	45	Pole/Sapling	5	40						
	White Oak	15	Pole/Sapling	6	40						
	Quaking Aspen	5	Pole/Sapling	5							
	Red Pine	10	Sapling/Pole	4							
	Jack Pine	10	Sapling/Pole	3							
	Black Cherry	15	Sapling/Pole	4							
50	623 - Emei	rgent Wetla	nd	Nonsto	ocked	12.9			No		
51	4124 - Red	with White	Oak S	awtimb	er Well	53.4	110	111-140	N/A		oak pine stand with oak dominant overall but understory shows stand is
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	converting to white pine. nct runs through center of stand e/w, needs to be protected in any treatments regime. could thin area along trail and the
	Red Oak	55	Log	14	110	R	ed Maple	Medium	5 - 10 feet	Sapling	sw portion of stand and do more of a seed tree in remainder to release
	White Oak	32	Log/Pole	11		F	Red Oak	Low	Variable	Sapling	existing regen and get oak stump sprouts. snow trail would also need
	White Pine	10	Log/Pole	13		W	hite Pine	Medium	5 - 10 feet	Sapling	protection where it runs through stand.
	Red Pine	3	Log	16			Beech	Low	5 - 10 feet	Sapling	
52	4130	- Aspen	P	oletimb	er Well	6.9	31	Immature	N/A		Small a6 stand, just transitioning to pole sized on average, with some
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	size variability throughout.
	Red Maple	25	Sapling/Pole	4			hite Pine	Medium	< 5 feet	Sapling	
	Bigtooth Aspen	65	Pole/Sapling	5	31					, ,	
	Black Cherry	10	Sapling	3							
53	4124 - Red	with White	Oak Sav	vtimbe	r Mediur	m 24.9	115	51-80	N/A		overstory of red and white oak with mixed understory of Aspen, red
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	maple and some oak regenerating well. prison fence now bisects stand. could consider oversfory removal at this point but this would sacrifice
	Red Oak	78	Log	14	115	R	ed Maple	Medium	10 - 20 feet	Sapling	quite a bit of the advanced regen present at this time.
	White Oak	20	Log	14		F	Red Oak	Low	Variable	Sapling	
	Red Pine	2	Log	11		W	hite Oak	Low	Variable	Sapling	
						Bigto	ooth Aspen	Medium	10 - 20 feet	Sapling	
						W	hite Pine	Low	Variable	Sapling	
						Wi	tch Hazel	Low	Variable	Tall Shrub	
54	4130	- Aspen	P	oletimb	er Well	9.2	46		N/A		fair quality Aspen stand with red maple component throughout. scattered
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	white pine as well. looks to be same age as Aspen clones in stand to north, check cutting records and redraw stand lines if needed. red maple
	Red Maple	20	Pole/Sapling	5			ed Maple	Medium	Variable	Sapling	is clumpy, overall tree size is on the small size for age, consider treating
	White Oak	5	Sapling/Pole	3		W	hite Pine	Low	Variable	Sapling	next yoe unless more acreage is needed from age class.
	Bigtooth Aspen	70	Pole	7	46	Wi	tch Hazel	Medium	5 - 10 feet	Tall Shrub	
	White Pine	5	Pole	8				1	1		



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age E	A Range	Managed S	Site	General Comments	
55		Aspen, Oak		Poletimb		7.4	75	81-110	N/A		old Aspen with larger oak throughout stand along with red maple and trace white pine. final harvest stand retaining a couple large white oak for	
	Canopy Species	% Cover			l Age		nopy Species	Density	Avg. Height	Size	mast source. treat with adjacent jack pine stand. buffer fife lake nct for	
	Red Maple	8	Pole	8			ed Maple	Low	Variable	Sapling	aesthetics.	
	Red Oak	20	Log	12		North	ern Pin Oak	Low	Variable	Sapling		
	White Oak	10	Log/Pole	11			hite Pine	Low	Variable	Sapling		
I	Bigtooth Aspen	60	Pole/Log	8	75	Wi	tch Hazel	Low	10 - 20 feet	Tall Shrub		
	White Pine	2	Log	12								
56	42100 - Plar	nted White F	Pine	Poletimb	er Well	11.0	67	171-200	N/A		planted white pine with red pine scattered throughout planting as well.	
	Canopy Species	% Cover	Size Class	DBH	l Age						same age. pugsley fence still encompasses stand and therefor access is limited. some lathe was present along fence line nesrby where it should	
	Red Oak	5	Log/Pole	12							end so maybe resolution is in the works?	
	White Oak	5	Log/Pole	12								
	White Pine	75	Pole/Log	9	67							
	Red Pine	15	Pole/Log	8								
57	4191 - Mixed Upla Co	and Decidu	ous with	Saplin	g Well	42.4	21	1-50	N/A		mixed stand dominated by Jack pine with Aspen and other deciduous species evenly distributed throughout. fair quality overall.	
	Canopy Species	% Cover	Size Class	DBH	l Age							
	White Oak	2	Sapling	2								
(Quaking Aspen	30	Sapling	3								
N	lorthern Pin Oak	8	Sapling	2								
	Jack Pine	40	Sapling/Pole	e 4	21							
	Black Cherry	20	Sapling	3								
58	42121 - Planted Dec	l Jack Pine, iduous	Mixed	Poletimb	er Well	37.6	79	51-80	N/A		overall generally variable in terms of size and stocking, jack pine averaging 4-5 sticks. deciduous species concentrated in Central, interior	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	portion of stand but scattered throughout. significant understory in places with some areas of light overstory. could consider final harvest with jack	
	Red Maple	10	Pole/Sapling	g 6		Re	ed Maple	High	Variable	Sapling	pine, Aspen and red maple expected to regenerate along with oak.	
(Quaking Aspen	6	Pole/Sapling	g 6		Bla	ck Cherry	Low	Variable	Sapling	protect advanced regen where possible. retain red pine. buffer fife lake	
N	lorthern Pin Oak	5	Sapling	3		Wi	tch Hazel	Low	10 - 20 feet	Tall Shrub	nct for aesthetics.	
	Jack Pine	70	Pole/Log	8	79	North	ern Pin Oak	Medium	Variable	Sapling		
	Black Cherry	5	Pole	6								
	Red Pine	2	Log	12								
59	4131 - A	Aspen, Oak		Sapling	Medium	24.8	7	Immature	N/A		regenerating well, saplings getting above browse line and are generally in	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	the 5-15' range overall. scattered overatory red pine, jack pine, white pine and oak present throughout. Stand was harvested under contract 031-	
	Red Maple	25	Sapling/Pole	е 3		Wi	tch Hazel	Medium	10 - 20 feet	Tall Shrub	13-01, some residual was marked to leave, most notably along trail in	
(Quaking Aspen	40	Sapling	1	6			'		•	east of stand along with some individual trees marked throughout	
N	lorthern Pin Oak	15	Sapling	2							remainder of stand. Sapling class was featured in canopy.12/2/19 SG - Stand was treated via hydro-axe contract in summer 2017.	
N	lorthern Pin Oak	5	Log	12							otana was treated via hydro-axe contract in suffiller 2017.	



Stand	Level 4 C	·	Size De	ensity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments	
60	4126 - White, E	Black, N. P	in Oak	Sawtimb	er Well	61.1	115	81-110	N/A		thinned last yoe, fair quality overall, stand us responding well to treatment
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	with regen filling in and intermediate canopy white advancing into overstory. Stand cut under tsale contract 056-13-01 by AJD.
	Red Oak	25	Log/Pole	12	115	W	hite Pine	High	Variable	Sapling	0.0.000, 0
	White Oak	55	Log/Pole	10	115	W	hite Oak	Low	5 - 10 feet	Sapling	
	White Pine	20	Pole/Sap/Log	g 6							
61	4123 -	Red Oak	;	Sawtimb	er Well	31.0	110	81-110	N/A		stand thinned 2 entry periods ago, overstory stocking now hovers around
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	100 or so. regen of red maple and white pine is advanced and doing fairly well being nursed along by oak shade. scattered white pine and trace red
	Red Oak	73	Log	14	110	Re	ed Maple	High	5 - 10 feet	Sapling	pine scattered evenly throughout stand. could treat with overstory
	White Oak	15	Log/Pole	12		W	hite Pine	Medium	5 - 10 feet	Sapling	removal or seed tree near snow trail and 186 for aesthetics and to retain
	White Pine	10	Log	14							mast source.
	Red Pine	2	Log	12							
62	122 - Road	d/Parking L	ot	Nonsto	ocked	1.7			No		
63	42100 - Plan			Poletimb		9.8	67	171-200	N/A		decent quality white pine plantation, has not yet been thinned. consider treating this yoe by third row thin or take 2 leave 2 method. trace red pine
	Canopy Species		Size Class		l Age						and also scattered oaks mainly near perimeter.
	Red Oak	5	Log/Pole	12							
	White Oak	5	Log/Pole	12							
	White Pine	90	Pole/Log	8	67						
64	4199 - Other Mixe	d Upland D	eciduous S	Sapling I	Medium	12.6	22	1-50	N/A		Stand harvested 2 entry periods ago, consists of small dbh deciduous
	Canopy Species	% Cover	Size Class	DBH	l Age						regen with scattered jack and red pine.
	Red Maple	20	Sapling	2							
	Red Oak	35	Sapling	2	22						
	White Oak	20	Sapling	1							
	Red Pine	5	Sapling	1							
	Jack Pine	10	Sapling	2							
	Black Cherry	10	Sapling	2							
65	4130	- Aspen	F	Poletimb	er Well	18.1	30	Immature	N/A		fair quality Aspen stand looks to have moved to pole size class with large sapling sizes represented as well. overall 5-6" average dbh.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	sapiing sizes represented as well, overall 5-6 average dbn.
	Red Maple	10	Sapling/Pole	4		Re	ed Maple	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	83	Pole/Sapling	5	30	North	ern Pin Oak	Low	5 - 10 feet	Sapling	
	White Pine	2	Pole	7		Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	



Stand	d Level 4 C	over Type	S	Size De	ensity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
66	4311 - Pin	ie, Aspen M	lix Po	oletimb	er Well	16.4	50	111-140	N/A		white pine dominant with Aspen distributed throughout, variable sizes
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	present with pole size being most dominant. some larger red oak and red pine present as well. retain stand for now and evaluate next toe for
	Red Maple	10	Sapling/Pole	4		R	ed Maple	Low	Variable	Sapling	conversion to aspen. nct traverses entire stand so aesthetics are of majo
	Red Oak	5	Log	16		V	/hite Oak	Low	Variable	Sapling	concern with and mgmt.
	White Oak	3	Log/Pole	12							
	Bigtooth Aspen	30	Pole/Sapling	7							
	White Pine	50	Pole/Sap/Log	7	50						
	Red Pine	2	Log	14							
67	4191 - Mixed Upl Co	and Decidu onifer	ous with	Saplin	g Well	8.2	30	1-50	N/A		Small pocket of mixed regen, mainly red/n pin oak. Growing fairly well, quite dense throughout much of stand. Will be small pole sized next you
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	10	Sapling	3	30						
	Red Oak	50	Sapling/Pole	4	30						
	White Oak	5	Sapling	2							
	White Pine	5	Sapling/Pole	4							
	Red Pine	10	Sapling	3							
	Jack Pine	5	Sapling	2							
	Black Cherry	15	Sapling	3							
68	42141 - Planted Dec	Mixed Pine	, Mixed Po	oletimb	er Well	25.0	30	1-50	N/A		Planted red pine, natural jack pine, fair amount of n pin oak scattered throughout as well. found average of red and jack pine to be about 5"
	Canopy Species	% Cover	Size Class	DBH	l Age						with quite a bit of variability throughout stand, some larger trees and some smaller. called stand pole sized but note that it is just in to pole
	Red Maple	10	Sapling	2	30						sized category and overall is only 2 sticks in height on average. also
	Northern Pin Oak	10	Pole/Sapling	5							difficult to determine but called red and jack pine evenly distributed but
	Red Pine	35	Pole/Sapling	5							red pine may be slightly higher in terms of overall species composition.
	Jack Pine	35	Pole/Sapling	5	30						
69	4130	- Aspen	Po	oletimb	er Well	12.2	30 I	mmature	N/A		Small a3/a6 stand with some overstory oak present at perimeter of stand
	Canopy Species	% Cover	Size Class	DBI	l Age						that were retained at the time of the last harvest. Stand growing well overall, called it pole sized but there is size variability and could be called
	Red Maple	10	Sapling	3							sapling.
	Bigtooth Aspen	70	Pole/Sapling	5	30						
	Northern Pin Oak	10	Log/Pole	11							
	Black Cherry	10	Sapling	3							
70	42100 - Plar	nted White	Pine Sa	awtimb	er Well	40.1	80	111-140	N/A		good quality white pine throughout with deciduous species present evenl
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	throughout as well, albeit in low numbers. some stocking variability but generally high ba throughout much of stand. regen is dense in much of
	Red Oak	5	Log	14		R	ed Maple	High	5 - 10 feet	Sapling	understory and is advanced with much in the 10-30' range. could thin
	White Oak	5	Log	12			Beech	Low	5 - 10 feet	Sapling	stand, do an overstory removal retaining some white pine to release
	White Pine	88	Log/Pole	11	80	Bla	ack Cherry	Low	5 - 10 feet	Sapling	regen. whatever treatment is done will be at the expense of much of the regen. overstory is in good condition and is high quality overall if
	Rigtooth Aspen	2	Pole	8		١٨	/hite Oak	Medium	10 - 20 feet	Sanling	determined to leave and ellow regen to advance further, regen will

10 - 20 feet

Medium

2

Pole

White Oak

Bigtooth Aspen

determined to leave and allow regen to advance further. regen will stagnate at some point soon tho if it has not already.



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	BA Range	Managed \$	Site	General Comments
71	42260 - Natural Pi	ne, Mixed D	Deciduous S	awtimb	er Well	39.7	90	141-170	N/A		mixed stand of white and red pine with oaks, Aspen and red maple
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered throughout. as previous field notes say, there have been a few treatments on this stand in the past, and most recently the northern 40
	Red Maple	10	Pole/Log	8		Re	ed Maple	Medium	Variable	Sapling	was cut last yoe resulting in the a3 stand adjacent. aspen is not as
	Red Oak	10	Log/Pole	12		R	ed Oak	Low	Variable	Sapling	prevalent in this portion of original larger stand. scattered clones
	White Oak	7	Log/Pole	12		W	hite Oak	Low	Variable	Sapling	throughout, not very extensive in size. fair amount of variable sized regen in understory.
	Bigtooth Aspen	8	Pole/Log	8		Bigto	oth Aspen	Low	Variable	Sapling	could potentially treat stand with a seed tree/island retention combination,
	White Pine	40	Log/Pole	12	90	W	nite Pine	Low	Variable	Sapling	leaving representative islands and individual tree retention near 113 and
	Red Pine	25	Log/Pole	12	90	Wit	ch Hazel	Low	10 - 20 feet	Tall Shrub	also adjacent to rec trail that bisects stand and the fife lake loop of the NCT that runs along the eastern edge of the stand, protect existing 1-4"
72	4310 - Pi	ne, Oak Mix	, P	oletimh	er Well	4.4	 51	81-110	N/A		natural regen from stump sprouts. retain some larger white oak for mast, do not leave any n. pin, red, black oak. Stand contains a few pockets of older white pine that appear to be natural in origin even though the majority of the stand was planted. Pocket of white pine (small) log/pole plantation with white oak pole/log
72											and some natural jack pine in se portion, separated from stand 3 this
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	yoe. also contains small amount of red oak and bta. 80ba med stocked
	Red Maple	5	Log/Pole	10			ed Maple	Medium	Variable	Sapling	beech and red maple regen
	Red Oak White Oak	30	Log	14			Beech hite Pine	Medium	Variable Variable	Sapling	
	Bigtooth Aspen	2	Pole/Log Pole/Log	9	L	VV	nite Pine	LOW	variable	Sapling	
	White Pine	53	Log/Pole	10	51						
	Jack Pine	5	Pole	8	31						
73	4126 - White, I			Sapling		15.1	5	1-50	N/A		white pine scattered throughout in variable sizes, oak species present as a sapling stump sprouts and saplings present prior to recent harvest.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand cut under tsale contract 056-13-01. Scattered retention through
	White Oak	60	Sapling/Pole	3	5	Wit	ch Hazel	Medium	5 - 10 feet	Tall Shruk	stand area was left as residual.
	Northern Pin Oak	20	Sapling/Pole	3	5						
	White Pine	20	Pole/Log	8							
74		iduous			er Well	39.0	100	81-110	N/A		Stand looks good following recent treatment, check next yoe to see how regen is continuing to respond and consider further management at that time.
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	
	White Oak	20	Log/Pole	12			ed Maple	Low	Variable	Sapling	Sale was cut under tsale contract 075-13 by Lutke FP. Small area was
	Northern Pin Oak	15	Log/Pole	12	120		hite Pine	Low	Variable	Sapling	excluded from sale in northern central portion of sale for long term retention.
	Red Pine	60	Pole/Log	8	100	Wit	ch Hazel	Low	Variable	Tall Shrub	



Stan	d Level 4 C	over Type	Si	ze De	nsity	Acres	Stand Age B	d Age BA Range Managed Site		Site	General Comments	
75	4310 - Pi	ne, Oak Mi	x Sa	wtimb	er Well	57.8	93	111-140	N/A		white oak and white pine overstory with 1-5" dense regen throughout	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	resulting from a harvest 20+ years ago. density of overstory portion of canopy is variable with some areas having shelterwood characteristics	
	White Oak	45	Log/Pole	10		Re	d Maple	High	10 - 20 feet	Sapling	while other portions of stand look like they were thinned. similar to many	
	White Pine	55	Log	13	93	Wh	nite Pine	High	10 - 20 feet	Sapling	stands in the area any overstory removal will be at the expense of a lot of	
						Northe	ern Pin Oak	Medium	5 - 10 feet	Sapling	the regen present. if treated majority of oak and pine canopy should be removed in order to further release existing regen.	
						WI	nite Oak	High	10 - 20 feet	Sapling	Tomoved in order to raintly release shoung regen.	
76	4310 - Pi	ne, Oak Mi	x Sa	wtimb	er Well	37.4	92	111-140	N/A		white pine white oak stand, very few other species in canopy aside from	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	trace red maple poles. both pine and oak species is are somewhat variable in size with logs and poles present. overall quality is decent.	
	White Oak	49	Log/Pole	10		Re	d Maple	Medium	10 - 20 feet	Sapling	regen is patchy with some area uniformly dense and others somewhat	
	White Pine	51	Log/Pole	11	92	Wh	nite Pine	Low	10 - 20 feet	Sapling	sparse. could treat stand by overstory removal, retaining some islands	
						Wit	ch Hazel	Low	10 - 20 feet	Tall Shrub	and individual trees for aesthetics, seed source and vertical structure, releasing existing regen in the process.	
						WI	nite Oak	Low	5 - 10 feet	Sapling	Toloading existing reger in the process.	
77	4119 - Mixed No	orthern Har	dwoods Sa	Sapling Medium 17.3 8		8	1-50	N/A		Stand treated under tsale contract 031-13-01, residual was marked to leave, mainly red and white pine with occasional deciduous species.		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species		Density	Avg. Height	Size	Maple and oak regen dominant with some aspen and conifer regen	
	Northern Pin Oak	10	Sapling/Pole/Log	4		Re	d Maple	Medium	Variable	Sapling	present.	
	White Pine	8	Pole/Sap/Log	6		Northe	ern Pin Oak	Medium	5 - 10 feet	Sapling		
	Red Pine	5	Log	14	96	Wh	nite Pine	Low	Variable	Sapling		
	Red Maple	67	Sapling/Pole	2	8	Bigto	oth Aspen	Low	5 - 10 feet	Sapling		
	Bigtooth Aspen	42141 - Planted Mixed Pine, Mixed Sawtimber Well 2				,						
78	42141 - Planted		1 0		er Well	26.6	100	81-110	N/A		ba/stocking is variable with some areas more dense and others a bit	
78	42141 - Planted	Mixed Pine	1 0	wtimb	er Well		100	81-110 Density	N/A Avg. Height	Size	ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of	
78	42141 - Planted Dec	Mixed Pine	e, Mixed Sa	wtimb		Sub-Ca				Size Sapling	ba/stocking is variable with some areas more dense and others a bit	
78	42141 - Planted Dec Canopy Species	Mixed Pine	e, Mixed Sa	wtimb		Sub-Ca	nopy Species	Density	Avg. Height		ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow	
78	42141 - Planted Dec Canopy Species Red Oak	Mixed Pine iduous Cover	e, Mixed Sa Size Class Log	wtimb	I Age	Sub-Ca Re	nopy Species d Maple	Density Medium	Avg. Height 10 - 20 feet	Sapling	ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow one more entry year on this stand for treatment in hopes that regen will	
78	42141 - Planted Dec Canopy Species Red Oak White Oak White Pine	Mixed Pine iduous **Cover** 10 30	e, Mixed Sa Size Class Log Log Log/Pole	DBH 14 12 12	100	Sub-Ca Re Wi	nopy Species d Maple nite Pine	Density Medium Medium	Avg. Height 10 - 20 feet Variable	Sapling Sapling	ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow one more entry year on this stand for treatment in hopes that regen will dance enough that management does less damage. Old strips of jack pine and red pine, deciduous regen filling in now along	
	42141 - Planted Dec Canopy Species Red Oak White Oak White Pine	Mixed Pine iduous % Cover 10 30 30 30	e, Mixed Sa Size Class Log Log Log/Pole	DBH 14 12 12 timbel	100 100	Sub-Ca Re Wi	nopy Species d Maple nite Pine nite Oak	Density Medium Medium Medium	Avg. Height 10 - 20 feet Variable 10 - 20 feet	Sapling Sapling	ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow one more entry year on this stand for treatment in hopes that regen will dance enough that management does less damage. Old strips of jack pine and red pine, deciduous regen filling in now along with white pine.	
	42141 - Planted Dec Canopy Species Red Oak White Oak White Pine	Mixed Pine iduous % Cover 10 30 30 30 ne, Oak Mi % Cover	e, Mixed Sa Size Class Log Log Log/Pole x Pole	DBH 14 12 12 timbel	1 Age	Sub-Ca Re Wi	nopy Species d Maple nite Pine nite Oak	Density Medium Medium Medium	Avg. Height 10 - 20 feet Variable 10 - 20 feet	Sapling Sapling	ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow one more entry year on this stand for treatment in hopes that regen will dance enough that management does less damage. Old strips of jack pine and red pine, deciduous regen filling in now along	
79	42141 - Planted Dec Canopy Species Red Oak White Oak White Pine 4310 - Pi Canopy Species	Mixed Pine iduous % Cover 10 30 30 30 ne, Oak Mi % Cover	e, Mixed Sa Size Class Log Log Log/Pole x Pole Size Class	DBH 14 12 12 timbel	1 Age	Sub-Ca Re Wi	nopy Species d Maple nite Pine nite Oak	Density Medium Medium Medium	Avg. Height 10 - 20 feet Variable 10 - 20 feet	Sapling Sapling	ba/stocking is variable with some areas more dense and others a bit more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow one more entry year on this stand for treatment in hopes that regen will dance enough that management does less damage. Old strips of jack pine and red pine, deciduous regen filling in now along with white pine. Red pine retention left throughout but more heavily concentrated along Walton Rd.	
79	42141 - Planted Dec Canopy Species Red Oak White Oak White Pine 4310 - Pi Canopy Species White Oak	Mixed Pine iduous Cover 10 30 30 30 ne, Oak Mi Cover 35	e, Mixed Sa Size Class Log Log Log/Pole x Pole Size Class Sapling/Pole/Log	DBH 14 12 12 timber DBH	1 Age	Sub-Ca Re Wi	nopy Species d Maple nite Pine nite Oak	Density Medium Medium Medium	Avg. Height 10 - 20 feet Variable 10 - 20 feet	Sapling Sapling	more open. species composition is also quite variable with pockets of pine and also areas of oak. pine pockets are generally higher ba. allow one more entry year on this stand for treatment in hopes that regen will dance enough that management does less damage. Old strips of jack pine and red pine, deciduous regen filling in now along with white pine. Red pine retention left throughout but more heavily concentrated along	



Stand	I Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
80	4199 - Other Mixe	d Upland D	eciduous	Saplin	g Well	12.4	21	1-50	N/A		mixed deciduous and coniferous regen, dense throughout much of stand. Aspen clones along with dense pockets of pine, oak and red maple.
	Canopy Species	% Cover	Size Class	DBH	l Age						Aspert ciones along with derise pockets of pine, oak and red maple.
	Red Maple	10	Sapling	2							
	Red Oak	40	Sapling	2	21						
	White Oak	5	Sapling	2							
	Bigtooth Aspen	5	Sapling	2							
	Black Cherry	30	Sapling	2							
	White Pine	10	Sapling/Pole	3							
81	42290 - Nati	ural Mixed F	Pine S	Sawtimb	er Well	36.6	96	81-110	N/A		mixed agenda with red pine dominant. advanced understory in much of
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand area with oak regen dominant along with pockets of white pine and some red maple. n pin oak is declining as is jack pine. recommend
	Northern Pin Oak	20	Log/Pole	10		Re	d Maple	Low	Variable	Sapling	oerstory removal retaining all white oak regardless of size and protecting
	White Pine	22	Pole/Log	8		Northe	ern Pin Oak	Medium	10 - 20 feet	Sapling	regen 4" and less. in addition retain some red pine for aesthetics and a
	Red Pine	43	Log	14	96	Wh	nite Pine	Medium	Variable	Sapling	seed source as natural red pine regen is occurring near stand edges. residual should be less than 10ba overall with occasional pockets of red
	Jack Pine	13	Pole	7		WI	nite Oak	Medium	10 - 20 feet	Sapling	pine retained.
	White Oak	2	Log/Pole	12				'		•	- '
82	4126 - White, I	Black, N. Pi	in Oak Po	oletimbe	r Mediur	n 4.9	45	1-50	N/A		Small pole/large sapling sized stand, some variability in stocking. See
	Canopy Species	% Cover	Size Class	DBH	l Age						past comments, not sure if WLD is still interested in these management activities. If not allow to grow and reevaluate next yoe.
	Red Maple	10	Sapling/Pole	9 4							,
	White Oak	40	Pole/Sapling		45						SG 10/12/11 - Could hand fell the red maple and thin multi-stemmed or down to one stem per stump.
	Northern Pin Oak	30	Pole	5							down to one stem per stump.
	White Pine	5	Pole	6							
	Black Cherry	15		3							
83	42110 - Pla	nted Red P	ine :	Sawtimb	er Well	38.1	100	111-140	N/A		very good quality red pine stand thinned last yoe and the previous entry
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	period. oak regen along with some white pine regen advancing in understory ranging from 10-20' tall with areas quite thick, some pockets
	Red Pine	100	Log	14	100	Re	d Maple	Medium	10 - 20 feet	Sapling	more open. Thinned under tsale contract 014-13-01.
						WI	nite Oak	Medium	10 - 20 feet	Sapling	
						Northe	ern Pin Oak	Medium	10 - 20 feet	Sapling	
84	4199 - Other Mixe	d Upland D	eciduous	Saplin	g Well	25.3	9	1-50	N/A		mixed stand with oak overstory along with some white pine and red pine areas. remainder/bulk of canopy is sapling/pole red maple and other
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	deciduous species.stand was supposed to be burned and was to control
	Red Maple	51	Sapling/Pole	2	9	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Northern Pin Oak	8	Log	12	114						is fully stocked with regen coupled with overstory that was retained at time of harvest.
	White Oak	5	Log/Pole	10							unic oi naivest.
	White Pine	8	Pole/Sapling	g 7							
	White Oak	15	Sapling/Pole	2							
	Black Cherry	5	Sapling	2							
	Red Pine	8	Log	12							



Stand	d Level 4 C	over Type	S	ize De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
85		Pine, Oak		awtimb		81.2	68	51-80	N/A		mixed stand, responding fairly well to recent thinning, white pine and oak species are regenerating and existing advanced regen is doing well.
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	Stand harvested under tsale contract 074-13-01 by Charlie Kitchen.
	White Oak	25	Log/Pole	13			ite Pine	High	Variable	Sapling	
	Northern Pin Oak	10	Log/Pole	10	110		ch Hazel	Low	10 - 20 feet	Tall Shrub	
	White Pine	50	Log/Pole/Sap	12	68	Wh	ite Oak	Medium	Variable	Sapling	
	Red Pine	15	Log/Pole	13							
86	42110 - Pla	nted Red P	ine Sa	awtimb	er Well	11.1	96	111-140	N/A		small stand with seasonally wet depression in center, relatively large timber throughout dominated by red and white pine, past inventory says
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	planted but this stand has a natural origin feel to it. recommend retaining
	White Pine	40	Log/Pole	12		Wh	nite Oak	Low	Variable	Sapling	long terms for visual along trail, soil protection and wildlife habitat.
	Red Pine	60	Log/Pole	13	96	Wh	ite Pine	Medium	Variable	Sapling	
						Northe	ern Pin Oak	Low	Variable	Sapling	
87	42250 -	Pine, Oak	Sa	awtimb	er Well	133.8	95	81-110	N/A		mixed stand of pine and oak with red pine dominant, white oak and white pine evenly distributed throughout. regen is dense in areas, decent
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	quality. multiple sizes of red pine with majority log size but a component
	White Oak	23	Log/Pole	12		Wh	ite Pine	Medium	10 - 20 feet	Sapling	of intermediate canopy variable sized poles. See management
	Northern Pin Oak	10	Pole/Sap/Log	8			rn Pin Oak	Medium	10 - 20 feet	Sapling	comments.
	White Pine	22	Log/Pole	12			d Maple	Medium	10 - 20 feet	Sapling	could treat by overstory removal, similar to other nearby stands with
	Red Pine	40	Log/Pole	13	95	Wh	nite Oak	Medium	10 - 20 feet	Sapling	same characteristics of large overstory and advanced regen, this will be
	Jack Pine	5	Pole	7							at the expense of some of this regen. could also thin an area of the stand and do overstory removals on some of the adjacent stands. if final harvest and restart acres are needed a portion of this stand could be a candidate however significant site prep and release spraying are
88	42111 - Planted Dec	d Red Pine, iduous	Mixed Sa	awtimb		31.6	96	111-140	N/A		pine oak stand with red pine dominant throughout, scattered pockets where red pine density decreases and oak species are more prevalent.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	pin oak is mediocre in quality and showing signs of decline, variable stocking in many areas of stand as a result of past harvests, significant
	Northern Pin Oak	20	Log/Pole	11	93	Red	d Maple	Low	Variable	Sapling	advanced regen in much of these more open areas - consider seed tree
	White Oak	15	Log/Pole	11		Wh	ite Pine	Medium	5 - 10 feet	Sapling	harvest leaving 10 ba of a combination of red pine and white oak, where red pine concentration is high could mark small clumps of trees or along
	Red Pine	65	Log/Pole	12	96		ch Hazel	Low	10 - 20 feet	Tall Shrub	snow trail for to account for aesthetics. leave trees will account for
						Wh	nite Oak	Medium	10 - 20 feet	Sapling	retention and also provide a seed/mast source. in majority of treatment
											area no more than 10 ba should be left. area between snow trail and rr grade should be treated by removing white pine and some or all of white oak.
89	4191 - Mixed Upl Co	and Decidu onifer	ous with	Sapling	Well	4.9	35	1-50	N/A		Area treated heavier than surrounding WP stand, some larger white pine retained in this gap and represented as one entry in canopy, larger white
	Canopy Species	% Cover	Size Class	DBH	Age						pine are same age as trees in stand 91 - 100 years old.
	Red Maple	10	Sapling	2							
	White Oak	10	Sapling	2							
	Northern Pin Oak	30	Sapling	2	35						
	White Pine	32	Sapling	4	35						
	Black Cherry	18	Sapling	2							



Stand	Level 4 C	Cover Type		Size Density		Acres	Stand Age E	BA Range Managed Site			General Comments
90		ted Red Pine, Mixed eciduous		Sawtimb	er Well	67.2	100	81-110	N/A		red pine doing well following thinning last yoe. oak regen is beginning to establish in understory, some browse but generally in good condition. A
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	relatively significant amount of pin oak was left after last harvest and is declining, could remove and thin areas of red pine that are higher density
	White Oak	10	Log/Pole	12		Re	d Maple	Low	Variable	Sapling	and for operability to get large crowned oaks out of stand if more acres
Ν	Northern Pin Oak	15 Log		16		Wh	nite Pine	Low	Variable	Sapling	are needed in this age class
	White Pine	5	Log	14		Oa	ak (spp.)	Low	Variable	Sapling	Stand was thinned under tsale contract 013-13-01, marked by contractors, majority of red/pin oak was removed but some still remains.
	Red Pine	70	Log/Pole	13	100						BA hovers around 110 sq ft/ac.
91	42100 - Plan	ted White	Pine S	Sawtimb	er Well	50.9	100	111-140	N/A		white pine stand with red pine, white oak and pine oak distributed
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	throughout in lower numbers. white pine good quality as are other representative species. could thin or seed tree part of stand or conduct
	White Pine	76	Log/Pole	12	100	Re	d Maple	Medium	10 - 20 feet	Sapling	overstory removal and leave islands as a seed source along with some or
	Red Pine	10	Log	12		Wh	nite Pine	Low	Variable	Sapling	the white oak for mast, attempting to protect some of the existing regen.
	White Oak	7	Log	12		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
Ν	Northern Pin Oak	7	Log	15		Northe	ern Pin Oak	Medium	10 - 20 feet	Sapling	
				•		WI	nite Oak	Medium	10 - 20 feet	Sapling	
92	4126 - White, E	Diagle N. D.									
32	4120 - WIIILE, L	Siack, IN. P	in Oak	Sapling	g Well	10.5	4	1-50	N/A		regen doing well some browse but overall its in good shape. pine and
	Canopy Species		Size Class		y Well I Age	10.5	4	1-50	N/A		white oak retention scattered throughout stand, represented with regen in
	•			DBH		10.5	4	1-50	N/A		white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed
	Canopy Species	% Cover	Size Class	DBH	l Age	10.5	4	1-50	N/A		white oak retention scattered throughout stand, represented with regen in canopy.
	Canopy Species White Oak	% Cover	Size Class Sapling/Pole	DBH	Age 4	10.5	4	1-50	N/A		white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed
	Canopy Species White Oak Northern Pin Oak	% Cover 40 35 25	Size Class Sapling/Pole Sapling Pole/Sapling	DBH	4 4 4	6.1	105	1-50 81-110	N/A		white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment
93	Canopy Species White Oak Northern Pin Oak White Pine	% Cover 40 35 25 Black, N. P	Size Class Sapling/Pole Sapling Pole/Sapling	DBH 4 1 1 6 Sawtimb	4 4 4	6.1		81-110		Size	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E	% Cover 40 35 25 Black, N. P	Size Class Sapling/Pole Sapling Pole/Sapling	DBH 4 1 1 6 Sawtimb	A Age 4 4 er Well	6.1 Sub-Ca	105	81-110	N/A	Size Sapling	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species	% Cover 40 35 25 Black, N. P	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class	DBH 4 1 6 Sawtimb	A Age 4 4 er Well	6.1 Sub-Ca	105 nopy Species	81-110 Density	N/A Avg. Height		white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species White Oak	% Cover 40 35 25 Black, N. P % Cover 25	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class Log/Pole	DBH 1 6 Sawtimb DBH 10	A Age 4 4 er Well	6.1 Sub-Ca Re	105 nopy Species d Maple	81-110 Density Low	N/A Avg. Height Variable	Sapling	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand to the south.
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species White Oak Bigtooth Aspen	% Cover 40 35 25 Black, N. P % Cover 25 5	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class Log/Pole Log/Pole	DBH 1 6 Sawtimb 10 10	A Age 4 4 4 Per Well	6.1 Sub-Ca Re	105 nopy Species d Maple nite Pine	81-110 Density Low Medium	N/A Avg. Height Variable Variable	Sapling Sapling	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand to the south.
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species White Oak Bigtooth Aspen Northern Pin Oak	% Cover 40 35 25 Black, N. P % Cover 25 5 50	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class Log/Pole Log/Pole	DBH 9 4 11 6 Sawtimb DBH 10 10 12	A Age 4 4 4 Per Well	6.1 Sub-Ca Re	105 nopy Species d Maple nite Pine	81-110 Density Low Medium	N/A Avg. Height Variable Variable	Sapling Sapling	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand to the south.
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species White Oak Bigtooth Aspen Northern Pin Oak White Pine	% Cover 40 35 25 Black, N. P % Cover 25 5 50 5 15	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH 9 4 11 6 Sawtimb DBH 10 10 12 8	er Well 1 Age 1 105	6.1 Sub-Ca Re	105 nopy Species d Maple nite Pine	81-110 Density Low Medium	N/A Avg. Height Variable Variable	Sapling Sapling Tall Shrub	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand to the south.
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species White Oak Bigtooth Aspen Northern Pin Oak White Pine Red Pine	% Cover 40 35 25 Black, N. P % Cover 25 5 50 5 15	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH	er Well 1 Age 1 105	6.1 Sub-Ca Re Wit	105 nopy Species d Maple nite Pine	81-110 Density Low Medium Low	N/A Avg. Height Variable Variable 10 - 20 feet	Sapling Sapling Tall Shrub	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand to the south.
93	Canopy Species White Oak Northern Pin Oak White Pine 4126 - White, E Canopy Species White Oak Bigtooth Aspen Northern Pin Oak White Pine Red Pine	% Cover 40 35 25 Black, N. P % Cover 25 5 50 5 15	Size Class Sapling/Pole Sapling Pole/Sapling in Oak Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH	er Well 1 Age 1 105	6.1 Sub-Ca Re With With 5.1 Sub-Ca	105 nopy Species d Maple nite Pine ch Hazel	81-110 Density Low Medium Low	N/A Avg. Height Variable Variable 10 - 20 feet Managed Op	Sapling Sapling Tall Shrub Dening	white oak retention scattered throughout stand, represented with regen in canopy. Stand was harvested under tsale contract 013-13-01, essentially a seed tree with scattered pine and white oak marked to leave. Small oak stand bordered by RR right of way and compartment boundary. Nice vertical structure adjacent to replant area and MC3 stand to the south.

Stan	d Level 4 C	Level 4 Cover Type 4310 - Pine, Oak Mix			ensity	Acres Star	nd Age B	A Range	Managed S	Site	mixed stand of oak and pine, with size and species composition variability throughout. some small pockets of jack pine, pin oak is in			
95	4310 - Pi				er Well	33.5		111-140	N/A					
	Canopy Species	% Cove	Size Class	DBH	l Age	Sub-Canopy	Species	Density	Avg. Height	Size	rough shape and declining, red pine more prevalent in Central and south			
	White Oak	14	Log/Pole	11		Red Ma	ple	Low	Variable	Sapling	eastern portion of stand. scattered Aspen throughout as well. could treat			
	Northern Pin Oak	40	Log/Pole	13	96	White P	Pine	Low	Variable	Sapling	by final harvest to release existing regen while retaining some red pine,			
	White Pine	25	Pole/Log	9		Witch H	azel	Low	10 - 20 feet	Tall Shrub	white pine and white oak, most notablyalong snow trail, or sheltetwood to nurse along oak sapling layer, area between snow trail and rr grade,			
	Red Pine	15	Log/Pole	12	96	Northern P	in Oak	Low	Variable	Sapling	remove all pin oak, retain conifers and some or all white oak.			
	Jack Pine	4	Pole	8		White C	Dak	Low	10 - 20 feet	Sapling				
	Bigtooth Aspen	2	Pole	8										
96	500	- Water		Nonsto	ocked	6.2			No					
97	42250 -	· Pine, Oak		Saplin	g Well	31.7	30	1-50	N/A		very mixed stand of pine and oak regenerating with dense stocking.			
	Canopy Species	% Cove	Size Class	DBH	l Age						scattered red pine overstory trees that were retained, generally less than 10ba but some in more concentrated pockets. scattered pin oak poles			
	White Oak	10	Sapling	2							and a few log sized trees in oversfiry as well.			
	Northern Pin Oak	20	Sapling/Pole/Lo	g 3	30						,			
	White Pine	35	Sapling/Pole	3	30									
	Red Pine	10	Log	14	96									
	Jack Pine	15	Sapling/Pole	3	30									
	Black Cherry	10	Sapling	3										
98	42110 - Pla	inted Red F	Pine Sav	wtimbe	r Mediur	n 18.3	93	51-80	N/A		red pine stand with average ba in the 50-80 range with some pockets			
	Canopy Species	% Cove	Size Class	DBH Age		Sub-Canopy	Species	Density	Avg. Height	Size	higher and some lower. red pine is sheltering a fully stocked oak understory of relatively good quality, rexommend allowing red pine to			
	Red Pine	98	Log	12	93	White C	Dak	High	10 - 20 feet	Sapling	continue to nurse along oak species.			
	White Pine	2	Log/Pole	10		Northern P	in Oak	High	10 - 20 feet	Sapling				
						White P	Pine	Low	5 - 10 feet	Sapling				
						Witch H	azel	Low	5 - 10 feet	Tall Shrub				
						Red Ma	ple	Low	10 - 20 feet	Sapling				
		and Decidu	uous with S	apling l	Medium	15.5	30	1-50	N/A		Treated with stand 101, resulting stand consists of mixed deciduous saps/poles with some conifers scattered throughout.			
99	4191 - Mixed Upl Co	onifer												
99		onifer % Cove	Size Class	DBH	l Age									
99	Ċ		Size Class Sapling/Pole	DB I 2	1 Age 30									
99	Canopy Species	% Cove												
	Canopy Species Red Maple	% Cove	Sapling/Pole	2	30									
	Canopy Species Red Maple White Oak	% Cover	Sapling/Pole Sapling	2	30									
	Canopy Species Red Maple White Oak Northern Pin Oak	% Cover 10 10 3	Sapling/Pole Sapling Log	2 2 12	30									
	Canopy Species Red Maple White Oak Northern Pin Oak Northern Pin Oak	% Cover 10 10 3 20	Sapling/Pole Sapling Log Sapling	2 2 12 2	30									
	Canopy Species Red Maple White Oak Northern Pin Oak Northern Pin Oak White Pine	% Cover 10 10 3 20 10	Sapling/Pole Sapling Log Sapling Pole/Sapling	2 2 12 2 6	30									

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Stand	Level 4 Cover Type			Size Density		Acres	Stand Age BA Range		Managed S	Site	General Comments	
100	42141 - Planted Dec	Mixed Pine	e, Mixed	Sawtimber Well		29.1	95	111-140	N/A		mixed stand dominated by red pine. was marked and set up last yoe but did not sell. recommend treating again by overstory removal, retaining	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered red and white pine and some white oak in combination with retention in islands, to allow for oak and white pine understort to be	
N	lorthern Pin Oak	15	Log/Pole	12		Wh	nite Pine	Medium	Variable	Sapling	released. also expect jack pine regen in spots. do not retain any red oal	
	White Pine	25	Log/Pole	10		Wit	ch Hazel	Low	10 - 20 feet	Tall Shrub		
	Red Pine	50	Log/Pole	13	95	Northe	ern Pin Oak	Medium	10 - 20 feet	Sapling		
	Jack Pine	5	Pole/Log	9		Wł	hite Oak	Medium	10 - 20 feet	Sapling		
101	4126 - White, I	Black, N. P	in Oak Sa	awtimbe	r Medium	n 50.5	100	51-80	N/A		ba is still relatively low after thinning 2 entry periods ago and regen is still	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	filling in. overstory is in good condition in terms of health. quite a bit of variability in terms of stocking with some canopy gaps and shelterwood	
	White Oak	65	Log/Pole	12	100	Re	d Maple	Medium	Variable	Sapling	characteristics while other areas are more typical of a thinning.	
N	lorthern Pin Oak	20	Log	14		Wh	nite Pine	Low	Variable	Sapling		
	Red Pine	15	Log	14		Blac	ck Cherry	Low	Variable	Sapling		
						WI	hite Oak	Medium	Variable	Sapling		
102	623 - Emer	rgent Wetla	and	Nonst	ocked	7.2			No		treed bog	
102		rgent Wetla		Nonsto Sawtimb		3.2	110	81-110	No N/A		mixed oak pine stand, providing nice aesthetics along trail and near	
103		ne, Oak Mi		Sawtimb		3.2	110			Size	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long	
103	4310 - Pi	ne, Oak Mi	x	Sawtimb	er Well	3.2 Sub-Ca			N/A	Size Sapling	mixed oak pine stand, providing nice aesthetics along trail and near	
103	4310 - Pi	ne, Oak Mi	x Size Class	Sawtimb DB F	er Well	3.2 Sub-Ca	nopy Species	Density	N/A Avg. Height		mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long	
103	4310 - Pi Canopy Species Iorthern Pin Oak	ne, Oak Mi Cover 45	x Size Class Log	Sawtimb DBH	er Well	3.2 Sub-Ca	nopy Species nite Pine	Density Medium	N/A Avg. Height Variable	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long	
103	4310 - Pi Canopy Species Jorthern Pin Oak White Pine	ne, Oak Mi **Cover 45 35 20	Size Class Log Log/Pole Log/Pole	Sawtimb DBF 14 12	er Well 1 Age	3.2 Sub-Ca	nopy Species nite Pine	Density Medium	N/A Avg. Height Variable	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform	
103 N	4310 - Pi Canopy Species Jorthern Pin Oak White Pine Red Pine	ne, Oak Mi Cover 45 35 20 ated Mixed	Size Class Log Log/Pole Log/Pole	Sawtimb DBF 14 12 12 Poletimb	er Well 1 Age	3.2 Sub-Ca	nopy Species nite Pine hite Oak	Density Medium Low	N/A Avg. Height Variable 10 - 20 feet	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall	
103 N	4310 - Pi Canopy Species Iorthern Pin Oak White Pine Red Pine 42140 - Plan	ne, Oak Mi Cover 45 35 20 ated Mixed	x Size Class Log Log/Pole Log/Pole	Sawtimb DBF 14 12 12 Poletimb	er Well 110 Der Well	3.2 Sub-Ca	nopy Species nite Pine hite Oak	Density Medium Low	N/A Avg. Height Variable 10 - 20 feet	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform	
103 N	4310 - Pi Canopy Species Jorthern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species	ne, Oak Mi Cover 45 35 20 ated Mixed Cover	x Size Class Log Log/Pole Log/Pole Pine Size Class	Sawtimb DBH 14 12 12 Poletimb DBH 3	er Well 110 Der Well	3.2 Sub-Ca	nopy Species nite Pine hite Oak	Density Medium Low	N/A Avg. Height Variable 10 - 20 feet	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and	
103 N	4310 - Pi Canopy Species Jorthern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Jorthern Pin Oak	ne, Oak Mi Cover 45 35 20 nted Mixed Cover 10	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling	Sawtimb DBH 14 12 12 Poletimb DBH 3 5	er Well 1 Age 1 110 1 Age 1 Age	3.2 Sub-Ca	nopy Species nite Pine hite Oak	Density Medium Low	N/A Avg. Height Variable 10 - 20 feet	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and	
103 N	4310 - Pin Canopy Species Northern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Northern Pin Oak Red Pine	ne, Oak Mi **Cover* 45	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling Pole/Sapling	Sawtimb DBH 12 12 12	er Well 1 Age 1 110 1 Age 1 Age	3.2 Sub-Ca	nopy Species nite Pine hite Oak	Density Medium Low	N/A Avg. Height Variable 10 - 20 feet	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and	
103 N	4310 - Pi Canopy Species Northern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Northern Pin Oak Red Pine Jack Pine White Pine	ne, Oak Mi **Cover* 45	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling Pole/Sapling Pole/Sapling	Sawtimb DBH 12 12 12	er Well 1 Age 1 110 Der Well 4 Age 30	3.2 Sub-Ca	nopy Species nite Pine hite Oak 30	Density Medium Low	N/A Avg. Height Variable 10 - 20 feet	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and trace white oak log trees. densely stocked stand of mixed regen, mainly oak, jack pine and	
103 N 104	4310 - Pi Canopy Species Northern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Northern Pin Oak Red Pine Jack Pine White Pine	ne, Oak Mi **Cover* 45	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling Pole/Sapling Pole/Sapling	Sawtimb DBH 14 12 12 Poletimb DBH 3 5 5 Sapling	er Well 1 Age 1 110 Der Well 4 Age 30	3.2 Sub-Cal Wh Wh	nopy Species nite Pine hite Oak 30	Density Medium Low 1-50	N/A Avg. Height Variable 10 - 20 feet N/A	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and trace white oak log trees.	
103 N 104	4310 - Pi Canopy Species Iorthern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Iorthern Pin Oak Red Pine Jack Pine White Pine 4310 - Pi	ne, Oak Mi **Cover* 45	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling Pole/Sapling Pole/Sapling	Sawtimb DBH 14 12 12 Poletimb DBH 3 5 5 Sapling	er Well 1 Age 1 110 Der Well 3 Age 30 Well	3.2 Sub-Cal Wh Wh	nopy Species nite Pine hite Oak 30	Density Medium Low 1-50	N/A Avg. Height Variable 10 - 20 feet N/A	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and trace white oak log trees. densely stocked stand of mixed regen, mainly oak, jack pine and	
103 N 104	4310 - Pi Canopy Species Northern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Northern Pin Oak Red Pine Jack Pine White Pine 4310 - Pi Canopy Species	ne, Oak Mi **Cover* 45	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling Pole/Sapling Pole/Sapling Pole/Sapling X Size Class	Sawtimb DBH 14 12 12 Poletimb DBH 3 5 5 Sapling DBH 2	er Well 1 Age 1 110 Der Well 3 Age 30 Well	3.2 Sub-Cal Wh Wh	nopy Species nite Pine hite Oak 30	Density Medium Low 1-50	N/A Avg. Height Variable 10 - 20 feet N/A	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and trace white oak log trees. densely stocked stand of mixed regen, mainly oak, jack pine and	
103 N 104	4310 - Pi Canopy Species Iorthern Pin Oak White Pine Red Pine 42140 - Plan Canopy Species Iorthern Pin Oak Red Pine Jack Pine White Pine 4310 - Pin Canopy Species Iorthern Pin Oak	ne, Oak Mi **Cover* 45	x Size Class Log Log/Pole Log/Pole Pine Size Class Sapling Pole/Sapling Pole/Sapling x Size Class Sapling	Sawtimb DBH 14 12 12 Poletimb DBH 3 5 5 Sapling DBH 2	per Well 1 Age 30 30 Well 1 Age	3.2 Sub-Cal Wh Wh	nopy Species nite Pine hite Oak 30	Density Medium Low 1-50	N/A Avg. Height Variable 10 - 20 feet N/A	Sapling	mixed oak pine stand, providing nice aesthetics along trail and near lowland area/kettle pond. see old comments, recommend to retain long term. mixed stand generally do.inated by red pine. rows are not always uniform and there are areas where volunteer species are mixed in but overall doing well for a mixed stand. scattered overstory red, white pine and trace white oak log trees. densely stocked stand of mixed regen, mainly oak, jack pine and	



Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments		
106	42110 - Pla	nted Red P	ine	Sawtimbe	er Well	78.0	102	111-140	N/A		red pine continues to respond well to thinning, growing well overall. white		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	oaks and pin oak are quite high in density in understory ranging from 5- 20' in height, trace white pine in overstory. Stand was thinned under		
	White Oak	10	Log/Pole	12		Wh	nite Pine	Low	Variable	Sapling	tsale contract 003-13-01 by Woodstar FP in winter of 2014. Red pine		
	Red Pine	90	Log	13	102	Northe	ern Pin Oak	Medium	5 - 10 feet	Sapling	density is approximately 100-130 BA with some variability where red oak		
						Re	d Maple	Medium	10 - 20 feet	Sapling	trees were removed, most notably in the NW portion of the stand. This area contained red oak decline and thus it was determined that all red		
						WI	nite Oak	Medium	10 - 20 feet	Sapling	oak species should be removed and white oak would be left as a mast source. Edge retention was put in place near RR grade and along 131.		
107	4130	- Aspen		Sapling	Well	12.5	7	Immature	N/A		Aspen regenerating well, retained overstory in decent shape overall,		
	Canopy Species	% Cover	Size Class	DBH	Age						some trees have toppled creating good wildlife cover. Stand was harvested in winter of 2014 under tsale contract 057-13-01 by Mulberg		
	Red Oak	2 2	Log	14							FP/PCAPC		
	White Oak	12	Log	12									
	Bigtooth Aspen	70	Sapling	2	7								
	White Pine	8	Pole/Sap/Log	g 6									
	Beech	8	Sapling	1									
108	42110 - Pla	nted Red P	ine	Sawtimbe	er Well	36.7	96	111-140	N/A		responding fairly well to treatment, red pine growing well. ba is variable		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	but averages 120 with pockets of 50-80 ba where larger oaks were removed. oak regen is beginning to fill in and advance and is quite a		
	Red Pine	85	Log	13	96	Re	d Maple	Medium	10 - 20 feet	Sapling	significant component in much of the understory. Part of original		
	Red Oak	5	Log	16		R	ed Oak	Low	10 - 20 feet	Sapling	stand 31, was treated/thinned in the 2014-2015 under tsale contract 61-		
	White Pine	5	Log	14 12		WI	nite Oak		10 - 20 feet	Sapling			
	White Oak	5	Log			White Pine		Low	_ow 5 - 10 feet	Sapling			
109	42110 - Pla	nted Red P	ine	Sawtimbe	er Well	58.4	99	81-110	N/A		stand harvested last yoe, red pin thinned with areas of advanced regen released and some canopy gaps placed around larger oaks. regen is in		
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	good condition and consists mainly of red maple and oak species.		
	Northern Pin Oak	15	Log	14		Re	d Maple	Medium	5 - 10 feet	Sapling			
	White Oak	2	Log	12			ern Pin Oak	Medium	5 - 10 feet	Sapling	This is a large area dominated by red pine that was planted in 1925.		
	Red Pine	83	Log/Pole	12	99	WI	nite Oak	High	10 - 20 feet	Sapling	There are small variations in the presence of oak sawlogs depending o previous treatments, however they exist only as a minor part of the star		
											canopy. Other areas are characterized by a fairly heavy presence of red maple and oak saplings, also resulting from previous treatments.		
110	4139 - Aspen,	Mixed Deci	duous	Sapling Well		40.7	7	1-50	N/A		Stand was harvested in winter 2014 - white oak, white pine and red pine wgere marked to leave as residual. Aspen and red maple regenerating		
	Canopy Species	% Cover	Size Class	DBH	Age						well, these species in sapling class were featured in canopy. (old		
	Red Maple	25	Sapling	1							comment) Stand contains a few pockets of older white pine that appear		
	White Oak	10	Log/Pole	12							to be natural in origin even though the majority of the stand was planted.		
	Bigtooth Aspen	50	Sapling	2	6								
	White Pine	5	Log	12	89								
	Red Pine	5	Log/Pole	12	89								
	White Pine	5	Sapling	2									



Stand	Level 4 Cover Type			Size Density		Acres	Stand Age I	JA Kange	Managed S	ite	General Comments
111	4124 - Red v	with White (Oak S	Sawtimb	er Well	2.8	107	111-140	N/A		oak pine stand with Aspen more prevalent in eastern portion of stand.
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	western area of stand is a steep slope leading down to pond/wetland area, should be hard factored and retained. operable portion could be
	Red Maple	3	Pole	7		Re	ed Maple	Low	Variable	Sapling	treated with shelterwood/seed tree harvest, retaining larger red pine and
	Red Oak	48	Log	14	107	Wh	nite Pine	Low	Variable	Sapling	white oak mainly for visual, and regenerating Aspen.
	White Oak	25	Log/Pole	12		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
Е	Bigtooth Aspen	7	Log	16							
	Red Pine	12	Log/Pole	12							
	White Pine	5	Log	12							
112	122 - Road	d/Parking Lo	ot	Nonsto	ocked	0.5	0		No		131 corridor.
113 4	4112 - Maple, Beec			Sapling		71.9	5	Immature	N/A		stand was not burned. roller chopping work was unsuccessful and now stand is full of deciduous regeneration. if red pine is to be planted, stand
(Canopy Species		Size Class		l Age						needs to be sprayed and monitored. full stocked at this time with 3-6'
	Red Maple	80	Sapling	1	5						regen.
	Red Oak	10	Sapling	1							Burn prescription for this stand was removed and it was determined that
	White Oak	10	Sapling	1							
	writte Oak	10	Sapling	1							roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully.
	Wille Cak	10	Sapling	1							roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be
114	42111 - Planted			1 Sawtimb	er Well	23.4	96	111-140	N/A		roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red
	42111 - Planted	d Red Pine, iiduous		Sawtimb	er Well		96 nopy Species		N/A Avg. Height	Size	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good
	42111 - Planted Dec	d Red Pine, iiduous	Mixed S	Sawtimb		Sub-Ca				Size Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red
(42111 - Planted Dec Canopy Species	d Red Pine, iduous % Cover	Mixed S	Sawtimb DBH		Sub-Ca	nopy Species	Density	Avg. Height		roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability
(42111 - Planted Dec Canopy Species Red Maple	d Red Pine, ciduous % Cover	Mixed S Size Class Pole	Sawtimb DBH		Sub-Ca Re	nopy Species	Density Medium	Avg. Height 5 - 10 feet	Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability
(42111 - Planted Dec Canopy Species Red Maple orthern Pin Oak	d Red Pine, ciduous Cover 10 8 7	Mixed S Size Class Pole Log Log	DBH 5 14	I Age	Sub-Ca Re	nopy Species ed Maple ern Pin Oak	Density Medium Medium	Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability is red pine stocking with pockets of lower BA.
115	42111 - Planted Dec Canopy Species Red Maple orthern Pin Oak White Oak	d Red Pine, ciduous Cover 10 8 7	Mixed S Size Class Pole Log Log	DBH 5 14 12 Sapling	I Age	Sub-Ca Re Northe	nopy Species ed Maple ern Pin Oak hite Oak	Density Medium Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability is red pine stocking with pockets of lower BA. stand regenerating well overall, regen is dense and while there is evidence of some significant browse, much of the saplings component is
115	42111 - Planted Dec Canopy Species Red Maple orthern Pin Oak White Oak 4199 - Other Mixe	d Red Pine, ciduous Cover 10 8 7	Mixed S Size Class Pole Log Log eciduous	DBF 5 14 12 Sapline	I Age	Sub-Ca Re Northe	nopy Species ed Maple ern Pin Oak hite Oak	Density Medium Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability is red pine stocking with pockets of lower BA. stand regenerating well overall, regen is dense and while there is evidence of some significant browse, much of the saplings component is above browse level. red pine retention pockets in good condition as well.
115	42111 - Planted Dec Canopy Species Red Maple orthern Pin Oak White Oak 4199 - Other Mixe Canopy Species	d Red Pine, ciduous Cover 10 8 7 d Upland D Cover	Mixed S Size Class Pole Log Log eciduous Size Class	Sawtimb DBH 5 14 12 Sapling DBH 2	J Age	Sub-Ca Re Northe	nopy Species ed Maple ern Pin Oak hite Oak	Density Medium Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability is red pine stocking with pockets of lower BA. stand regenerating well overall, regen is dense and while there is evidence of some significant browse, much of the saplings component is above browse level. red pine retention pockets in good condition as well. Portion of original stand 31, was cut in 2016 under tsale contract 61-036-
115	42111 - Planted Dec Canopy Species Red Maple orthern Pin Oak White Oak 4199 - Other Mixe Canopy Species Red Maple	d Red Pine, ciduous Cover 10 8 7 dd Upland D Cover 50	Mixed S Size Class Pole Log Log eciduous Size Class Sapling/Pole	DBH 2 1	J Age	Sub-Ca Re Northe	nopy Species ed Maple ern Pin Oak hite Oak	Density Medium Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling	roller chopping would take care of existing stump sprout deciduous species and lessen slash enough to allow trenching and planting to be done successfully. Stand was originally part of large stand 31 to the north but was separated after being cut under tsale contract 61-036-13-01 in 2016. Stand is slated to be burned and then replanted to red pine. Originally part of stand 31 to the north but is separated from it after treatments completed on stands 113 & 115. pine/oak dominated with red maple and oak understory, generally fully stocked. red pine is good quality, oak is fair with some mortality throughout stand. some. ariability is red pine stocking with pockets of lower BA. stand regenerating well overall, regen is dense and while there is evidence of some significant browse, much of the saplings component is above browse level. red pine retention pockets in good condition as well.



Stand	Level 4 C	over Type		Size Density		Acres	Stand Age	BA Range	Managed S	Site	General Comments
116	4191 - Mixed Upla Co	and Decidu	ous with	Sawtimb	er Well	13.6	58	111-140	N/A		Separated from adjacent stand 34 due to higher concentration of aspen and white pine in this stand. Aspen is decent quality as is white pine, oak
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	species still distributed throughout this stand, only in lower numbers than adjacent stand. Some areas that seem to have slightly higher water table
	Red Maple	10	Pole/Log	8		Re	ed Maple	Medium	Variable	Sapling	with hemlock present and some hummocks, not signify higher water table
	Beech	2	Pole	8			Beech	Low	Variable	Sapling	though. Final harvest stand retaining some larger white pine along with
	Red Oak	13	Log/Pole	12		WI	hite Pine	Medium	Variable	Sapling	some scattered oak, preferably white oak for seed and mast. Do not cut any hemlock regardless of size.
	White Oak	10	Log/Pole	12		Н	lemlock	Low	Variable	Pole	any hemiock regardless of size.
Е	Bigtooth Aspen	30	Pole/Log	8	58						-
	White Pine	30	Log/Pole	10							
117	4126 - White, I	Black, N. Pi	n Oak	Sawtimb	er Poor	1.3	114	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Red Oak	28	Log	16	114	Re	ed Maple	Medium	5 - 10 feet	Sapling	
	White Oak	70	Log/Pole	12	114	WI	hite Pine	Low	Variable	Sapling	
Е	Bigtooth Aspen	2	Log/Pole	12		Wit	tch Hazel	Low	5 - 10 feet	Tall Shrub	
		'		'		North	ern Pin Oak	Medium	5 - 10 feet	Sapling	
						Bigto	ooth Aspen	Medium	5 - 10 feet	Sapling	