



Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52171

Entry Year 2024

Acreage: 1,744

County Cheboygan

Management Area: Cheboygan Lake Plain

Stand Examiner: Tricia St. Pierre

Legal Description:

Cheboygan Co, Nunda Township

T33N R02W

Sec 1: NW, W1/2SW

Sec 2: all except SW

Sec 3: N1/2, NWSW, N1/2SE, SESE

Sec 10: N1/2NE, SENE, W1/2SWNE, NENW, S1/2NW, S1/2SW, S1/2SE, NESE

Sec 11: SWSW, S1/2NWSW, NWNWSW

Identified Planning Goals:

Goals are aimed at providing the protection, integrated management, and responsible use of natural resources, as well as preserving and enhancing the health and productivity of state forest land. These goals of providing a diverse and undiminished natural resource base are for the social, recreational, environmental, and economic benefits of the State of Michigan and its inhabitants. Management decisions have been made with consideration to sustainability and diversity of the plants, animals, and recreational activities on state land. Addressing forest health concerns including invasive species shall be done whenever and wherever appropriate to do so.

Soil and topography:

Soils are dominated largely by sand (approximately 64% of the compartment is sand, while an additional 27% is a taxonomic variety thereof) with 4% each muck and peat types, and less than 1% water. The terrain is generally flat (41% 0-6% slope) to gently undulating (36% 6-12% slope) with a decent amount of short, steep slopes (22% 12-30% slope, <1% 30-50% slope). The steepest slopes are on the edges of waterways, specifically tributaries into the Little Pigeon River, though there are some steeper slopes in the hardwood stands in the south and elsewhere.

The dominant soil types are Rubicon sand (51%) and Blue Lake loamy sand (15%) with lesser amounts (less than 8% each) of Leelanau loamy sand, Kalkaska sand, Rubicon sand, Croswell sand, Lupton muck, and Tawas peat. Trace amounts (<3% each) of Cheboygan loamy sand, Au Gres Sand, Mancelona sand, Kinross mucky sand, Roscommon muck, Ocqueoc fine sand, and Bowstring muck are found within this compartment.

Rubicon sands by definition are deep, well drained soils, generally forested, historically dominated by red pine and aspen with components of white pine and jack pine. Red pine plantations do well on these sites. Within this compartment, oak is a well established component on Rubicon sands in addition to the pine and aspen. Of the Rubicon soils, 51% are dominated by aspen, 31% by Mixed Deciduous (oak, aspen, and red maple with and without pine), 8% red pine, 5% mixed coniferous (red and white pine, occasionally jack), 2% upland mix (oak, aspen, pine), and 3% nonforested openings.

The Blue Lake series is moderately to well drained, capable of supporting quality northern hardwood (namely sugar maple, beech, and yellow birch), as well as aspen, white pine, and hemlock. Blue Lake soils in this compartment are dominated by sugar maple, beech, and basswood, with lesser amounts of red maple and white pine, and trace hemlock. Most notable, perhaps, is that maturing aspen stands on Blue Lake soils often have a very well developed, highly desirable mix of quality hardwood stems, especially sugar maple, in the subcanopy.

KOTAR: The northeast half of this compartment is entirely PARVHa (though some sites lean towards PARVVb) on Rubicon Sand, currently dominated with a mix of aspen, oak, and pine; all vigorous growers and able to achieve an older age before deteriorating. Red maple is a common associate. There are many pine and oak spread across this half of the compartment meeting legacy criteria by age and diameter. Oak and red maple are highly productive, but herbivory is a detrimental force against successful regeneration of these species, especially when attempting even-aged management.

The northwest quarter is a mix of PARVVb, PARVVb/AFO, AFO/AFOCa, PARVCo, PARVHa, unclassified lowland, and water. The whole area is a mix of Loamy Sands and Sands with some wet sites on top of peat or muck. As such, this quarter has increased diversity between stands and, in most cases, a fair amount of species richness in the subcanopy. With exception of the lowland/water sites, most trees grow vigorously. Subcanopy white pine is a commonality amongst the varying habitat types. Subcanopy hardwood is especially abundant under most aspen and pine types, which may lend itself to the consideration of cover type rotations where even-aged management has failed to result in the regeneration of desirable hardwood.

The southwest quarter is dominated by AFO/AFOCa (derived from Blue Lake Loamy Sand and Kalkaska Sand), but has veins of PARVVb/AFO, PARVVb, true AFO, PARVCo, unclassified lowland, and a small inclusion of PARVHa and surface water to boot. Some stands on the better quality AFO/AFOCa sites have been driven towards aspen cover types by means

of even-aged management and subsequent herbivory reducing overcanopy species diversity. The remaining mature hardwood stands produce nice hardwood but are also suffering from deer and elk browse, simplifying the subcanopy.

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

The north edge of this compartment adjoins other state forest land. Otherwise, ownership around the compartment is residential to the west and south, and owned almost entirely by a wildlife sanctuary to the east. Greenwood Foundation is a privately operated foundation aimed at forest and wildlife conservation. The majority of the sanctuary (nearly 2000 acres) is surveyed and fenced. Many of the residential properties are year-round, though there are some hunting camps and private parcels occupied seasonally or intermittently. Vacant properties are being developed; a trend which may impact recreation on and the visibility of state land in this area.

Line 5 bisects this compartment and there is a substation located in section 10 (ground likely leased from the private landowner).

Unique Natural Features:

Both redshouldered Hawk and Goshawk nests have been identified within 1/4-mile of this compartment. Nesting requirements and habitat are favorable for both species in and around this compartment. There's potential for the 3-striped Oncocnemis (invertebrate associated with the Little Pigeon River) and Blanding's Turtle (vertebrate associated with the Little Pigeon River), as both have been observed nearby. Goblin Fern has been observed to the north and there is suitable habitat within this compartment.

Potential for rare plants of Rich-Mesic Forests include: Carex assiniboinensis, showy orchid, ginseng, and goblin fern. Potential for rare plants in lowland cover types includes Calypso orchid, round leaved orchid, limestone oak fern, and Ram's Head Lady's-Slipper. Potential for rare plants of Dry Northern Forests and Dry Mesic Northern Forests include false violet and pine drops.

A Dry-Mesic Northern Forest natural community type has been identified and protected as the Pigeon River Pines ERA to the east of this compartment. Characteristics of this community type can be found within this compartment, though there are no designated ERAs.

High Priority Stream Buffers associated with Natural Rivers (Little Sturgeon and Little Pigeon) Natural Rivers Zone HCVA overlaps with portion of a stand identified as Long Term Retention. Corey Lake, headwaters of the Little Sturgeon, Tributaries to the Little Pigeon

Archeological, Historical, and Cultural Features:

Although there are no known archaeological occurrences, the potential exists especially within proximity to waterways. Portions of this compartment were owned by a Rail Company in the early 1900s.

Special Management Designations or Considerations:

Special considerations should be made when managing around tributaries to the Little Pigeon River and along the Little Sturgeon River and Corey Lake, deferring to the Fisheries Biologist for direction. The swamp surrounding Corey Lake is a Poor Conifer Swamp and should be recognized using the MNFI community abstract for conservation and/or management in and around the stand.

High quality and dense desirable hardwood regeneration under non-hardwood cover types should be considered when making decisions for the future of these stands. It might be feasible, if not desirable, to rotate cover types on the landscape where natural desirable regeneration (more specifically sugar maple associations) is present and advanced.

Deer and elk browse can be devastating for the regeneration and recruitment of desirable hardwood species (oak, maple) following management activities. Guidance for minimizing stem availability (like intact tops and slash, enclosures) might be gleaned from the Walters-Roloff Hardwood Regeneration Study as more information becomes available.

HRD considerations in pine types

Watershed and Fisheries Considerations:

This compartment is in the Little Pigeon River watershed and Little Sturgeon River watershed. It contains a couple of small lakes (Corey Lake and a small unnamed lake), as well as part of the Little Sturgeon River. Prescribed treatments are appropriate for protection of these waterbodies.

Wildlife Habitat Considerations:

This compartment consists mostly of upland areas containing oak, mixed aspen/oak, hardwoods, and red and jack pine along with two lowland areas associated with the Little Pigeon River and Corey Lake. These lowland areas support a variety of species including black bear, white tailed deer, furbearers, and various amphibians. Harvests will concentrate on regenerating oak for future mast production and aspen for age class diversity and varied habitats. Early successional habitat will benefit white tailed deer, elk, wild turkey, grouse, woodcock, and various songbirds. This area receives significant hunting pressure for white tailed deer, grouse, woodcock, and wild turkey.

Mineral Resource and Development Concerns and/or Restrictions

Sections 1-3 & 10-11, T33N-R2W, Cheboygan County

The nearest active sand/gravel pit is more than three miles to the northwest. There is some potential for sand & gravel within the compartment. The Antrim Shale is thin to absent beneath the compartment, and there is no known potential for economic oil & gas production from other formations at this time. There is no known potential for metallic minerals in this

part of the state.
Comments submitted by Peter Rose, 1/19/2022.

Vehicle Access:

Vehicular access is reliable in all seasons through the center and the east quarter of the compartment. The northern and southern acreage is accessible via seasonal county roads. The northwest can be a challenge to access as forest roads are prone to developing deep mud holes as are seasonal county roads from the north. Sandy roads in the east and south are well drained but are easily erodible.

Survey Needs:

Greenwood foundation: SENW Sec 1 T33N R02W

Recreational Facilities and Opportunities:

There are no designated trails present. Some fishing and/or trapping opportunities (fish, beaver). Greenwood Foundation is a wildlife preserve located to the east and south of this compartment, offering private educational, hiking, and wildlife viewing opportunities.

Fire Protection:

There are a few volatile fuel types present within this compartment, though there are no major concerns in nominal conditions. In periods of extended drought, red pine and oak (or young mixed-deciduous) types may see increased fire activity and behavior. Wolverine VFD is located just over a mile away on Webb Road providing quick response and/or a reliable water source.

Additional Compartment Information:

The following reports from the Inventory are attached:

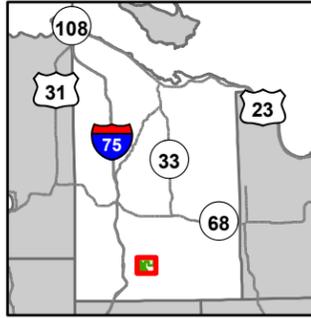
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

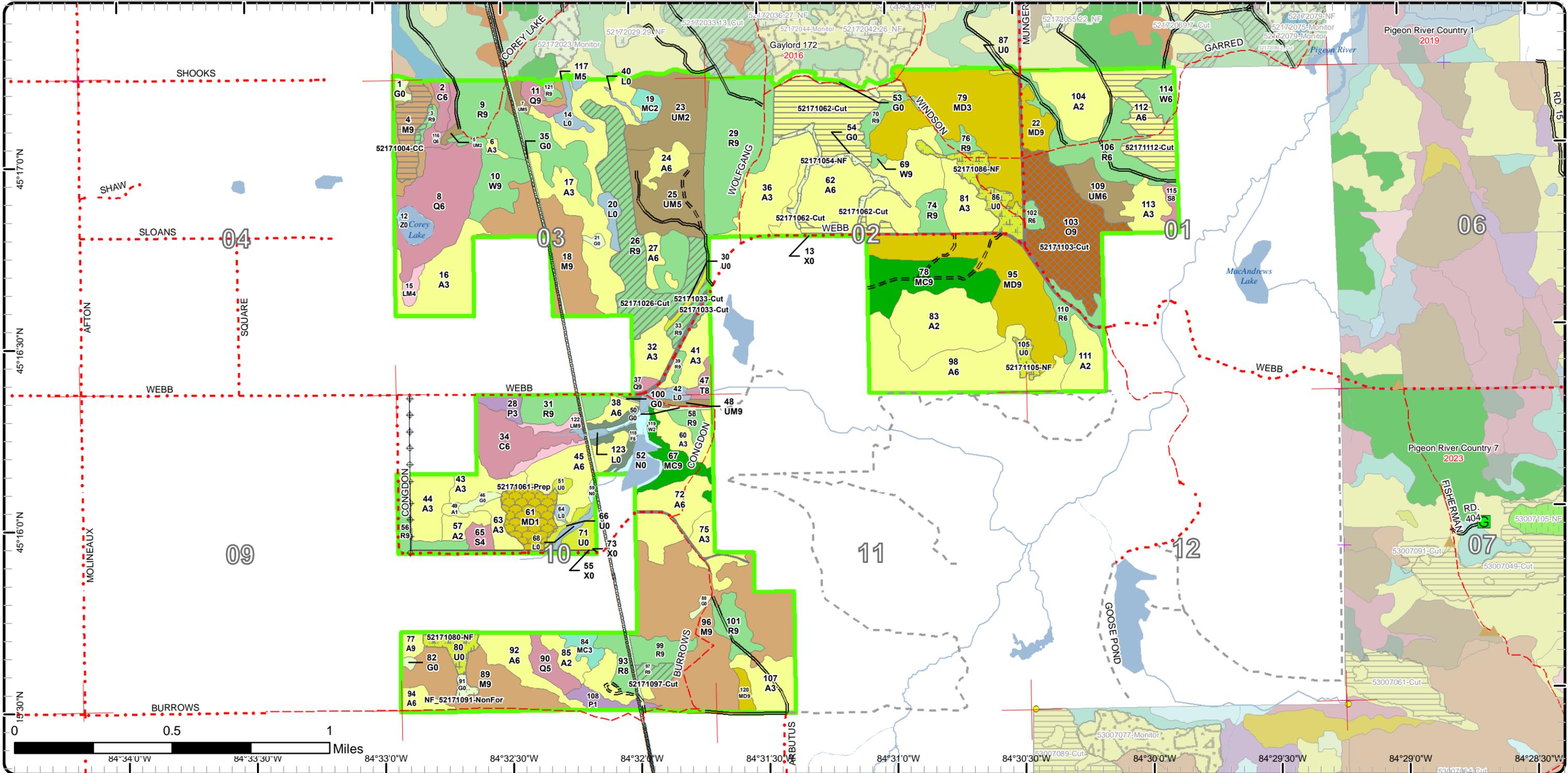
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 171
 T33N, R02W, Sec. 1-3, 10, 11
 County: Cheboygan
 Unit: Gaylord
 Mgmt Area: Cheboygan Lake Plain
 YOE: 2024
 Acres: 1743.6 GIS Calculated
 Examiner: Tricia St. Pierre
 Map Revised: 11/15/2022
 Map Phase: Post-Review

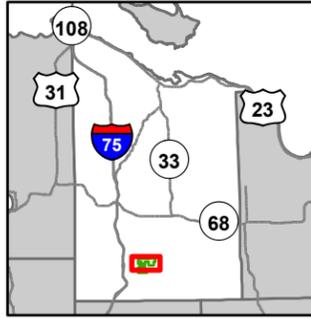


- | | | |
|-------------------------------------|-----------------------------------|----------------------------------|
| — Miris Corners | Other Treatment - See Comments | 612 - Lowland Coniferous Forest |
| ● Survey Grade Corners | Selection (Group, Single Tree) | 613 - Lowland Mixed Forest |
| --- Counties | Clearcut (w/Reserves) | 122 - Roads/Parking Lot |
| — DNR - Secondary Forest Road | Thinning (Crown, Low, Systematic) | 123 - Other High Intensity Urban |
| — DNR - Forest Access Route | Site Prep | 310 - Herbaceous Openland |
| - - - County - Gravel Road | 411 - Northern Hardwood | 330 - Low Density Trees |
| - - - County - Dirt Road (Seasonal) | 412 - Oak Types | 500 - Water |
| - - - Private - Dirt / Gravel Road | 413 - Aspen | 622 - Lowland Shrub |
| — Intermittent Stream | 419 - Mixed Upland Deciduous | 623 - Emergent Wetland |
| — Lake/Pond | 421 - Planted Pines | |
| — Perennial River | 422 - Natural Pines | |
| — Lakes and Rivers | 423 - Other Upland Conifers | |
| — Pipeline | 429 - Mixed Upland Conifers | |
| — Powerline | 430 - Upland Mixed Forest | |
| — Compartment Boundary | 611 - Lowland Deciduous Forest | |

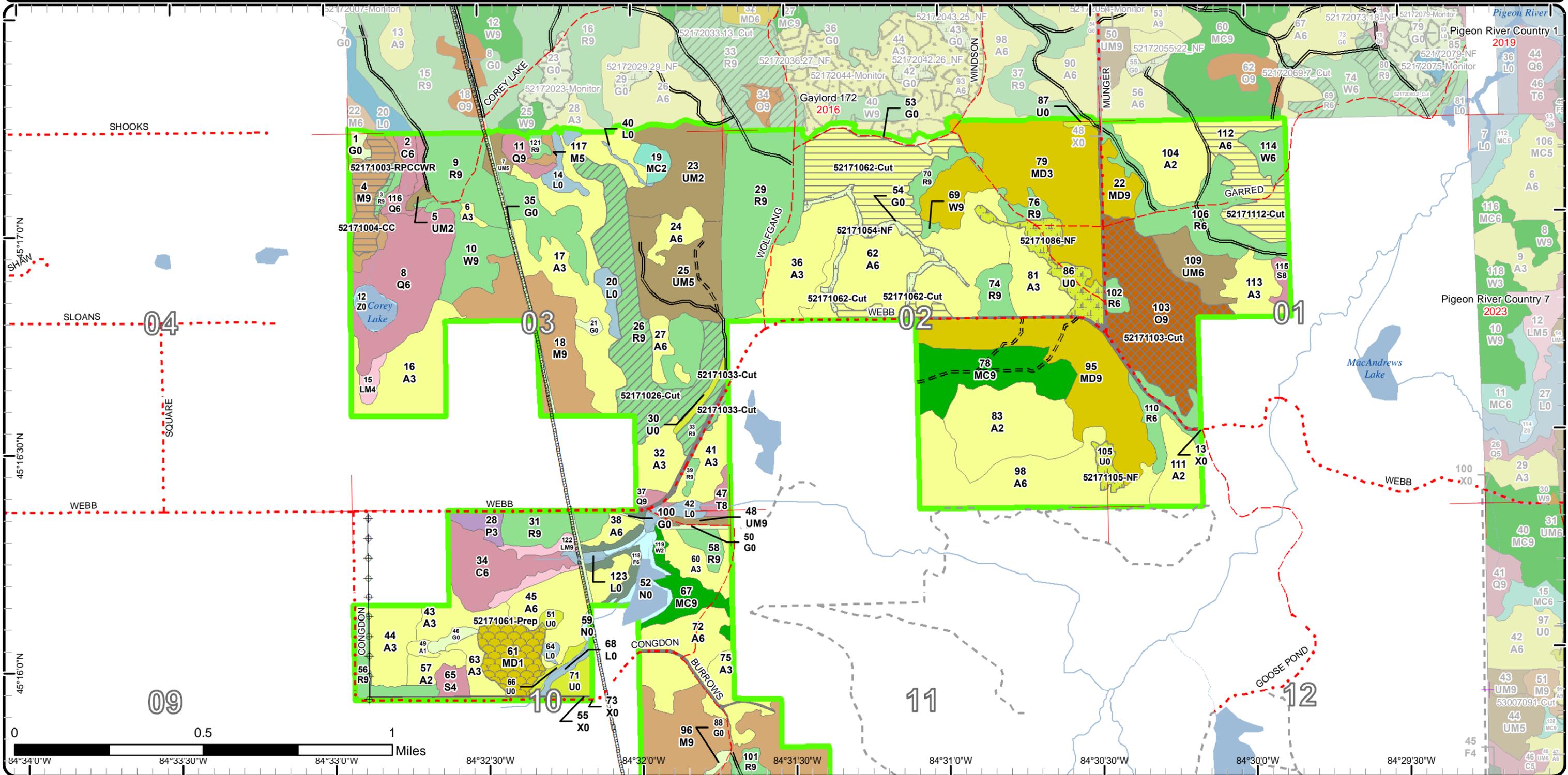


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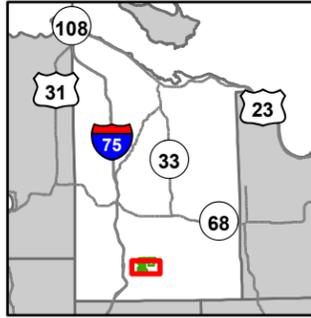


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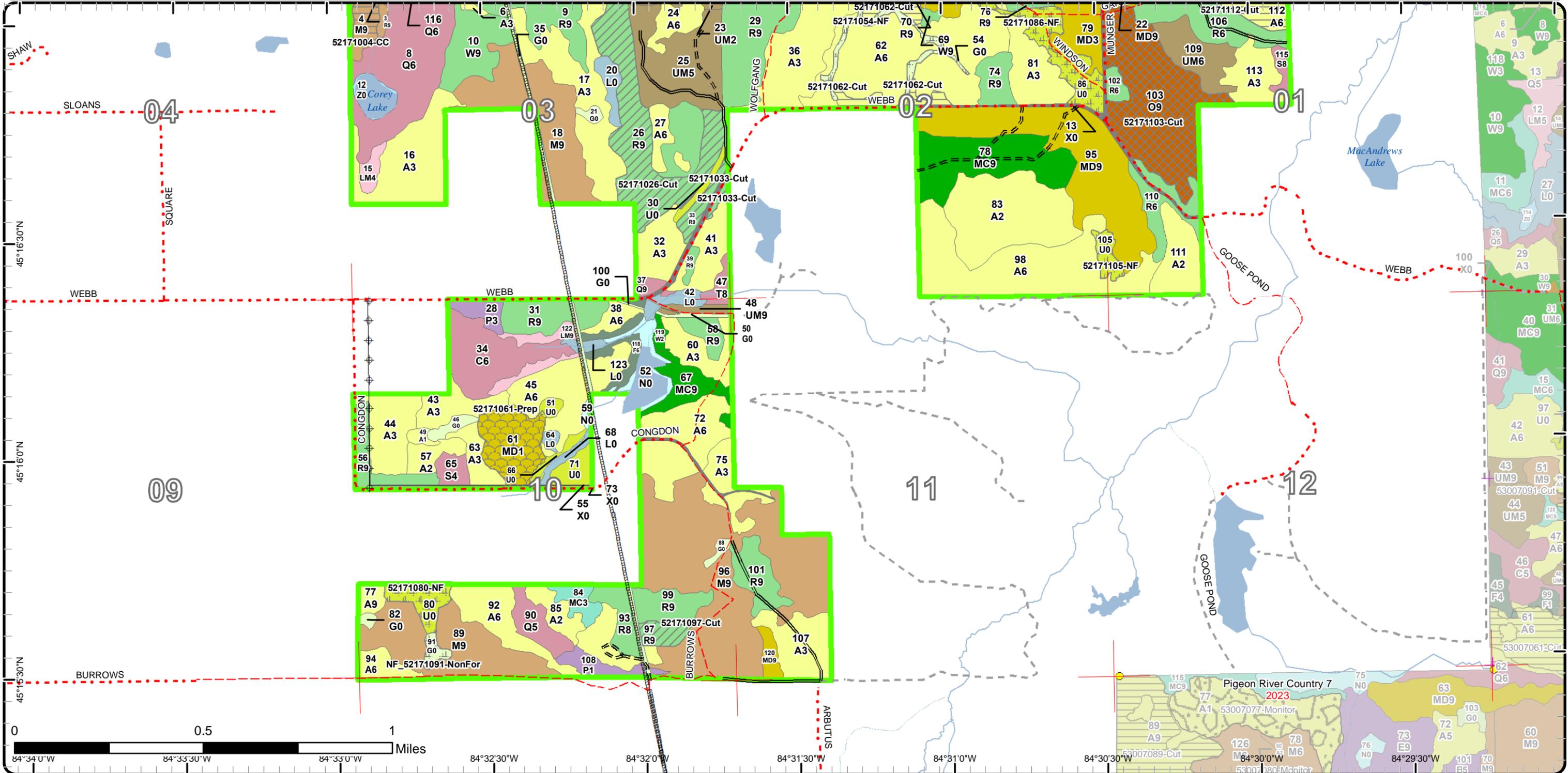


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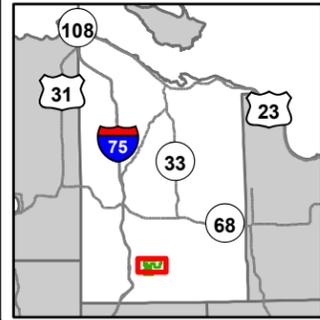


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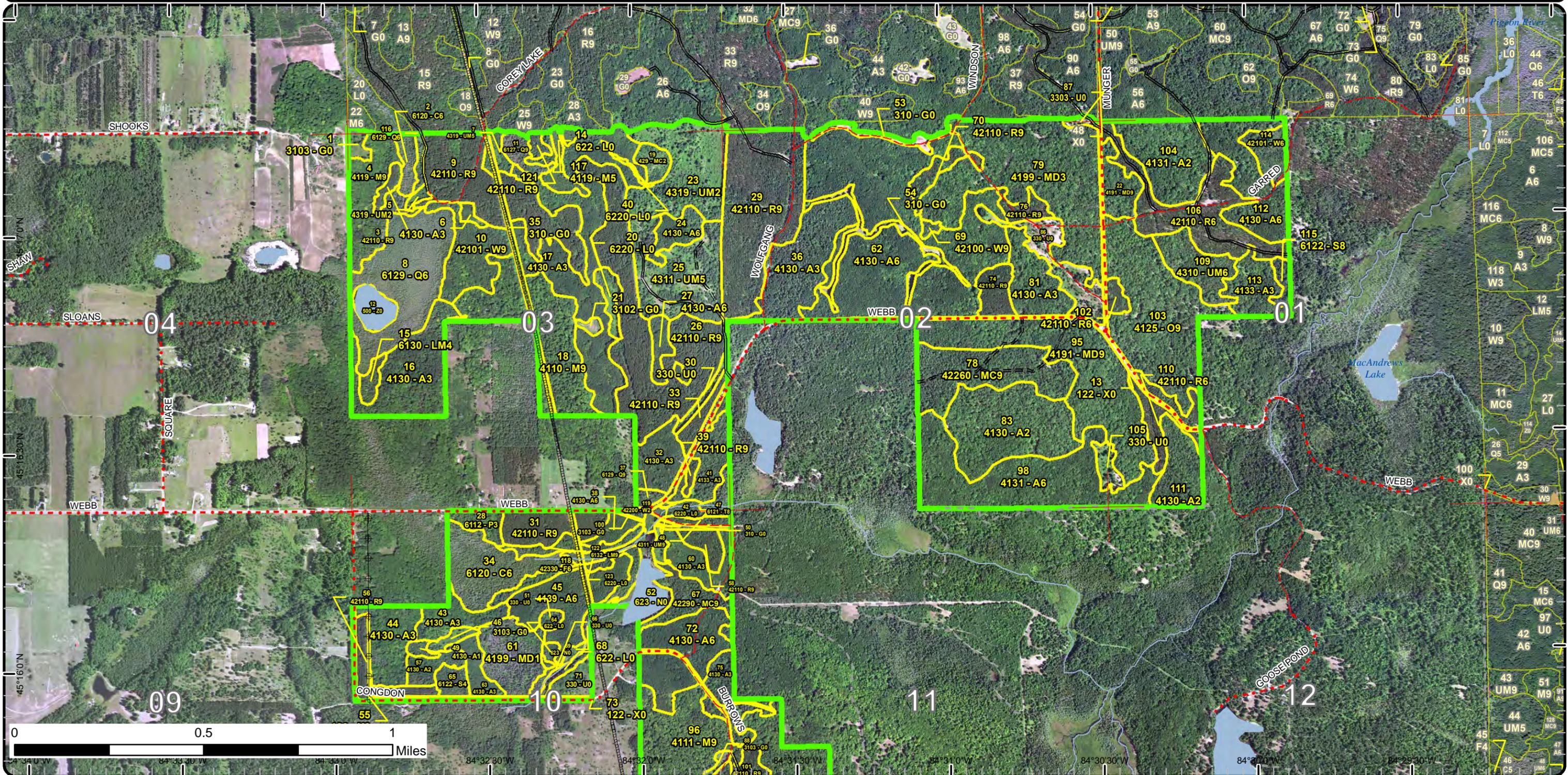


Stand Boundary Map

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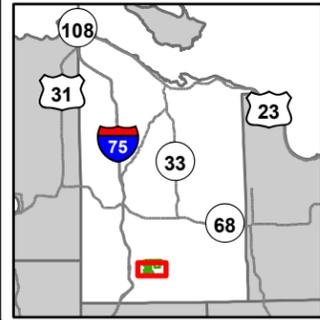


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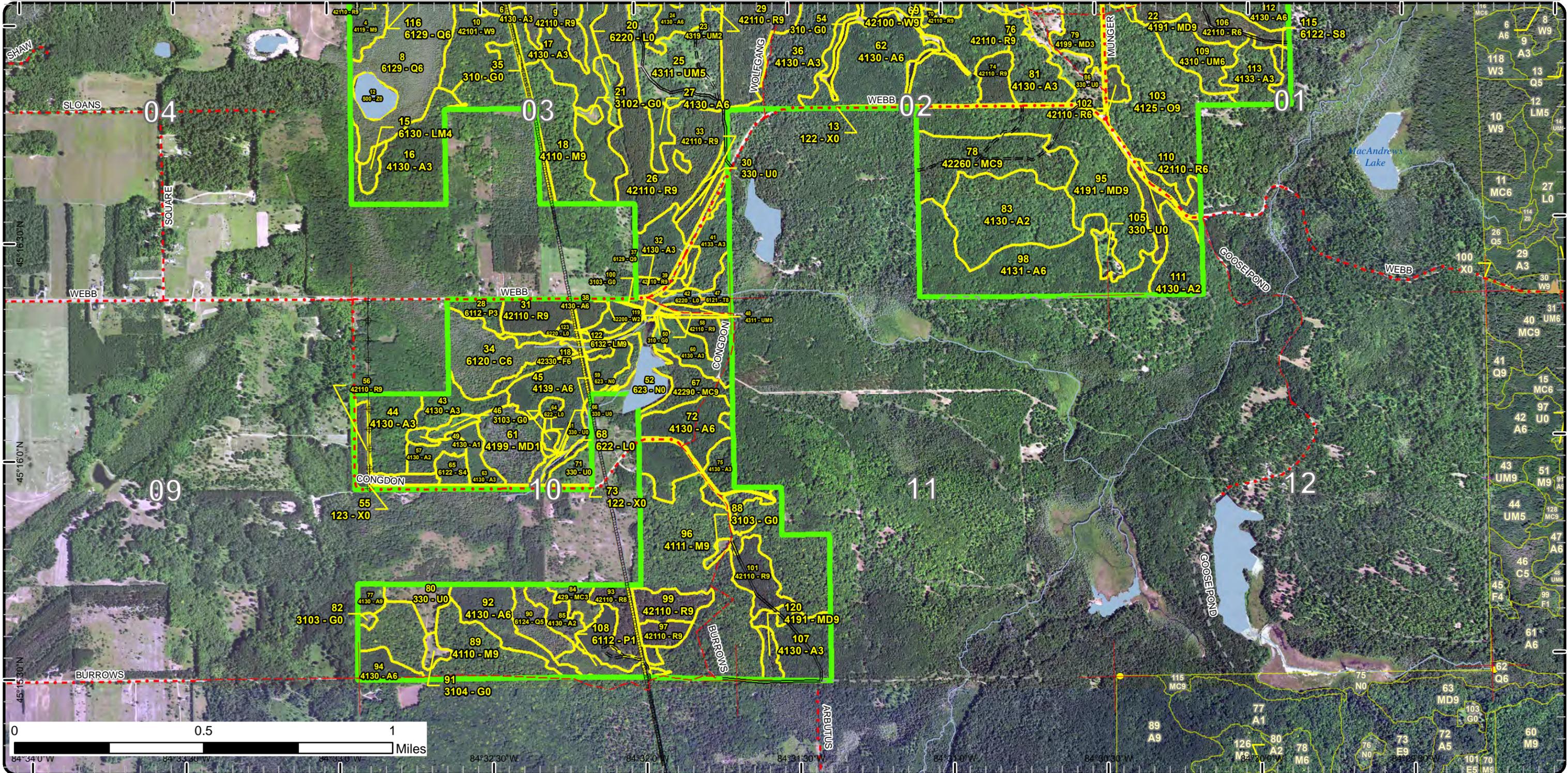


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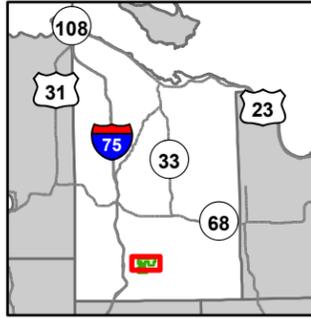


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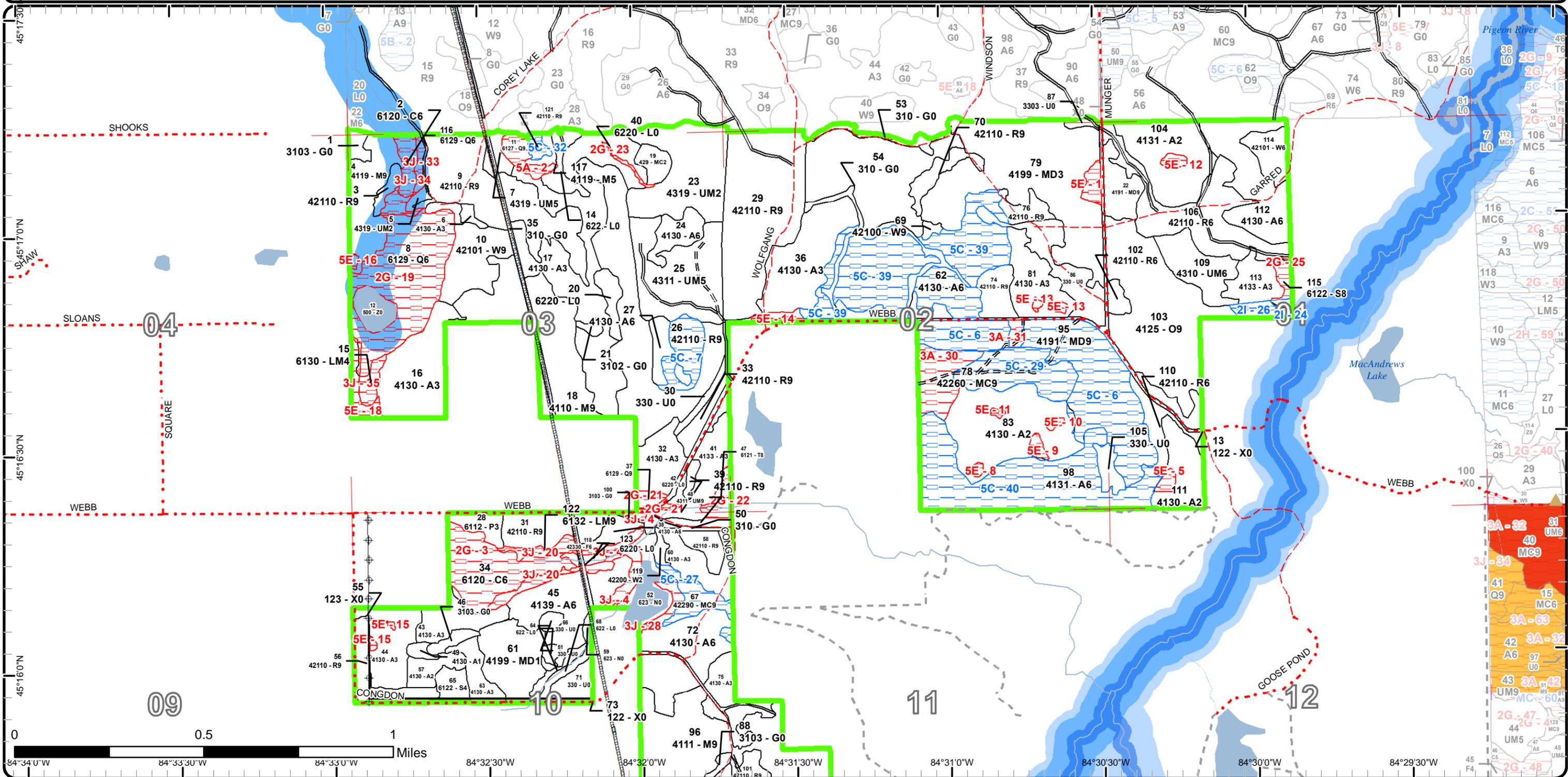


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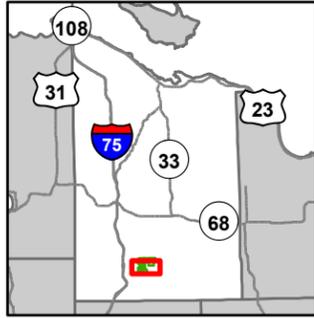


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- Available w/ Constraints
- 2I: Survey needed
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 3A: Conservation Values incompatible with harvest at this time
- 3J: Water quality / BMPs (stream, river, or lake)
- 5A: Not able to obtain desirable regeneration
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- Cold Water Lakes
- Non-Dedicated Natural Areas and National Natural Landmarks
- High Priority Trout Stream Buffer

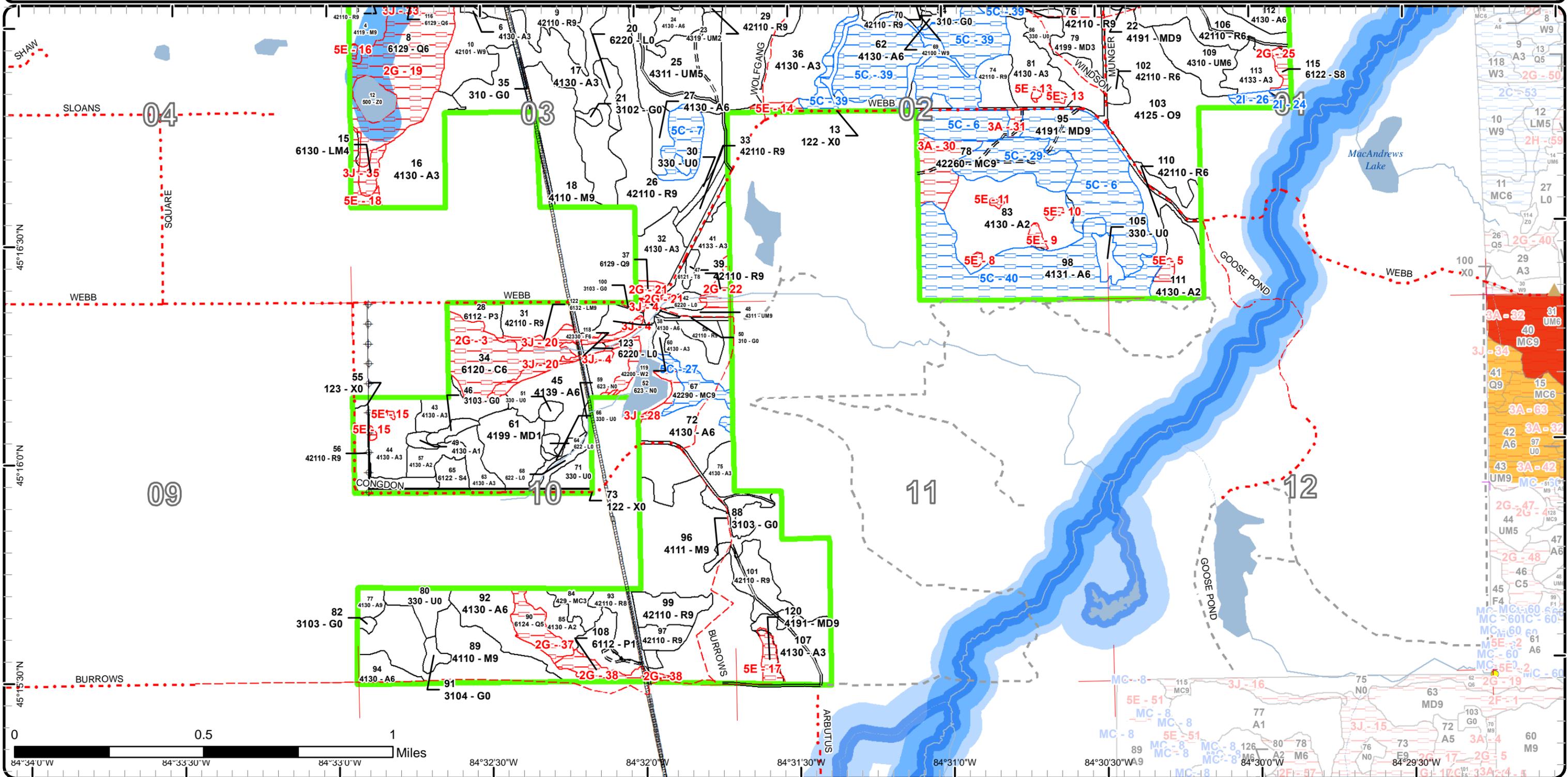


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Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	238	18	133	35	60	133	0	0	0	3	0	0	0	0	0	0	0	620
Cedar	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	28
Herbaceous Openland	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Low-Density Trees	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Lowland Aspen/Balsam Poplar	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Lowland Conifers	0	0	0	0	0	0	0	0	5	9	0	7	41	0	0	0	0	0	62
Lowland Mixed Forest	0	0	0	0	0	0	0	3	0	0	7	0	0	0	0	0	0	0	10
Lowland Shrub	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Spruce/Fir	0	0	0	0	0	0	0	5	0	0	3	0	0	0	0	0	0	0	7
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Mixed Upland Deciduous	0	88	0	0	0	0	0	9	4	0	0	56	0	0	0	0	0	0	157
Natural Mixed Pines	0	0	0	0	0	0	0	0	11	32	0	0	0	0	0	0	0	0	43
Northern Hardwood	0	0	0	0	0	0	0	0	0	2	59	135	0	0	0	0	0	0	195
Oak	0	0	0	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0	54
Red Pine	0	0	0	0	0	0	0	282	9	0	0	0	0	0	0	0	0	0	291
Tamarack	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
Upland Conifers	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Upland Mixed Forest	0	0	33	5	0	32	0	14	0	0	3	0	0	0	0	0	0	0	85
Upland Spruce/Fir	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Urban	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
White Pine	0	0	2	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	29
Total	129	331	63	144	43	92	133	340	29	47	103	252	41	0	0	0	0	0	1743



Report 2 – Treatment Summary

Gaylord Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 171

Total Compartment Acres: 1,744

Commercial Harvest - 200
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	71	0	0	0	0	0	0	0	0	71
Northern Hardwood	14	0	0	0	0	0	0	0	0	14
Oak	0	54	0	0	0	0	0	0	0	54
Red Pine	1	0	0	0	0	60	0	0	0	61
Total	86	54	0	0	0	60	0	0	0	200

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	200	18	0	0	0	0	0	0	38	256
Next Step	0	0	18	0	0	18	176	0	0	212
Total	200	18	18	0	0	18	176	0	38	468



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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
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Approved Treatments:

3	52171003-RPCCWR	1.4	42110 - Planted Red Pine	Sawtimber Well	66	171-200	Harvest	Clearcut with Retention	4112 - Maple, Beech, Cherry Association	Even-Aged	No
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Prescription Final harvest stand. Mark some Red Pine trees to leave. Leave a 50-100 feet buffer along stream.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Acceptable regeneration will meet minimum stocking requirements for mixed deciduous species.

Other Comment:

Old next step comments: Regeneration survey. Acceptable regeneration includes a mix of deciduous species.

Site Condition

Proposed Start Date: 10/1 /2013

4	52171004-CC	13.7	4119 - Mixed Northern Hardwoods	Sawtimber Well	90	81-110	Harvest	Clearcut with Retention	4112 - Maple, Beech, Cherry Association	Even-Aged	No
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Prescription Harvest stand to regenerate. Do not cut Hemlock. Follow retention guidelines. Buffer stream by 100 feet minimum where necessary.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Acceptable regeneration includes a moderate to well stocked mix of deciduous species.

Other Comment:

Current BA = 87. Poor quality Sugar Maple and beech with the aspen dying out. EAB in the ash. Old next step comments: Regeneration survey. Acceptable regeneration includes a moderate to well stocked mix of deciduous species.

Site Condition

Proposed Start Date: 10/1 /2013

26	52171026-Cut	49.1	42110 - Planted Red Pine	Sawtimber Well	66	171-200	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
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Prescription Marked thinning to 120-140 BA.

Specs:

Next Step

Treatments:

Acceptable Regen: Planted red pine

Other Comment:

Recommend marking in leaf-off - regen except for southern acreage will be a bear. Southeast acreage has been removed from treatment area for hilly terrain, lower basal areas, and high stocking of deciduous species.

Site Condition

Proposed Start Date: 10/1 /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
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33	52171033-Cut	5.6	42110 - Planted Red Pine	Sawtimber Well	63	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
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Prescription Marked thinning to 120 BA. Leave all deciduous trees and white pine unless necessary to remove for operations.

Specs:

Next Step

Treatments:

Acceptable Mature planted red pine stocked to 120 BA

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

54	52171054-NF	8.1	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	3105 - Mixed Upland Herbaceous		No
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Prescription Mowing and/or planting

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

61	52171061-Prep	17.9	4199 - Other Mixed Upland Deciduous	Sapling Poor	3	Immature	SitePrep	Trenching	42110 - Planted Red Pine	Even-Aged	No
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Prescription Plant RP

Specs:

Next Step Planting, Initial Plant; Pesticide, Skidder - Site Prep; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Acceptable regeneration includes a well stocked stand of planted Red Pine.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

62	52171062-Cut	45.4	4130 - Aspen	Poetimber Well	56	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
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Prescription Final harvest following retention guidelines. Create variable edges in treatment area adjacent to Webb Road.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regeneration will meet minimum stocking requirements for aspen.

Regen:

Other Utilize retention to capture unique stand level features or areas of mature oak and pine.

Comment:

Site Condition

Proposed Start Date: 10/1 /2023



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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80	52171080-NF	7.9	330 - Low-Density Trees	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	320 - Upland Shrub		No
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Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and/or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

86	52171086-NF	15.5	330 - Low-Density Trees	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	320 - Upland Shrub		No
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Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and/or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

97	52171097-Cut	5.0	42110 - Planted Red Pine	Sawtimber Well	67	171- 200	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
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Prescription Thin stand to 140 BA accepting lower basal area in pockets of poor form or pre-existing low BA.

Specs:

Next Step

Treatments:

Acceptable Planted red pine

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

103	52171103-Cut	54.0	4125 - Black, N. Pin Oak	Sawtimber Well	105	81-110	Harvest	Group Selection	4124 - Red with White Oak	Two-Aged	No
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Prescription Group selection focusing on expanding aspen, retaining 40-50% of parent stand; retain all conifer. Include drumming log spec for grouse.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regeneration will meet minimum stocking requirements for oak and/or aspen.

Regen: Stand will maintain oak coverytype until young cohort recruits into the canopy.

Other

Comment: Use 4" spec. Leave tops and slash intact and scattered as much as possible to inhibit browse. Prefer leaving tops on oak stumps to protect stump sprouts.

Site Condition

Proposed Start Date: 10/1 /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
105 52171105-NF	4.1	330 - Low-Density Trees	Nonstocked		Unspecified	NonForestMgt	Other - Specify	320 - Upland Shrub		No
<p><u>Prescription</u> Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and/or soft mast.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>										
112 52171112-Cut	25.7	4130 - Aspen	Poletimber Well	56	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Final harvest utilizing retention to capture wind-firm, large crowned oak. Do not cut any pine.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Acceptable regeneration will meet minimum stocking standards for aspen.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>										
91 NF_52171091-NonFor	2.5	3104 - Degraded	Nonstocked		Unspecified	NonForestMgt	Other - Specify	3105 - Mixed Upland Herbaceous		No
<p><u>Prescription</u> Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and/or soft mast.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>										

Total Treatment Acreage Proposed: 255.9

Report 4 – Site Conditions

Gaylord Mgt. Unit
Tricia St. Pierre : Examiner

Compartment: 171
Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions							
		With Condition	Not Available		2I	5C	2G	3A	3J	5A	5E	
619	486	119	14	Aspen	4	115						14
28	0	0	28	Cedar			23			5		
33	33	0	0	Herbaceous Openland								
41	41	0	0	Low-Density Trees		0						
11	5	0	6	Lowland Aspen/Balsam Poplar			6					
62	0	0	62	Lowland Conifers			52			5	5	0
10	0	0	10	Lowland Mixed Forest						10		
20	19	0	1	Lowland Shrub			1					
8	5	1	2	Lowland Spruce/Fir	1		2					
12	12	0	0	Marsh								
157	95	54	8	Mixed Upland Deciduous		54		2				6
43	0	27	16	Natural Mixed Pines		27		13	3			
195	195	0	0	Northern Hardwood								0
54	54	0	0	Oak								
291	279	12	0	Red Pine		12	0					0
4	0	0	4	Tamarack			4					
10	10	0	0	Upland Conifers								
87	87	0	0	Upland Mixed Forest								
8	0	0	8	Upland Spruce/Fir						8		
17	17	0	0	Urban								
6	6	0	0	Water								
28	28	0	0	White Pine								
1,744	1,373	212	159	Total Forested Acres	4	208	88	14	30	5	21	
	79%	12%	9%	Relative Percent								

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

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2	Unavailable	5A: Not able to obtain desirable regeneration	5	2G: Too wet (sensitive soils, does not include access issues)	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified
Comments: This is a white pine bog with dense leatherleaf on the ground. A harvest would likely convert this to a lowland shrub stand. Fire might be an acceptable tool in preparing a seed bed for natural pine and spruce regeneration, but commercial harvesting is not recommended.							
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	3J: Water quality / BMPs (stream, river, or lake)	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified
Comments: Stand is composed of seeps, saturated soils, and an intermittent stream, a tributary into the little Pigeon River. Impressive component of yew not found elsewhere in this compartment, much less on other state forest land.							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand acts as a transitional slope from upland to lowland, a riparian buffer protecting a tributary into the Little Pigeon River. Potential for beaver damage is extremely high. Seeps present.							
5	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	55	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Slightly hilly with low BA, higher inclusion of deciduous trees. Delay treatment.							

Report 4 – Site Conditions

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8	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Gaylord Mgt. Unit
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16	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
17	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	41	3J: Water quality / BMPs (stream, river, or lake)	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified
Comments: Poor Conifer Swamp with floating mats, rich ground flora, some lesser seen species. Unique swamp within this compartment. Water feeds into Corey Lake.							
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Gentle slopes, seeps. Stand is a riparian buffer into a tributary into the Little Pigeon River.							
21	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Wet, soggy stand with seeps. Water adjoins tributary of the Little Pigeon River.							

Report 4 – Site Conditions

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22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Saturated soils. Stand contains a tributary to the Little Pigeon River.							
23	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Intermittent or seasonal stream corridor. Flowing water, no defined banks observed 10/2021.							
24	Available	2I: Survey needed	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Private fence line with no known survey corners.							
25	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Black spruce dominated lowland with sensitive soils. One small upland knob; south edge trends to upland (blocked by fence).							
26	Available	2I: Survey needed	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Private fence line through stand. No corners found.							
27	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Deciduous removal in 1994 resulted in a two-aged stand. Delay treatment for midcanopy aspen to become merchantable before treating again, removing 10-30 BA of additional pine at that time.							

Report 4 – Site Conditions

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Compartment: 171

Tricia St. Pierre : Examiner

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28	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: POG - survey would be needed to verify. Xlog red and white pine, overmature BAM. Appears to be two aged resulting from a low to moderate intensity fire in the early to mid 1900s.							
29	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Consistent presence of legacy trees across stand. Delay treatment for green-up considerations with adjacent stand (to south) and for further subcanopy development for advanced regeneration.							
30	Unavailable	3A: Conservation Values incompatible with harvest at this time	13	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified
Comments: POG (Type 2) and fire-origin second growth in west portion of stand.							
31	Unavailable	3A: Conservation Values incompatible with harvest at this time	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Many oak and white pine meeting legacy criteria. Adjust site conditions boundary when adjacent acreage is managed. Might code as long term retention at that point.							
32	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Delay treatment for small stand size and accessibility challenges. Better to manage with stand to north in adjacent compartment.							

Report 4 – Site Conditions

Gaylord Mgt. Unit

Compartment: 171

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33	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
<p>Comments: Defined stream, Little Sturgeon River, through the southern portion of this stand. The eastern portion acts as a transitional zone and riparian buffer to the C6 to the west with seeps and braided channels of the Little Sturgeon River.</p>							
34	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
<p>Comments: Stand contains the Little Sturgeon River.</p>							
35	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
<p>Comments: A very wet stand; water feeding into Corey Lake which is the headwaters for the Little Sturgeon River.</p>							
37	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: A very wet stand with flowing water, saturated soils.</p>							
38	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Sensitive, saturated soils. Very slow to regenerate.</p>							

Report 4 – Site Conditions

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39	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	62	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Aspen restart target met. Delay treatment to allow poles to further develop.							
40	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	53	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Pole dominated stand. Delay treatment for further development.							

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
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Comments



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.

ERA = Ecological Reference Area
 HCVA = High Conservation Value Area
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																	
1	3103 - Rubus-Fern	Nonstocked	2.6		Unspecified	No	Stand is dominated by bracken fern throughout the summer months, becoming dominated by bluestem in the fall. Evenly distributed pole black cherry in north. Trace goldenrod, blueberry, serviceberry, and field strawberry. Balsam fir present in pole/sap; cherry "shrub"/sapling/pole. Blue cladonia present.																	
								Sub-Canopy Species	Density	Avg. Height	Size													
								Beech	Low	Variable	Sapling													
								Balsam Fir	Trace	Variable	Pole													
								Hemlock	Trace	10 - 20 feet	Sapling													
								Red Pine	Trace	5 - 10 feet	Sapling													
								White Spruce	Trace	10 - 20 feet	Sapling													
								Red Oak	Trace	< 5 feet	Sapling													
								Bracken Fern	Full	Unspecified	Non-Wood													
								Honeysuckle (spp.)	Trace	Variable	Tall Shrub													
								Juniper	Trace	< 5 feet	Tall Shrub													
								White Pine	Low	5 - 10 feet	Sapling													
								Little Bluestem	High	Unspecified	Non-Wood													
Black Cherry	Low	5 - 10 feet	Tall Shrub																					
2	6120 - Lowland Cedar	Poletimber Well	4.5	92	111-140	N/A	Flowing stream through stand with undefined banks in most areas. Lower basal area in the north third, lower stocking of cedar and an increase in larch, spruce, fir. The majority of the stand is very hummocky with surface water. Northeast is a small area dominated by red maple, paper birch, and larch; slightly less wet here with a defined channel to the west. Trace black spruce saplings on the northeast edge; one red pine (sap <5'), one yew (shrub <1'), trace alder leafed buckthorn (shrub <2') present within the stand. Iris present.																	
								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size								
								Northern White Cedar	83	Pole/Sap/Log	8	92	Balsam Fir	Medium	Variable	Sapling								
								Balsam Fir	3	Pole/Sapling	6		Tag Alder	Medium	5 - 10 feet	Tall Shrub								
								Tamarack	10	Log/Pole	12		Northern White Cedar	Trace	< 5 feet	Sapling								
								Paper Birch	1	Sapling/Pole	4		Red Osier Dogwood	Trace	< 5 feet	Tall Shrub								
								Black Spruce	2	Pole/Log/Sap	8		Tamarack	Trace	Variable	Sapling								
								Red Maple	1	Pole/Sapling	6		Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub								
													Red Oak	Trace	< 5 feet	Seeding								
								3	42110 - Planted Red Pine	Sawtimber Well	2.6	66	171-200	N/A	An upland stand, but very soggy on the east edge. Trace white cedar, quaking aspen, red maple, balsam fir on the northeast edge. One xlog (24") paper birch snag. Trace balsam fir, paper birch in canopy. Rare occurrence of striped maple in subcanopy.									
																Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
																Quaking Aspen	2	Pole/Log	8		Balsam Fir	Medium	Variable	Sapling
																Red Pine	97	Log/Pole	11	66	Red Oak	Low	< 5 feet	Sapling
Red Maple	1	Pole	8		Beech	Medium	Variable									Sapling								
					Paper Birch	Trace	>20 feet									Sapling								
					Red Maple	Low	Variable									Sapling								
					Bracken Fern	Trace	Unspecified									Non-Wood								
					Sugar Maple	High	Variable									Sapling								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
4	4119 - Mixed Northern Hardwoods	Sawtimber Well	19.3	90	81-110	N/A	Canopy/Subcanopy species data was edited in October 2021. Stand is prescribed and has been purchased but has not yet been cut. Sale expires soon (2022?). Change in private ownership (to west) has presented access challenges. Ash has been wiped out from EAB. Trace cherry, cedar, larch in canopy. Significant amount of hemlock, especially in the south half and east quadrant. South end becomes wet; east end transitions into wetter ground into adjacent lowland (paper and yellow birch, hemlock increase here). Steep hill in the north; more red oak in the northeast. Tiny non-forested opening half way down stand 3 (R9) with bracken fern (full) and low/trace amounts of sapling oak, cherry, beech, fir, red pine. Variable medium-high stocking of beech in the subcanopy. Hemlock at medium density in the subcanopy in pole/log/sapling form.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	10	Log/XLog	16		White Ash	Low		< 5 feet	Seeding
Paper Birch	1	Log/Pole	10		Basswood	Trace		< 5 feet	Seeding
Red Oak	2	Log/Pole/Sap	14		Sugar Maple	High		< 5 feet	Seeding
Ironwood	1	Pole	6		Hemlock	Medium		>20 feet	Pole
Basswood	5	Log/Pole/XLog	14		Ironwood	Medium		>20 feet	Sapling
Balsam Fir	2	Pole/Log	8		Black Cherry	Trace		< 5 feet	Seeding
Red Maple	26	Log/Pole/XLog	14		Balsam Fir	Medium		Variable	Sapling
Yellow Birch	2	Log/Pole	10		Beech	High		Variable	Sapling
Hemlock	2	Log/Pole/XLog	12		Red Oak	Trace		< 5 feet	Seeding
Sugar Maple	26	Log/Pole	12	90					
White Pine	2	XLog/Log	18						
Beech	20	Log/XLog/Pole	16						
Quaking Aspen	1	Log	12						
5	4319 - Mixed Upland Forest	Sapling Medium	1.3	28	Immature	N/A	Formerly a non-forested stand, becoming overgrown with aspen and balsam fir saplings. Trace white spruce, red pine present in canopy. Trace rubus, beech in subcanopy. Heavy browsing pressure on aspen, maple.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Fir	53	Sapling/Pole	3	28	Beech	Trace		Variable	Sapling
Red Oak	5	Sapling	2		Red Oak	Trace		< 5 feet	Sapling
Tamarack	1	Sapling	4		Balsam Fir	Medium		Variable	Sapling
Red Maple	5	Sapling	2		Red Pine	Trace		Variable	Sapling
Quaking Aspen	35	Sapling/Pole	4		Quaking Aspen	Trace		< 5 feet	Sapling
Paper Birch	1	Sapling/Pole	4		Black Cherry	Low		Variable	Sapling
					Bracken Fern	Full		Unspecified	Non-Wood
					Wintergreen	High		< 5 feet	Tall Shrub
					Blueberry/Bilberry/Cranberry	Trace		< 5 feet	Tall Shrub
6	4130 - Aspen	Sapling Well	1.5	37	Unspecified	N/A		Trace paper birch, white oak in the canopy. Trace black spruce, larch in midcanopy. Southeastern leg is an old landing dominated by red and white pine saplings with red and white oak, balsam fir.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density			Avg. Height
Bigtooth Aspen	97	Sapling/Pole	4	37	Red Maple	Low	Variable		Sapling
Red Oak	1	Sapling/Pole	2		Balsam Fir	Medium	Variable		Sapling
Red Maple	1	Sapling	2		Black Cherry	Trace	5 - 10 feet		Sapling
Quaking Aspen	1	Sapling	2		White Pine	Low	< 5 feet		Sapling
					White Oak	Trace	< 5 feet		Sapling
					Serviceberry (Juneberry)	Low	< 5 feet		Sapling
					Beech	Trace	Variable		Sapling
					Sugar Maple	Low	Variable		Sapling
					Red Oak	Low	Variable		Sapling
					Bracken Fern	Medium	Unspecified	Non-Wood	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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7	4319 - Mixed Upland Forest	Poletimber Medium	3.2	21	1-50	N/A	Hodgepodge of a stand. Trace red oak, white oak in canopy. Areas of R6, MD3/MD6, rubus/fern. East and south edges are damp with some little wet depressions within the stand. One scotch pine present. Bulrush, milkweed, wild raisin scattered. Southeast edge has larch, quaking aspen, trace bam.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	20	Sapling/Pole	4		Red Pine	Trace	Variable	Sapling
White Pine	15	Pole/Sapling	6		Balsam Fir	Trace	Variable	Sapling
Black Cherry	10	Sapling	4		Red Oak	Trace	Variable	Sapling
Tamarack	2	Pole/Sapling	6		Bulrush	Low	Unspecified	Non-Wood
Quaking Aspen	1	Pole/Sap/Log	6		Black Cherry	Trace	Variable	Sapling
Red Pine	30	Pole/Sapling	6	21	White Spruce	Low	Variable	Sapling
Red Maple	20	Pole/Sapling	6		Blackberry/Raspberry	High	< 5 feet	Tall Shrub
White Spruce	2	Sapling	4		Balsam Poplar	Trace	Variable	Sapling
					Bracken Fern	Medium	Unspecified	Non-Wood

8	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	41.4	110	51-80	N/A	This is a sapling stand although MiFI would not allow it to be typed as such. Absolutely a Poor Conifer Swamp, dominated by larch and black spruce with higher densities of cedar on the stand periphery and edges near Corey Lake. Occasional red maple, paper birch, quaking aspen, balsam fir, balsam poplar (generally more diversity) on the transitional edges as well. Floating mats; extremely fragile saturated fibric peat. Brooming in black spruce. Goldthread (trace) and pitcher-plant (trace) present. Trace buckbean (Menyanthes trifoliata) and marsh cinquefoil (Potentilla palustris) associated together. Rare bedstraw, swamp gooseberry, equisetum, swamp thistle, bog rosemary, orchids, chokeberry, wild raisin throughout. Some braided streams in the west. The Little Sturgeon River rises out of Corey Lake (which this stand surrounds) and flows northward through the west side of this stand.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	30	Sapling/Pole	3		Alder	Trace	< 5 feet	Tall Shrub
Northern White Cedar	30	Pole/Sap/Log	6	110	Northern White Cedar	Trace	< 5 feet	Seeding
Tamarack	40	Sapling/Pole	4	110	Black Spruce	Low	Variable	Sapling
					Leatherleaf	Trace	< 5 feet	Tall Shrub
					Tamarack	Low	Variable	Sapling
					Blueberry/Bilberry/Cranberry	Trace	< 5 feet	Tall Shrub
					Alder Leaved Buckthorn	Trace	< 5 feet	Tall Shrub
					Swamp Dewberry	Low	< 5 feet	Tall Shrub
					Red Maple	Trace	< 5 feet	Seeding
					Michigan Holly	Trace	Variable	Tall Shrub
					Cattail spp.	Trace	Unspecified	Non-Wood
					Red Osier Dogwood	Trace	< 5 feet	Tall Shrub
					Labrador Tea	Medium	< 5 feet	Tall Shrub
					Sphagnum Moss	Full	Unspecified	Non-Wood
					Bog Birch	Low	< 5 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments					
9	42110 - Planted Red Pine	Sawtimber Well	40.4	66	111-140	N/A	Recently thinned (52-103-15). Previously third row thinned in 1994. Varying, inconsistent basal area. Vein of red oak, red maple with quaking aspen, sugar maple, balsam fir, beech, and ironwood (sap/pole) in the north. Trace canopy paper birch, balsam fir, red oak, red maple, basswood, quaking aspen scattered elsewhere. Rare white oak, white ash, nannyberry, white spruce in subcanopy. Thistle and mullein in skid trails. Trace wood rose along edge of pipeline corridor. Decent hardwood subcanopy.					
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size		
Red Pine		100	Log/Pole	11	66	Balsam Fir		Medium	Variable	Sapling		
						Bracken Fern		High	Unspecified	Non-Wood		
						Blackberry/Raspberry		Low	< 5 feet	Tall Shrub		
						Quaking Aspen		Low	10 - 20 feet	Sapling		
						Black Cherry		Trace	Variable	Sapling		
						Beech		Low	Variable	Sapling		
						Witch Hazel		Trace	10 - 20 feet	Tall Shrub		
						Ironwood		Low	Variable	Sapling		
						Red Maple		Low	Variable	Sapling		
						Red Oak		Low	Variable	Sapling		
						Sugar Maple		Medium	Variable	Sapling		
						White Pine		Trace	< 5 feet	Sapling		
10	42101 - Planted White Pine, Mixed Deciduous	Sawtimber Well	18.2	66	111-140	N/A	West facing slope. Southwest end is heavy to aspen with hardwood and white pine. Inclusion of white cedar in trace amounts in southwest, becoming more common along the west edge of the stand transitioning into the Q3/Q6. West edge is a quick transition into lowland; some sogginess. Black spruce in the subcanopy increases here as well. Clumpy hardwood in the canopy. Subcanopy is quite nice, stocked with sugar maple and a surprising amount of basswood. Rare striped maple, white oak, maple leaved viburnum, juniper, and serviceberry in the subcanopy. Trace red oak, white ash, and black cherry in the canopy.					
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size		
Quaking Aspen		15	Log/Pole/Sap	12		White Ash		Trace	< 5 feet	Sapling		
Balsam Fir		2	Pole/Log/Sap	7		Sugar Maple		Medium	Variable	Sapling		
White Pine		60	Log/Pole/XLog	12	66	Black Cherry		Trace	Variable	Sapling		
Basswood		5	Log/XLog	16		Northern White Cedar		Trace	>20 feet	Log		
Paper Birch		2	Pole/Log/Sap	8		Basswood		Low	< 5 feet	Sapling		
Sugar Maple		4	Log/XLog/Pole	12		Black Spruce		Trace	Variable	Sapling		
Beech		1	Log/Pole	14		Beech		Low	Variable	Sapling		
Red Maple		10	Log/Pole	10		Balsam Fir		Low	Variable	Sapling		
11	6127 - Lowland Pine	Sawtimber Well	4.8	100	81-110	N/A		This is a white pine bog. Subcanopy is overall fairly simple with low amounts of white pine and black spruce and medium/high blueberry, labrador tea, and leatherleaf throughout. Other species are not consistent and occur in pockets or on the edges, in transitional areas. Trace red maple on perimeter; trace red maple, paper birch, oak, and balsam fir in the canopy in the southernmost portion of the stand. Higher balsam fir subcanopy stocking in the south half. Rare Michigan Holly in southeast. Huckleberry and blueberry in subcanopy.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species			Density	Avg. Height	Size	
White Pine		60	Log/XLog/Pole	14	100	Bulrush			Trace	5 - 10 feet	Non-Wood	
Tamarack		9	Pole/Log	8		Labrador Tea			Medium	< 5 feet	Tall Shrub	
Quaking Aspen		1	Log	14		Wild Raisin			Trace	< 5 feet	Tall Shrub	
Black Spruce		30	Pole	6		Blueberry/Bilberry/Cranberry			Medium	< 5 feet	Tall Shrub	
						Tamarack			Trace	Variable	Sapling	
						Leatherleaf			High	< 5 feet	Tall Shrub	
						Beech			Trace	5 - 10 feet	Sapling	
						White Pine			Low	< 5 feet	Sapling	
						Black Spruce			Low	Variable	Sapling	
						Red Maple			Low	Variable	Sapling	
						Red Oak			Low	< 5 feet	Seeding	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
12	500 - Water	Nonstocked	6.3		Unspecified	No	Corey Lake, which is the headwaters for the Little Sturgeon River. Pretty hard transition from land to water - abrupt banks.				
13	122 - Road/Parking Lot	Nonstocked	11.5		Unspecified	No	Webb Road (main E-W road) and Munger Road (N-S).				
14	622 - Lowland Shrub	Nonstocked	5.5		Unspecified	No	Observed stand from all edges except the southwest. Old rail grade runs nnw-sse from the northeast edge of the stand, bisection the main body from the smaller island. Extremely dense holly in spots with willow, alder, and occasional chokeberry, wild raisin. Scattered larch (sap/pole/log), black spruce (P/S), and balsam fir. Ground cover is variable, dominated by leatherleaf and labrador tea.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Balsam Fir	Trace	Variable	Sapling
								Tamarack	Low	>20 feet	Sapling
								Red Maple	Trace	>20 feet	Sapling
								Wild Raisin	Low	5 - 10 feet	Tall Shrub
								Alder	Low	Variable	Tall Shrub
								Leatherleaf	Medium	< 5 feet	Tall Shrub
								Quaking Aspen	Trace	>20 feet	Sapling
								Chokeberry	Low	5 - 10 feet	Tall Shrub
								Yellow Birch	Trace	>20 feet	Pole
								Michigan Holly	High	5 - 10 feet	Tall Shrub
								Willow spp.	Medium	Variable	Tall Shrub
Labrador Tea	Medium	< 5 feet	Tall Shrub								
15	6130 - Fir, Aspen, Maple	Poletimber Poor	3.2	69	Unspecified	N/A	Transitional stand holding water. No consistency in canopy density or species distribution. Nightshade present. Tiny clump of cattails in northwest with sapling/pole overstory of cedar, spruce, and fir, the majority of which has been combined with the Q-type to the north. South half of stand is more densely forested. Ash mortality from EAB. Stand geometry has been altered since the last inventory cycle which resulted in a change in coverytype.				
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size			
Black Spruce	5	Pole/Sapling	6		Wild Raisin	Trace	< 5 feet	Tall Shrub			
Northern White Cedar	10	Sapling/Pole	4		Balsam Fir	Medium	Variable	Sapling			
Tamarack	10	Log	12		Black Ash	Medium	Variable	Sapling			
Black Ash	2	Pole/Sapling	6		Tag Alder	Medium	10 - 20 feet	Tall Shrub			
Quaking Aspen	30	Log/XLog	16	69	Michigan Holly	Low	5 - 10 feet	Tall Shrub			
White Spruce	3	Log	10		Beech	Low	Variable	Sapling			
Red Maple	25	Pole/Log/Sap	8		Red Osier Dogwood	Trace	< 5 feet	Tall Shrub			
Balsam Fir	15	Pole/Sapling	6	40	Sugar Maple	Trace	Variable	Sapling			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
16	4130 - Aspen	Sapling Well	30.1	4	Immature	N/A	<p>Heavy deer and elk browsing pressure. Very little diversity in regeneration above browse height. Stand is dominated by aspen (6-10' in 2021) with very few hardwood species escaping browse. The majority of sugar maple saplings in the canopy (<1%) are residual saplings that were not harvested when this stand was treated. Residual white pine (clumpy and scattered, mostly in the southeast and far north) and cedar (clumpy, especially along west edge near lowland). Southeast strip of residual conifer includes white pine with trace larch, black spruce, and balsam fir. Strip along south edge of stand has received very heavy browse (in combination with shade?) with little growing >3'. 3.5 acre retention along the west edge of the stand/compartiment. Retention composition: approx 100BA, 95% canopy closure. 49% QA (14" L); 33% RM (8" P/L); 15% BF (6" P/L/S); 2% BC (6" P/S); 1% SM (14 (L/X); <1% WS (8" P/L); trace YB, EH, WC along south edge. Subcanopy: BF (medium, sap, variable), IW (low, sap, variable), BC (low, sap, >20' & <5'), RO (trace, sap/seed, <5'), SM (trace, sap/seed, <5').</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	3	Log/Pole/XLog	14	72	Blackberry/Raspberry	Medium		< 5 feet	Tall Shrub
Northern White Cedar	1	Pole/Log	8		Bracken Fern	Medium		Unspecified	Non-Wood
Black Cherry	1	Sapling	1		White Ash	Trace		< 5 feet	Sapling
Quaking Aspen	94	Sapling	1	4	Balsam Fir	Low		Variable	Sapling
Red Oak	1	Log/Pole	10		Sugar Maple	Low		< 5 feet	Sapling
					Beech	Trace		< 5 feet	Sapling
					Red Maple	Low		< 5 feet	Sapling
17	4130 - Aspen	Sapling Well	52.6	28	Unspecified	N/A	<p>Stand is in transition from sapling to pole with areas still very much in the sapling class, and others meeting pole criteria. Deer and elk throughout stand. Amazing amount of sugar maple saplings (and a nice presence of basswood saplings), persistent though browsed. Old rail grade through north portion of stand. Stand could be divided (and might need to be during the next entry) between the north half and south half. North half is much wetter, dominated by quaking aspen; south half is more consistently bigtooth dominated upland with a couple wet drainages. South half has pretty incredible hardwood sapling in the subcanopy, while the north half has a less densely stocked subcanopy though a slight increase in oak seedlings/saplings. Trace white oak, balsam fir, elm, red maple, red oak, and paper birch saplings in canopy. Trace "supercanopy" residual (log/pole) sugar maple, white pine, red maple. Rare occurrences of juniper, hawthorn, white pine, serviceberry, white oak, and witch hazel in subcanopy. Trace bulrush, virgin's bower, bam, cattails, wild raisin in wettest areas.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Oak	1	Log/XLog/Pole	12		Ironwood	Low		Variable	Sapling
Ironwood	2	Sapling/Pole	2		Red Maple	Trace		Variable	Sapling
Quaking Aspen	45	Sapling/Pole	4	28	Blackberry/Raspberry	Medium		< 5 feet	Tall Shrub
Pin Cherry	1	Sapling/Pole	4		Sugar Maple	High		Variable	Sapling
Bigtooth Aspen	44	Pole/Sapling	6		Prickly Or Wild Gooseberry	Trace		< 5 feet	Tall Shrub
Sugar Maple	1	Sapling/Pole	2		Black Cherry	Low		Variable	Sapling
Balsam Poplar	2	Sapling/Pole	4		White Ash	Low		Variable	Sapling
Black Cherry	3	Sapling/Pole	3		Beech	Trace		Variable	Sapling
Balsam Fir	1	Log/Pole	12		Maple Leaved Viburnum	Trace		< 5 feet	Tall Shrub
					Basswood	Low		Variable	Sapling
					Red Oak	Low		< 5 feet	Sapling
					Bracken Fern	Trace		Unspecified	Non-Wood
					Balsam Fir	Medium	Variable	Sapling	
					American Elm	Trace	< 5 feet	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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18 4110 - Sugar Maple Association Sawtimber Well 39.2 90 81-110 N/A Trace red oak (log/pole), white pine (log/pole), and red maple (pole/log) in canopy. Scarce Xlog sugar maple. Rare serviceberry, witch hazel, hemlock (log/pole) in subcanopy.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	49	Log/Pole	12	90	Black Cherry	Low	5 - 10 feet	Sapling
Basswood	45	Log/Pole/XLog	14		Red Oak	Trace	Variable	Sapling
Quaking Aspen	1	Log/Pole/XLog	14		Sugar Maple	Medium	< 5 feet	Seeding
Beech	2	Log/Pole/XLog	14		Maple Leaved Viburnum	Trace	5 - 10 feet	Tall Shrub
Bigtooth Aspen	3	Log/Pole/XLog	16		Ironwood	Trace	>20 feet	Pole
					Ironwood	High	10 - 20 feet	Sapling
					White Ash	Low	Variable	Sapling
					Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub
					White Pine	Trace	< 5 feet	Sapling
					Basswood	Low	< 5 feet	Sapling
					Beech	Medium	Variable	Sapling
					Balsam Fir	Medium	Variable	Sapling

Increase in white pine saplings in the SSW due to white pine in the canopy; increase in white pine saplings (medium) and canopy white pine west of the pipeline (white pine stand/seed source to north). BBD mortality is around 50%. One mostly dead paper birch pole. Scattered dense clumps of sugar maple seedlings; one white oak seedling. Some decent advanced sugar maple regeneration in the far northeast tip. One juniper and trace RM in northeast. Trace autumn olive along pipeline corridor.
2021 current BA is around 101 having slightly fallen (and falling) in the wake of EAB and BBD.

19 429 - Mixed Upland Conifers Sapling Medium 4.4 15 1-50 N/A Trace white oak, red maple, and ironwood (saplings) in canopy. Nice upland mixed conifer semi-open knoll. Harvested in 2007.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	5	Sapling/Pole	4		Pin Cherry	Medium	5 - 10 feet	Tall Shrub
Bigtooth Aspen	20	Pole/Sapling	6		Bracken Fern	High	Unspecified	Non-Wood
Balsam Fir	30	Sapling/Pole	4		Little Bluestem	Low	Unspecified	Non-Wood
White Pine	5	Pole/Sapling	6		Balsam Fir	Low	Variable	Sapling
Red Oak	5	Sapling/Pole	4		Sweet Fern	Low	< 5 feet	Tall Shrub
Red Pine	5	Sapling/Pole	4		Juniper	Trace	< 5 feet	Tall Shrub
Jack Pine	30	Sapling/Pole	4	15	Red Oak	Medium	Variable	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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20	6220 - Alder/willow	Nonstocked	4.5		Unspecified	No				
							Sub-Canopy Species	Density	Avg. Height	Size
							Red Pine	Low	10 - 20 feet	Sapling
							Cattail spp.	Trace	Unspecified	Non-Wood
							Balsam Fir	Medium	Variable	Sapling
							Quaking Aspen	Low	Variable	Sapling
							Alder Leaved Buckthorn	Trace	< 5 feet	Tall Shrub
							Northern White Cedar	Trace	>20 feet	Sapling
							Virgin's Bower	Trace	Unspecified	Vine
							Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub
							White Pine	Trace	5 - 10 feet	Sapling
							Red Maple	Trace	10 - 20 feet	Sapling
							Red Osier Dogwood	Low	< 5 feet	Tall Shrub
							Bracken Fern	Low	Unspecified	Non-Wood
							Wild Raisin	Trace	5 - 10 feet	Tall Shrub
							Bulrush	Medium	Unspecified	Non-Wood
							Paper Birch	Trace	>20 feet	Sapling
							Balsam Poplar	Trace	Variable	Sapling
							Black Cherry	Trace	Variable	Tall Shrub
							Red Oak	Trace	Variable	Tall Shrub
							American Elm	Low	>20 feet	Sapling
Alder	Trace	5 - 10 feet	Tall Shrub							
White Oak	Trace	>20 feet	Pole							
Willow spp.	High	>20 feet	Tall Shrub							
Black Ash	Trace	Variable	Sapling							

Lowland and upland non-forested opening dominated by willow with bulrush and balsam fir. Drier portions are dominated by bracken and raspberry, upland forbs. Abandoned railroad grade divides stand down the middle. Most trees are present in multiple size classes, not just those listed in species column. Rare water hemlock (*Cicuta* spp.). Low amounts of false nettle. Elk beds in stand. Northeast is aspen/fir/willow/cherry; northwest is willow/bulrush/cattails/dogwood; middle is bracken/raspberry; south is black cherry/willow/red pine/bulrush.

21	3102 - Grass	Nonstocked	1.3		Unspecified	No				
							Sub-Canopy Species	Density	Avg. Height	Size
							Spotted Knapweed	Full	5 - 10 feet	Non-Wood
							Little Bluestem	High	Unspecified	Non-Wood
Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub							

Low mullein and trace thistle present. Trace oak, red pine, white pine, black cherry on perimeter. One apple sapling, 5'.

22	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	9.1	63	81-110	N/A									
							Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
							Bigtooth Aspen	5	Pole/Log/Sap	6		Bracken Fern	Medium	Unspecified	Non-Wood
							Red Maple	15	Pole/Sap/Log	8		Red Maple	Low	Variable	Sapling
							White Pine	30	Pole/Log/Sap	7	63	Witch Hazel	Trace	5 - 10 feet	Tall Shrub
							White Oak	25	Log/XLog	14	103	Beech	Trace	Variable	Sapling
							Northern Pin Oak	25	Log/XLog	16		White Oak	High	Variable	Sapling
												Wintergreen	Low	< 5 feet	Tall Shrub

Northern tip has trace black cherry (shrub 5-10') and full wintergreen. Rare quaking aspen, red pine in canopy. BAs 120, 60, 110, 100, 70, 100 = 93 ave. Scattered charred stumps. Heavy stocking of white oak sapling 5-10'.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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23 4319 - Mixed Upland Forest Sapling Medium 32.5 15 Immature N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	10	Sapling/Pole/Log	2		Red Maple	Low	Variable	Sapling
Jack Pine	29	Sapling	2	15	Witch Hazel	Low	5 - 10 feet	Tall Shrub
White Pine	5	Log/XLog	14		Bracken Fern	Medium	Unspecified	Non-Wood
Red Maple	33	Sapling	2	15	White Oak	Low	< 5 feet	Sapling
Red Oak	5	Sapling	2		Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
White Oak	5	Sapling	2		Balsam Fir	Low	Variable	Sapling
Red Oak	5	XLog/Log	18	110	Black Cherry	Low	Variable	Tall Shrub
Quaking Aspen	1	Sapling	2		Quaking Aspen	Low	5 - 10 feet	Sapling
Red Maple	2	Log/XLog	14		Sweet Fern	Trace	< 5 feet	Tall Shrub
White Pine	5	Sapling	2		Beech	Low	Variable	Sapling
					White Pine	Low	Variable	Sapling
					Red Oak	Medium	Variable	Sapling
					Jack Pine	Trace	Variable	Sapling

Two storied, confusing but fun stand. Difficult to represent with MiFI limitations. Residual "supercanopy" red oak, white pine, balsam fir, red maple, and trace sugar maple. Sapling canopy dominated by red maple and jack pine with lesser amounts of balsam fir, red and white oak, white pine, and quaking aspen saplings. Southwest quarter of the stand has much high densities of residual oak, maple, and pine. Little hill that was left intact (not harvested) of red oak, balsam fir, basswood, white pine, quaking aspen, and sugar maple.
One larch. Residual jack pine in southwest. One apple in southwest on edge of stand 19.
Jack Pine and aspen cut in 2007. Elk and deer rubs.
Tiny vein of water (saturated soil, little to no surface water) along south edge of stand 19, coming from the alder swale (stand 40).
(Subcanopy densities may vary from what's shown.)

24 4130 - Aspen Poletimber Well 7.4 40 Unspecified N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	5	Pole/Sap/Log	6		White Pine	Low	Variable	Sapling
Red Oak	2	Log/Pole	12		Red Oak	Low	Variable	Sapling
Bigtooth Aspen	45	Pole/Log	8	40	Sugar Maple	Low	Variable	Sapling
White Pine	5	Log/Pole/XLog	14		Red Maple	Low	>20 feet	Sapling
Sugar Maple	3	Log/XLog	16		Balsam Fir	Low	Variable	Sapling
Red Pine	2	Log/Pole/XLog	16		Black Cherry	Low	Variable	Sapling
Red Maple	8	Sapling/Pole	4		Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
Quaking Aspen	30	Pole/Sapling	6		White Oak	Low	5 - 10 feet	Sapling
					White Ash	Trace	< 5 feet	Sapling

Trace black cherry, white oak, jack pine, paper birch in canopy. Rare juniper in subcanopy. Undulating terrain.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
25	4311 - Pine, Aspen Mix	Poletimber Medium	32.4	40	51-80	N/A	Trace sugar maple, scotch pine, red maple, white spruce, jack pine, paper birch, balsam fir, and ironwood in the canopy. Rare occurrences of hazel nut, sugar maple, american fly honeysuckle, sweet fern, shinleaf, and vetch in the subcanopy. Scattered blue cladonia, reindeer moss, mullein, wintergreen, trailing arbutus, yarrow, queen ann's lace. Rare witch hazel, sweet fern, shinleaf, and vetch. Stand is a patchwork of aspen clones, volunteer/natural and planted pine (red and white), and grassy/fern openings. Log/Xlog white pine in openings, pole where planted. Higher white oak, red maple regen under white pine. Red pine is pole/sap throughout openings, L/X/P when in dense clumps with white pine. BA is incredible variable given the patchiness of this stand. Might be 200 within dense clumps or <10 in areas of sparse vegetation.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	Red Pine	15	Pole/Sap/Log	6		Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
	Red Oak	1	Sapling/Pole/Log	4		Little Bluestem	High	Unspecified	Non-Wood
	Bigtooth Aspen	10	Pole/Sapling	6		Red Maple	Trace	Variable	Sapling
	White Oak	1	Sapling/Pole	4		Spotted Knapweed	Trace	Unspecified	Non-Wood
	Quaking Aspen	35	Pole/Sap/Log	6	40	Red Oak	Trace	Variable	Sapling
	White Pine	30	Log/Pole/XLog	14		White Oak	Trace	< 5 feet	Sapling
	Black Cherry	8	Sapling/Pole	4		Serviceberry (Juneberry)	Low	Variable	Tall Shrub
						Juniper	Low	< 5 feet	Tall Shrub
						Red Pine	Low	Variable	Sapling
						Balsam Fir	Trace	Variable	Sapling
						Jack Pine	Trace	10 - 20 feet	Sapling
						Black Cherry	Medium	5 - 10 feet	Tall Shrub
						Blueberry/Bilberry/Cranberry	Low	< 5 feet	Tall Shrub
						Quaking Aspen	Low	5 - 10 feet	Sapling
						Bracken Fern	High	Unspecified	Non-Wood
						Willow spp.	Trace	5 - 10 feet	Tall Shrub
						White Pine	Medium	Variable	Sapling
						Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
						Beech	Trace	< 5 feet	Sapling
26	42110 - Planted Red Pine	Sawtimber Well	59.1	66	171-200	N/A	Trace sugar maple, paper birch, white pine in canopy. Scattered pockets of sapling deciduous and trace pole/log deciduous species in canopy. Rare occurrences of white ash, juniper, white pine, pipsissewa, wintergreen in subcanopy. There's an abrupt change in subcanopy about 3/4 of the way down the western leg of the stand. Regen is full to the north of that line (dominated by sugar maple with a good mix of other hardwood), then low to medium stocking to the south (beech/oak/fir mix with maple), returning back to high/full stocking in the southeastern leg. There's an increase in oak in the subcanopy in the southeast. Thinned in 1994.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	Bigtooth Aspen	2	Pole/Log/Sap	6		Serviceberry (Juneberry)	Trace	< 5 feet	Sapling
	Red Pine	96	Log/Pole	11	66	Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub
	Quaking Aspen	1	Pole/Sapling	6		American Elm	Trace	< 5 feet	Sapling
	Red Maple	1	Pole	6		Red Oak	Low	Variable	Sapling
						Basswood	Trace	< 5 feet	Sapling
						Red Maple	Medium	Variable	Sapling
						Balsam Fir	Medium	Variable	Sapling
						Black Cherry	Low	Variable	Sapling
						Ironwood	Trace	Variable	Sapling
						Beech	Medium	Variable	Sapling
						Bigtooth Aspen	Low	>20 feet	Sapling
						White Oak	Low	< 5 feet	Sapling
						Bracken Fern	Low	Variable	Non-Wood
						Sugar Maple	High	Variable	Sapling
						Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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27	4130 - Aspen	Poletimber Well	5.6	38	Unspecified	N/A	More white/red pine in south leg. Aspen is still sap/pole under denser pine. Trace balsam fir in canopy. Red maple that had occupied canopy space in the last inventory cycle has been outcompeted by aspen and is now a mid-canopy, suppressed species. Rare white spruce in subcanopy (<5').			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		2	Pole/Sapling	6		Red Oak		Low	Variable	Sapling
Bigtooth Aspen		84	Pole/Sapling	6	38	Balsam Fir		Low	>20 feet	Pole
Red Pine		8	Log/Pole	10		Black Cherry		Low	Variable	Sapling
White Pine		5	Log/Pole	10		Maple Leaved Viburnum		Medium	< 5 feet	Tall Shrub
Red Maple		1	Sapling/Pole/Log	4		Sugar Maple		Medium	< 5 feet	Sapling
						Ironwood		Trace	Variable	Sapling
						Bracken Fern		Low	Unspecified	Non-Wood
						White Ash		Trace	Variable	Sapling
						American Elm		Trace	< 5 feet	Seeding
						Red Maple		High	>20 feet	Sapling
						Balsam Fir		Low	Variable	Sapling
						White Oak		Trace	< 5 feet	Sapling
						White Pine		Low	Variable	Sapling
						Beech		Trace	< 5 feet	Sapling
						Serviceberry (Juneberry)		Trace	< 5 feet	Tall Shrub

28	6112 - Lowland Aspen	Sapling Well	4.9	4	Immature	N/A	Stand was harvested in 2018. Heavy browsing pressure on red maple. Trace bigtooth and red maple in sapling canopy. Residual conifer (spruce, hemlock, pine, cedar) scattered.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Hemlock		1	Log/XLog	14		Bracken Fern		Trace	Unspecified	Non-Wood
White Pine		2	XLog/Log	20		Red Maple		Low	< 5 feet	Tall Shrub
Northern White Cedar		5	Pole/Log	8		Balsam Fir		Low	Variable	Sapling
Quaking Aspen		86	Sapling	1	4	Blackberry/Raspberry		Medium	< 5 feet	Tall Shrub
Pin Cherry		2	Sapling	1						
Balsam Fir		1	Sapling/Pole	2						
White Spruce		3	Log/XLog	14						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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29 42110 - Planted Red Pine Sawtimber Well 53.8 65 141-170 N/A

Third row thinned in 2004. Trace bigtooth, red oak, black cherry in canopy. Rare juniper (just one) in subcanopy. Northwest has very little subcanopy. South half and northeast are heavily stocked with oak, beech, and maple.

Canopy Species	% Cover	Size Class	DBH	Age
White Pine	1	XLog/Log	22	
Quaking Aspen	2	Pole	7	
Red Pine	97	Log/Pole/XLog	10	65

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	Variable	Sapling
Bracken Fern	High	Unspecified	Non-Wood
White Oak	Medium	5 - 10 feet	Sapling
Sweet Fern	Trace	< 5 feet	Tall Shrub
Black Cherry	Low	Variable	Sapling
Blueberry/Bilberry/Cranberry	Low	< 5 feet	Tall Shrub
Ironwood	Trace	Variable	Sapling
Red Pine	Trace	10 - 20 feet	Sapling
Balsam Fir	Low	Variable	Sapling
White Pine	Low	Variable	Sapling
Red Maple	Medium	Variable	Sapling
Red Oak	Medium	Variable	Sapling

30 330 - Low-Density Trees Nonstocked 2.7 Unspecified No

This is very much a forested stand dominated by white pine, balsam fir, black cherry, and red pine, generally pole/sap/log.

Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	Medium	Variable	Sapling
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Beech	Trace	< 5 feet	Sapling
Bigtooth Aspen	Trace	>20 feet	Pole
Balsam Fir	Medium	Variable	Sapling
White Spruce	Trace	>20 feet	Log
Black Cherry	Medium	Variable	Sapling
Bracken Fern	Full	5 - 10 feet	Non-Wood
White Pine	Medium	Variable	Sapling
Red Oak	Trace	< 5 feet	Sapling
Balsam Poplar	Trace	5 - 10 feet	Sapling
Juniper	Trace	< 5 feet	Tall Shrub
Red Maple	Trace	< 5 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																													
31	42110 - Planted Red Pine	Sawtimber Well	13.4	60	81-110	N/A	Third row thinned in 2004, marked thinning in 8/2018. Rare occurrences of ironwood, bracken fern, quaking aspen, and red oak in subcanopy.																																																																													
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32	4130 - Aspen	Sapling Well	11.5	28	Unspecified	N/A	Trace elm, red pine, and white spruce in canopy. Rare white oak, white spruce, ironwood, and autumn olive in subcanopy. A lot more white spruce on south edge adjacent to seed source in stand 37. Wintergreen ground cover. While still sapling dominated in winter of 2021/22, this will undoubtedly be a pole stand in the next two year or so. Old railroad grade along west edge of stand. Saturated soils and standing water adjacent to and along the grade in the southwest; trace holly, willow, dogwood; dominated by alder.																																																																													
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33	42110 - Planted Red Pine	Sawtimber Well	5.6	63	141-170	N/A	Third row thinned in 1994. Trace paper birch, balsam fir, red oak, quaking aspen, red maple, and balsam poplar in canopy (<2% total. represented in the "2% BTA"). South tip of acreage east of road has a lot more white pine in the canopy. Trace elsewhere.																																																																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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34	6120 - Lowland Cedar	Poletimber Well	23.8	95	141-170	N/A	<p>A delightful cedar swamp dominated by cedar (mostly poles, though some areas dominated by saplings, other areas dominated by logs). A surprising amount of yew found consistently throughout the stand (except rare in the east third south of the stream), though browsed and generally <1'. Some beaver damage close to the stream. More red maple, paper birch, yellow birch on edges, especially the south edge. Larch, spruce, and white pine occur in clumps, though are found scattered consistently throughout the stand. Trace hemlock. Rare larch, hemlock, red oak in the subcanopy.</p> <p>East third (south of stream) is slightly more consistently dominated by cedar (higher BA too) but has an increase in paper birch and red maple spread throughout (still <2% total). Understory is heavy to balsam fir (high), versus low stocking (with occasionally dense pockets) throughout the rest of stand.</p> <p>Fairly diverse though generally sparse ground flora: creeping snowberry, yew, labrador tea, wintergreen, trailing arbutus, alder leaved buckthorn, nightshade, dwarf scouring rush, helleborine, shinleaf, honeysuckle, bunchberry, various ferns, bladder sedge, swamp thistle, swamp dewberry, and bedstraw present on dense mats of sphagnum mosses. Few old charred stumps present.</p> <p>Defined channel through stand; saturated soils. Water feeds into a tributary to the Little Pigeon River.</p> <p>BAs range 70-250, higher in dense cedar poles.</p>				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Black Spruce		7	Pole	7	95	Alder		Trace	10 - 20 feet	Tall Shrub	
Northern White Cedar		73	Pole/Sap/Log	7	95	Blueberry/Bilberry/Cranberry		Low	< 5 feet	Tall Shrub	
Tamarack		12	Pole/Log/Sap	8		Creeping Snowberry		Medium	< 5 feet	Tall Shrub	
White Spruce		2	Log/Pole	10		Sphagnum Moss		Full	Unspecified	Non-Wood	
Balsam Fir		5	Pole/Sap/Log	6		Canadian Yew		Low	< 5 feet	Tall Shrub	
White Pine		1	XLog/Log/Pole	20		Northern White Cedar		Trace	< 5 feet	Seeding	
						Black Spruce		Trace	< 5 feet	Seeding	
						Trailing Arbutus		Trace	< 5 feet	Tall Shrub	
						Labrador Tea		Low	< 5 feet	Tall Shrub	
						Wintergreen		Trace	< 5 feet	Tall Shrub	
						Balsam Fir		Low	Variable	Sapling	
						Alder Leaved Buckthorn		Trace	< 5 feet	Tall Shrub	

35	310 - Herbaceous Openland	Nonstocked	8.3		Unspecified		<p>Line 5 Pipeline. Generally upland with a few wet areas. Variable vegetation based on local influences (seed sources) and management activities. Species listed are not all inclusive.</p>
Sub-Canopy Species		Density	Avg. Height	Size			
Balsam Poplar		Trace	>20 feet	Sapling			
Balsam Fir		Trace	Variable	Sapling			
Sugar Maple		Trace	Variable	Sapling			
Willow spp.		Trace	5 - 10 feet	Tall Shrub			
Bracken Fern		High	Unspecified	Non-Wood			
Red Oak		Trace	10 - 20 feet	Sapling			
Red Pine		Low	5 - 10 feet	Sapling			
Black Cherry		Low	Variable	Sapling			
White Pine		Low	Variable	Sapling			
Blackberry/Raspberry		High	< 5 feet	Tall Shrub			
Tamarack		Trace	10 - 20 feet	Sapling			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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36	4130 - Aspen	Sapling Well	29.4	5	Immature	N/A	Low end of 75% canopy closure in 2021. Trace residual "supercanopy" red maple (10" P/L) and red oak (14" L/X), bigtooth (L), Red and white oak canopy sap/pole includes residual pole and sapling oak. Spotted knapweed in landing; queen ann's lace, sweet fern, little bluestem, and scattered red pine <5' also in landing. Red maple is hardly in the canopy now and likely wont be for much longer with continued browsing. Half acre in west center is over-browsed and under-stocked. Deer and elk present. Bigtooth in northwest. North is less forested (fewer stems >3', typically shrubby red maple) but there's significant pine seeding in - high/medium red pine stocking here. Retention along Webb Road: 45% QA (14" L/P), 40% WP (18" X/L/P), 10% RP (16" L/X), 5% BTA (12" L). Subcanopy: white pine, red maple saplings, variable heights. Trace oak and beech saplings.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	2	XLog/Log	20		White Oak	Low	< 5 feet	Sapling
Quaking Aspen	76	Sapling	1	5	Red Oak	Low	< 5 feet	Sapling
Pin Cherry	2	Sapling	1		Balsam Fir	Trace	Variable	Sapling
White Oak	2	Sapling/Pole	3		White Pine	Low	< 5 feet	Sapling
Bigtooth Aspen	5	Sapling	1	5	Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub
White Pine	3	Sapling	2		Red Maple	Medium	< 5 feet	Sapling
Red Maple	5	Sapling	1		Blueberry/Bilberry/Cranberry	Trace	< 5 feet	Tall Shrub
Red Pine	3	XLog/Log/Pole	20		Sweet Fern	Trace	< 5 feet	Tall Shrub
Quaking Aspen	1	Log	12		Bracken Fern	Full	Unspecified	Non-Wood
Red Oak	1	Sapling/Pole	3		Red Pine	Low	< 5 feet	Sapling

37	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	2.2	100	81-110	N/A	Multiple springs; very wet, spongy ground with water flowing south. North edge transitions slightly upland with more quaking aspen. A small thicket of alder in the eastern portion of the stand; clumpy cedar and spruce make up most of this stand. Rare occurrences of paper birch, elm, red maple, and balsam poplar in the canopy. Rare yellow birch, willow, dogwood, cattails, virgin's bower, dwarf scouring rush in the subcanopy.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Tamarack	5	Log	16		White Spruce	Trace	Variable	Sapling
White Spruce	10	Log/XLog	14		Black Ash	Trace	< 5 feet	Sapling
Northern White Cedar	35	Log/Pole	14	100	Northern White Cedar	Trace	< 5 feet	Seeding
Balsam Fir	35	Pole/Log	8		Paper Birch	Low	>20 feet	Sapling
Quaking Aspen	15	Log/XLog	14	100	Tag Alder	Low	5 - 10 feet	Tall Shrub
					Balsam Poplar	Trace	Variable	Sapling
					Bunchberry	Trace	< 5 feet	Tall Shrub
					Willow spp.	Trace	10 - 20 feet	Tall Shrub
					Balsam Fir	High	Variable	Sapling

38	4130 - Aspen	Poletimber Well	4.1	38	Unspecified	N/A	Rare white oak in canopy (just one). Rare white spruce, beech, red pine, white oak, red oak in subcanopy. Trace columbine in far east.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	2	Sapling/Pole	4		Sugar Maple	Low	< 5 feet	Seeding
Bigtooth Aspen	92	Pole/Sapling	6	38	Serviceberry (Juneberry)	Low	< 5 feet	Tall Shrub
Balsam Fir	1	Sapling/Pole	4		Red Maple	Medium	Variable	Sapling
Quaking Aspen	5	Pole/Sapling	6		Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub
					Black Cherry	Medium	Variable	Sapling
					Honeysuckle (spp.)	Trace	< 5 feet	Tall Shrub
					White Pine	Low	Variable	Sapling
					Balsam Fir	Medium	Variable	Sapling
					Bracken Fern	High	Unspecified	Non-Wood



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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39	42110 - Planted Red Pine	Sawtimber Well	1.5	63	81-110	N/A	Trace bigtooth and quaking aspen, paper birch, white spruce, red maple, white pine in canopy. Rare sugar maple in subcanopy.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Pine		99	Log/Pole	12	63	Serviceberry (Juneberry)		Trace	< 5 feet	Tall Shrub
Balsam Fir		1	Pole/Log	8		Bigtooth Aspen		Low	>20 feet	Sapling
						White Pine		Trace	Variable	Sapling
						Beech		Trace	Variable	Sapling
						Smooth Rose		Low	< 5 feet	Tall Shrub
						Black Cherry		Medium	Variable	Sapling
						Balsam Fir		Medium	Variable	Sapling
						Red Oak		Low	Variable	Sapling
						Pipsissewa		Low	< 5 feet	Tall Shrub
						Red Maple		Low	Variable	Sapling
						White Oak		Trace	< 5 feet	Sapling
						Bracken Fern		Medium	Unspecified	Non-Wood
						White Spruce		Trace	Variable	Sapling
						Blackberry/Raspberry		Low	< 5 feet	Tall Shrub

40	6220 - Alder/willow	Nonstocked	0.8	0	Unspecified	No	Stream corridor dominated by alder. Trace cherry, oak in far north; trace elm, balsam poplar, quaking aspen on the perimeters. Blue flag iris.
Sub-Canopy Species		Density	Avg. Height	Size			
Willow spp.		Trace	10 - 20 feet	Tall Shrub			
Balsam Fir		Trace	Variable	Sapling			
Alder		Full	10 - 20 feet	Tall Shrub			
Bulrush		Trace	Unspecified	Non-Wood			

41	4133 - Aspen, Mixed Pine	Sapling Well	11.4	28	Unspecified	N/A	Trace red pine and paper birch in the canopy. Rare pipsissewa, juniper, red pine, raspberry, sugar maple, and white spruce in the subcanopy. Medium to high stocking of white pine saplings, variable. South and Southeast edge get slightly damp. Southern 1.5 acres sits on a south facing slope into the adjacent lowland and would be a challenge to harvest without solid ground at the bottom. This is a small inclusion dominated by log bigtooth, red oak, white pine, and pole red maple, paper birch, and balsam fir. Small 1/4 acre non-forested opening just on the edge of stand 39 dominated by bracken with sap/pole red pine, white pine, and balsam fir. Some weevil damage in the white pine.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		56	Sapling/Pole	4	28	Beech		Trace	< 5 feet	Sapling
White Pine		25	Log/XLog/Pole	14	65	Wintergreen		Low	< 5 feet	Tall Shrub
Bigtooth Aspen		15	Pole/Sapling	6		Red Oak		Low	< 5 feet	Sapling
Black Cherry		1	Sapling/Pole	4		White Pine		Medium	Variable	Sapling
Balsam Fir		3	Pole/Sapling	6		Red Maple		Low	Variable	Sapling
						Balsam Fir		Medium	Variable	Sapling
						Serviceberry (Juneberry)		Trace	< 5 feet	Tall Shrub
						Black Cherry		Medium	5 - 10 feet	Tall Shrub
						White Oak		Trace	< 5 feet	Seeding
						Autumn Olive		Trace	5 - 10 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																	
42	6220 - Alder/willow	Nonstocked	4.0		Unspecified	No	Lowland alder with a significant amount of larch (pole/sap/log) and balsam fir (sap/pole) scattered about north of the road. Fir is more prominent in the west and larch in the east. Scattered dead black ash. Couple old cedar stumps. Drainage from west to east; one defined channel, but small braids here and there. This is a tributary to the Little Pigeon River. The portion south of the road has trees on the perimeter and is still alder dominated, but there's an increase in willow, dogwood, wild raisin, and cattails.																	
								Sub-Canopy Species	Density	Avg. Height	Size													
								Northern White Cedar	Trace	< 5 feet	Sapling													
								Wild Raisin	Trace	5 - 10 feet	Tall Shrub													
								Alder	High	5 - 10 feet	Tall Shrub													
								Balsam Fir	Medium	Variable	Sapling													
								White Pine	Trace	< 5 feet	Log													
								Paper Birch	Trace	>20 feet	Pole													
								Red Osier Dogwood	Trace	< 5 feet	Tall Shrub													
								Willow spp.	Low	< 5 feet	Tall Shrub													
								Tamarack	Medium	>20 feet	Pole													
								White Spruce	Trace	Variable	Sapling													
Virgin's Bower	Trace	Unspecified	Vine																					
43	4130 - Aspen	Sapling Well	9.9	4	Immature	N/A	Trace residual hemlock, white cedar (in the far east), balsam fir, beech, and yellow birch. Rare white oak, red pine, and white pine in the subcanopy. Heavy browsing pressure on hardwood regeneration. Very few red maple above browse height. Aspen are being hit, too. This might type out as an A2 during the next inventory cycle if browsing persists. Hopefully there's a little more diversity and structure to the subcanopy at that time. Stand was cut as part of Fawn Knutson Mix (52-122-14-01). Northern unharvested acreage occupies a gentle northeast-facing slope into the adjacent lowland. Red maple dominated with yellow birch, beech.																	
								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size								
								Bigtooth Aspen	75	Sapling	1	4	Bracken Fern	High	Unspecified	Non-Wood								
								Quaking Aspen	15	Sapling	1		Beech	Trace	< 5 feet	Sapling								
								Red Maple	2	Sapling	1		Blackberry/Raspberry	Low	< 5 feet	Tall Shrub								
								Ironwood	2	Sapling	1		Ironwood	Trace	< 5 feet	Sapling								
								Pin Cherry	4	Sapling	1		Red Maple	Trace	< 5 feet	Tall Shrub								
								White Pine	2	XLog/Log/Pole	18	73	Balsam Fir	Trace	Variable	Sapling								
								44	4130 - Aspen	Sapling Well	15.8	3	Immature	N/A	Slightly more residual in this stand than the adjacent stand. Trace residual beech and red maple logs. Heavy browsing pressure, especially in the northeast. Hardwood stump sprouts are browsed to nubs. Trace red pine volunteers on the edge of the red pine stand to the west and south. The majority of the canopy saplings are well within browse height, 3-6', especially with local elk populations. Areas might decline in the next 10 years with continuous browsing resulting in an A2. Subcanopy is undeveloped and influenced by browse rather than competition/succession. Completed in 2019: Fawn Knutson Mix, 52-122-14.									
																Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
																Bigtooth Aspen	10	Sapling	1		Pin Cherry	Low	Variable	Sapling
																Beech	5	Sapling	1		Black Cherry	Trace	Variable	Sapling
White Pine	3	Log/Pole	14		Blackberry/Raspberry	High	< 5 feet									Tall Shrub								
Quaking Aspen	70	Sapling	1	3	Red Pine	Trace	< 5 feet									Seeding								
Basswood	1	Log/XLog	14		Bracken Fern	Trace	Unspecified									Non-Wood								
Ironwood	2	Sapling	1		Beech	Low	< 5 feet									Sapling								
Sugar Maple	1	Log/Pole	12	75	Red Maple	Trace	< 5 feet									Tall Shrub								
Pin Cherry	8	Sapling	1		Balsam Fir	Trace	< 5 feet									Sapling								
					Ironwood	Low	Variable									Sapling								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
45	4139 - Aspen, Mixed Deciduous	Poletimber Well	23.6	38	Unspecified	N/A	<p>East of the pipeline is a 40/40% BTA/QA, 8% BF, 2% RM. West of the pipeline is 48% BAM, 42% BTA, 10% BF (trace RM, SM, PB, WS, WP). Very small opening of witch hazel, white oak, black cherry, yellow birch in the northwest. Southeast perimeter (adjacent to stand 59) is densely stocked balsam fir with trace white spruce, white pine, black cherry; one hawthorn.</p> <p>Little pocket of balsam fir blow down in the north central on north-facing slope.</p> <p>Rare paper birch, sugar maple, red oak, white spruce, ironwood, and white pine in the canopy. Rare white spruce and maple leaved viburnum in the subcanopy.</p> <p>Red and sugar maple were largely outcompeted by the aspen in the last ten years and are now confined to the mid canopy. Herbivory has influenced the subcanopy: not a lot (aside from balsam fir) in the 5-30' range: either it made it above browse height when the stand was cut or...it didn't. Occasional cherry and maple are in this intermediate canopy.</p> <p>A couple cedar seedlings on the edge of stand 52. Ironwood, leatherwood, and MLV are confined to the west side of the stand. White spruce and paper birch are associated with BAM; higher density canopy fir with BAM vs lower density canopy fir with BTA/QA.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Poplar	28	Pole/Log/Sap	8		White Oak	Trace		< 5 feet	Sapling
Red Maple	1	Pole/Sapling	6		Balsam Fir	High		Variable	Sapling
Black Cherry	1	Pole	6		Sugar Maple	Low		Variable	Sapling
Quaking Aspen	25	Pole/Sapling	6		Ironwood	Trace		>20 feet	Sapling
Bigtooth Aspen	30	Pole/Log	8	38	Beech	Trace		< 5 feet	Sapling
Balsam Fir	15	Pole/Log/Sap	8		Red Oak	Trace		< 5 feet	Sapling
					Wintergreen	Low		< 5 feet	Tall Shrub
					Black Cherry	Low		Variable	Sapling
					Bracken Fern	Trace		Unspecified	Non-Wood
					Leatherwood	Trace		< 5 feet	Tall Shrub
					White Pine	Trace		>20 feet	Log
					Red Maple	Low		Variable	Sapling
					Serviceberry (Juneberry)	Trace		5 - 10 feet	Tall Shrub
					White Pine	Trace	< 5 feet	Sapling	
46	3103 - Rubus-Fern	Nonstocked	2.5		Unspecified	No	<p>A fairly forested non-forested opening. White pine present in pole/log/sap, fir s/p, RM L/P/S, JP S/P. West end is 70% stocked with log hardwood with pole/log jack pine, balsam fir.</p>		
Sub-Canopy Species	Density	Avg. Height	Size						
Balsam Fir	Medium	Variable	Sapling						
Bracken Fern	Full	Unspecified	Non-Wood						
Sugar Maple	Low	>20 feet	Log						
Red Oak	Trace	Variable	Sapling						
Red Pine	Trace	>20 feet	Pole						
Beech	Low	5 - 10 feet	Sapling						
Jack Pine	Trace	Variable	Sapling						
Quaking Aspen	Low	5 - 10 feet	Sapling						
Spotted Knapweed	Trace	Unspecified	Non-Wood						
White Oak	Trace	Variable	Sapling						
Black Cherry	Trace	Variable	Sapling						
White Pine	Medium	Variable	Pole						
Red Maple	Low	>20 feet	Log						
47	6121 - Tamarack	Sawtimber Medium	3.7	87	51-80	N/A	<p>Some decline in the larch - conks, mortality - closer to the stream. Sensitive ground. Stream corridor flows easterly: a tributary into the Little Pigeon River. North tip is dominated by white pine, otherwise white pine is scattered. Trace cattails, willow, larch saplings in east where stream crosses onto private property. Fir subcanopy density varies from low to high.</p> <p>Trace white spruce, elm, black spruce in canopy. Rare chokeberry, serviceberry in subcanopy.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Tamarack	89	Log/Pole	14	87	Balsam Fir	Medium		Variable	Sapling
White Pine	5	Log/XLog/Pole	14		Tag Alder	Medium		10 - 20 feet	Tall Shrub
Quaking Aspen	2	Log/XLog	16		Black Cherry	Trace		>20 feet	Pole
Red Maple	1	Log/XLog	16		Northern White Cedar	Trace		< 5 feet	Sapling
Balsam Fir	2	Log/Pole	10		Red Osier Dogwood	Trace		< 5 feet	Tall Shrub
Northern White Cedar	1	Log/Pole	12						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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48	4311 - Pine, Aspen Mix	Sawtimber Well	2.7	90	111-140	N/A	North facing slope into adjacent lowland. Rare sugar maple in the canopy and subcanopy.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	45	Log/Pole/XLog	16	90	Black Cherry	Trace	5 - 10 feet	Sapling
Balsam Fir	5	Pole/Log	8		White Pine	Trace	< 5 feet	Sapling
Red Pine	1	Pole/Log	8		Red Oak	Low	Variable	Sapling
Paper Birch	1	Log/Pole	10		Northern White Cedar	Trace	>20 feet	Pole
Quaking Aspen	5	Log	14	90	Balsam Fir	High	Variable	Sapling
White Pine	38	XLog/Log/Pole	18	105	Hemlock	Trace	>20 feet	Pole
Red Maple	5	Log/Pole	10					

49	4130 - Aspen	Sapling Poor	1.6	3	Immature	N/A	Poor regeneration; extreme browsing on hardwood. South third is forested with quaking aspen saplings. North two-thirds is open and heavily browsed with sparse red and jack pine seedlings. Trace residual log jack pine, balsam fir, white pine. Rare residual beech (sapling). Completed in 2019: Fawn Knutson Mix, 52-122-14.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	1	Log	14	71	White Oak	Trace	< 5 feet	Sapling
Quaking Aspen	93	Sapling	1	3	Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Black Spruce	4	Log/Pole	10		Red Pine	Low	< 5 feet	Sapling
Pin Cherry	2	Sapling	1		Red Oak	Trace	< 5 feet	Sapling
					Red Maple	Medium	< 5 feet	Tall Shrub
					Jack Pine	Medium	< 5 feet	Sapling
					Bracken Fern	Full	Unspecified	Non-Wood

50	310 - Herbaceous Openland	Nonstocked	1.3		Unspecified	No	
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51	330 - Low-Density Trees	Nonstocked	1.7		Unspecified	No	Most trees are present in various size classes, P/S/L or P/S, generally. Low density trees or bracken fern covertype.
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Sub-Canopy Species	Density	Avg. Height	Size
Balsam Poplar	Medium	Variable	Sapling
White Pine	Low	Variable	Sapling
Red Oak	Trace	Variable	Sapling
Beech	Trace	< 5 feet	Sapling
Black Cherry	Medium	>20 feet	Pole
Bracken Fern	High	Unspecified	Non-Wood
Balsam Fir	Medium	>20 feet	Pole
Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub
Jack Pine	Low	Variable	Pole
Honeysuckle (spp.)	Trace	< 5 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
52	623 - Emergent Wetland	Nonstocked	10.8		Unspecified	No	Defined channel(s): tributary to the Little Pigeon River; beaver floodings. West edge is grass and alder, scattered willow and cattails. Northwest leg is grass and alder with scattered saplings and a beaver dam. Old railroad grade, mostly inundated, through the north-central portion of the stand. A series of beaver dams through the main body of the stand. East edge is mostly grasses, willow, trace vervain.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Willow spp.	Medium	< 5 feet	Tall Shrub
								Red Osier Dogwood	Trace	< 5 feet	Tall Shrub
								Alder	Medium	Variable	Tall Shrub
Cattail spp.	Medium	Unspecified	Non-Wood								
53	310 - Herbaceous Openland	Nonstocked	3.6		Unspecified	No	Consistent red and white pine, red oak saplings <5' along entirety of south half of stand. East bubble has trace white oak, black cherry, and red maple. Elk and deer present.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Red Oak	Trace	>20 feet	Log
								Sweet Fern	Low	< 5 feet	Tall Shrub
								Black Cherry	Trace	>20 feet	Pole
								Red Oak	Medium	< 5 feet	Sapling
								Little Bluestem	Trace	Unspecified	Non-Wood
								Balsam Poplar	Trace	< 5 feet	Sapling
								Spotted Knapweed	Low	Unspecified	Non-Wood
								White Pine	Medium	< 5 feet	Sapling
								Red Maple	Trace	>20 feet	Pole
								Red Pine	Medium	< 5 feet	Sapling
								White Oak	Trace	>20 feet	Log
								Bracken Fern	Low	Unspecified	Non-Wood
White Oak	Trace	< 5 feet	Sapling								
54	310 - Herbaceous Openland	Nonstocked	8.1		Unspecified	Managed Opening	Bigtooth and quaking aspen present (only bta listed), all saplings <10'. One white spruce <5', one balsam fir <5', trace mullein. Northernmost leg has about 50% canopy occupancy of pine and aspen, <10" with bracken. Central segment has less pine/aspen, though still present. One small clump of very dense sugar maple seedlings <1'. Southeast leg is heavy to bracken and hardwood/aspen saps <5'. One boxelder on the edge.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Bigtooth Aspen	Low	5 - 10 feet	Sapling
								Beech	Trace	< 5 feet	Sapling
								Sugar Maple	Trace	< 5 feet	Seeding
								Bracken Fern	Low	Unspecified	Non-Wood
								Ironwood	Trace	< 5 feet	Sapling
								Red Oak	Trace	< 5 feet	Sapling
								Red Oak	Trace	>20 feet	Log
								Spotted Knapweed	Low	Unspecified	Non-Wood
								Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
								White Pine	Medium	< 5 feet	Sapling
								Boxelder	Trace	>20 feet	Log
								Red Pine	Low	< 5 feet	Sapling
White Pine	Trace	>20 feet	Log								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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55 123 - Other High Intensity Urban Nonstocked 1.4 0 Unspecified Above ground (overhead) utility lines. Upland and lowland, very diverse flora. Species list is not at all inclusive.

Sub-Canopy Species	Density	Avg. Height	Size
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Spotted Knapweed	Low	Unspecified	Non-Wood
Bracken Fern	Medium	Unspecified	Non-Wood
Balsam Poplar	Trace	10 - 20 feet	Sapling
Little Bluestem	Low	Unspecified	Non-Wood
Autumn Olive	Trace	< 5 feet	Tall Shrub
Beech	Low	Variable	Sapling
Ironwood	Trace	< 5 feet	Sapling
Red Pine	Trace	Variable	Sapling

56 42110 - Planted Red Pine Sawtimber Well 8.8 71 141-170 N/A Thinned in 1984 and 8/2018.

Canopy Species	% Cover	Size Class	DBH	Age
Red Pine	98	Log/Pole	14	71
Red Maple	1	Log/Pole	12	
Quaking Aspen	1	Log	12	

Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	Low	Variable	Sapling
White Oak	Low	Variable	Sapling
Red Pine	Trace	< 5 feet	Sapling
Quaking Aspen	Trace	5 - 10 feet	Sapling
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Bigtooth Aspen	Trace	5 - 10 feet	Sapling
Red Maple	Medium	Variable	Sapling
Red Oak	Trace	< 5 feet	Sapling
Sugar Maple	Trace	< 5 feet	Sapling
Ironwood	Low	Variable	Sapling
Beech	Medium	Variable	Sapling
Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub

1% quaking aspen accounts for both quaking and bigtooth aspen present in canopy. Rare sugar maple in canopy. Rare black cherry in subcanopy. Red pine, jack pine saplings along west edge adjacent to the road. Subcanopy is likely to change in the next cycle as it develops post harvest.

57 4130 - Aspen Sapling Medium 5.8 3 Immature N/A Treatment was completed as part of Fawn Knutson Mix (52-122-14-01).

Canopy Species	% Cover	Size Class	DBH	Age
Black Spruce	10	Pole/Log/Sap	8	74
White Pine	5	Log/XLog	16	
Red Maple	5	Sapling	1	
Bigtooth Aspen	15	Sapling	1	
Quaking Aspen	60	Sapling	1	3
Pin Cherry	3	Sapling	1	
Balsam Fir	2	Sapling/Pole/Log	4	

Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	Trace	Variable	Sapling
Blueberry/Bilberry/Cranberry	Trace	< 5 feet	Tall Shrub
White Oak	Trace	Variable	Sapling
Black Spruce	Low	< 5 feet	Seeding
Balsam Fir	Trace	< 5 feet	Sapling
Wild Raisin	Trace	< 5 feet	Tall Shrub
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Red Pine	Trace	< 5 feet	Seeding

Drainage in the east separates mostly upland from lowland portions of stand. Significant residual black spruce, balsam fir, and white pine in the east leg with great black spruce regeneration <1'. Trace bulrush, willow in the wettest spots. Southern edge (adjacent to stand 56) is heavily browsed, dominated by shrubby red maple stump sprouts <2' with scattered red pine seedlings and balsam fir.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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58	42110 - Planted Red Pine	Sawtimber Well	4.9	63	81-110	N/A	Last thinned in 2004. Trace black cherry in canopy. Very small log stand, still heavy to poles.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	85	Log/Pole	10	63	Quaking Aspen	Trace	5 - 10 feet	Sapling
Quaking Aspen	2	Log	14		Bracken Fern	Medium	Unspecified	Non-Wood
White Pine	3	Log/XLog/Pole	14		Red Oak	Low	Variable	Sapling
Red Maple	2	Log/Pole	10		Witch Hazel	Trace	5 - 10 feet	Tall Shrub
Bigtooth Aspen	8	Pole/Log	12		Balsam Fir	Medium	Variable	Sapling
					Black Cherry	Low	Variable	Sapling
					Red Pine	Trace	< 5 feet	Sapling
					Pipsissewa	Trace	< 5 feet	Tall Shrub
					Ironwood	Trace	10 - 20 feet	Sapling
					Red Maple	Medium	Variable	Sapling
					White Pine	Low	Variable	Sapling
					Beech	Low	5 - 10 feet	Sapling
					Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
					Bigtooth Aspen	Low	10 - 20 feet	Sapling
					White Oak	Trace	< 5 feet	Sapling

59	623 - Emergent Wetland	Nonstocked	1.2		Unspecified	No	Northeast leg is dominated by cattails with trace larch. West (main) portion is dominated by cattails and alder with dead standing cedar. A significant amount of lowland flowering plants, including vervain and bog goldenrod. Interior or stand is very spongy. Defined channel in southern half. Trace saplings on north and south edges.
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Sub-Canopy Species	Density	Avg. Height	Size
Bulrush	Low	Unspecified	Non-Wood
Cattail spp.	Medium	Unspecified	Non-Wood
Willow spp.	Low	< 5 feet	Tall Shrub
Alder	Medium	Variable	Tall Shrub

60	4130 - Aspen	Sapling Well	10.9	17	Unspecified	N/A	Rare red maple in the canopy. Rare red pine, white oak in subcanopy. Trace red pine saps along disturbed areas. Subcanopy is dominated by cherry, red maple, and white pine to varying degrees with consistent balsam fir. Scattered residual oak, pine and a bigtooth aspen.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	5	Sapling	2		Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub
Red Oak	1	Log/Pole/Sap	14		Sugar Maple	Trace	10 - 20 feet	Sapling
White Pine	5	Pole/Sap/Log	6		Balsam Fir	Medium	Variable	Sapling
Black Cherry	2	Sapling/Pole	3		Wintercreeper	Medium	Unspecified	Vine
Red Pine	2	Pole/Sapling	7		Black Cherry	Medium	Variable	Sapling
Bigtooth Aspen	85	Sapling	3	17	Bracken Fern	Low	Unspecified	Non-Wood
					White Pine	Medium	Variable	Sapling
					Ironwood	Trace	5 - 10 feet	Sapling
					Red Oak	Low	Variable	Sapling
					Beech	Trace	5 - 10 feet	Sapling
					Red Maple	Medium	Variable	Sapling
					Witch Hazel	Trace	5 - 10 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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61	4199 - Other Mixed Upland Deciduous	Sapling Poor	18.1	3	Immature	N/A	Keeping in mind that the canopy only shows trees >3' tall at the time of inventory, this stand will look very different in the next inventory cycle, likely becoming a mix of pine/oak/aspens/cherry if oak and aspen can escape herbivory. Trace red pine make the >3' canopy. Few scattered residual (though still sapling) white oak, beech, and red maple. Heavy browsing on red maple. A few unproductive pockets, 1/4 to 1/2 acre in size. One log apple tree in the southeast. Completed in 2019: Fawn Knutson Mix, 52-122-14.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Beech		1	Sapling	2		Blueberry/Bilberry/Cranberry		Low	< 5 feet	Tall Shrub	
Red Maple		10	Sapling	1		Bracken Fern		Medium	Unspecified	Non-Wood	
Quaking Aspen		20	Sapling	1		White Oak		Medium	< 5 feet	Sapling	
Pin Cherry		44	Sapling	1	3	Apple (spp.)		Trace	>20 feet	Log	
Bigtooth Aspen		10	Sapling	1		Little Bluestem		Trace	Unspecified	Non-Wood	
Balsam Fir		10	Sapling	3		Jack Pine		High	< 5 feet	Sapling	
White Oak		5	Sapling	1		Red Maple		Medium	< 5 feet	Tall Shrub	
						Spotted Knapweed		Trace	Unspecified	Non-Wood	
						White Pine		Trace	< 5 feet	Sapling	
						Witch Hazel		Trace	< 5 feet	Tall Shrub	
						Quaking Aspen		Low	< 5 feet	Sapling	
						Blackberry/Raspberry		High	< 5 feet	Tall Shrub	
						Red Pine		Low	< 5 feet	Sapling	
						Red Oak		Low	< 5 feet	Sapling	

62	4130 - Aspen	Poletimber Well	107.1	56	111-140	N/A	This will quickly become a log stand. There are many pockets already there. Rare white oak, paper birch, blueberry in the subcanopy. Trace white oak, white ash in the canopy. There are two distinct oak and sugar maple cohorts - 56 year old and approximately 110 year old. Elk present in the stand. There's very little oak in the south half; South half is also more dominated by log aspen (10") with higher density of maple leaved viburnum in the subcanopy. There's a cluster of potholes in the central portion of the stand, south of the non-forested opening (stand 54). As with such a large stand, the subcanopy is rather variable.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Oak		12	Log/Pole/XLog	12		Red Maple		Trace	Variable	Sapling	
Beech		2	Log/Pole	12		Sugar Maple		Low	Variable	Sapling	
White Pine		5	Log/XLog/Pole	16		White Ash		Trace	< 5 feet	Sapling	
Red Pine		1	Log/XLog	16		Ironwood		Low	Variable	Sapling	
Sugar Maple		5	Log/Pole	10		Beech		Low	Variable	Sapling	
Red Maple		4	Pole/Log	8		Balsam Fir		Trace	Variable	Sapling	
Bigtooth Aspen		68	Pole/Log/Sap	8	56	White Pine		Low	Variable	Sapling	
Paper Birch		1	Pole/Log	8		Serviceberry (Juneberry)		Trace	Variable	Sapling	
Quaking Aspen		2	Pole/Log	8		Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
						Bracken Fern		Trace	Unspecified	Non-Wood	
						Witch Hazel		Trace	5 - 10 feet	Tall Shrub	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
63	4130 - Aspen	Sapling Well	6.6	18	Unspecified	N/A	Trace white oak, sugar maple, paper birch, white spruce, white pine in canopy. Scattered residual hardwood (red maple (pole), sugar maple, beech, paper birch); trace residual white pine. Mostly quaking aspen with scattered bigtooth clones.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	Black Cherry	2	Sapling/Pole	2		Red Oak	Trace	< 5 feet	Sapling
	Balsam Fir	5	Sapling/Pole	4		White Spruce	Trace	< 5 feet	Sapling
	Red Maple	3	Sapling/Pole	4		Red Maple	Medium	Variable	Sapling
	Quaking Aspen	74	Sapling	3	18	Black Cherry	Low	Variable	Sapling
	Balsam Poplar	2	Sapling	3		Balsam Fir	Medium	Variable	Sapling
	Bigtooth Aspen	14	Sapling	2		Bracken Fern	Full	Unspecified	Non-Wood
						White Oak	Trace	Variable	Sapling
						Beech	Trace	< 5 feet	Sapling
						White Pine	Trace	Variable	Sapling
						Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub
64	622 - Lowland Shrub	Nonstocked	1.3		Unspecified	No	Lowland holly stand with scattered alder, fir, willow, and red maple. Lowland associated trees (pole/sap) on the perimeter. Stream flows through, undefined mostly, from north to south on the east side of the stand. Fairly significant beaver damage in the northeast.		
						Sub-Canopy Species	Density	Avg. Height	Size
						Bulrush	Trace	Unspecified	Non-Wood
						Alder	Low	10 - 20 feet	Tall Shrub
						Willow spp.	Low	Variable	Tall Shrub
						American Elm	Trace	>20 feet	Sapling
						Black Spruce	Trace	>20 feet	Sapling
						Red Maple	Low	>20 feet	Sapling
						Red Osier Dogwood	Trace	< 5 feet	Tall Shrub
						Yellow Birch	Trace	>20 feet	Pole
						Michigan Holly	Full	5 - 10 feet	Tall Shrub
						Wild Raisin	Trace	Variable	Tall Shrub
						Balsam Fir	Low	>20 feet	Sapling
65	6122 - Black Spruce	Poletimber Poor	4.5	65	1-50	N/A	Ash succumbed to EAB. Trace larch, elm, bam. Pretty full sphagnum mosses. This is a low density black spruce bog with red maple saplings and dense lowland shrubs (predominately holly with scattered alder and wild raisin). Edges allow for more canopy diversity and higher density.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	Red Maple	37	Sapling/Pole	4	65	Black Spruce	Trace	< 5 feet	Sapling
	Yellow Birch	1	Pole	6		Labrador Tea	Trace	< 5 feet	Tall Shrub
	Quaking Aspen	2	Log	14		Wild Raisin	Low	< 5 feet	Tall Shrub
	Balsam Fir	2	Sapling/Pole	4		Blueberry/Bilberry/Cranberry	Trace	< 5 feet	Tall Shrub
	White Pine	1	XLog/Log	18		Michigan Holly	High	5 - 10 feet	Tall Shrub
	Black Spruce	57	Pole/Sap/Log	6	65	Tag Alder	Medium	10 - 20 feet	Tall Shrub
						Black Ash	Trace	< 5 feet	Sapling
						Balsam Fir	Trace	Variable	Sapling
						Red Osier Dogwood	Trace	< 5 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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66	330 - Low-Density Trees	Nonstocked	2.4		Unspecified	No	Sub-Canopy Species			
								Density	Avg. Height	Size
							Tag Alder	Trace	5 - 10 feet	Tall Shrub
							White Oak	Trace	Variable	Sapling
							American Elm	Trace	>20 feet	Pole
							White Pine	Trace	Variable	Sapling
							Black Cherry	Medium	Variable	Sapling
							Red Oak	Trace	< 5 feet	Sapling
							Jack Pine	Medium	>20 feet	Pole
							Quaking Aspen	Low	5 - 10 feet	Sapling
							Bracken Fern	High	Unspecified	Non-Wood
							Red Pine	Trace	5 - 10 feet	Sapling
							Balsam Fir	High	Variable	Sapling
							White Spruce	Trace	>20 feet	Log
							Balsam Fir	Medium	>20 feet	Pole
Hawthorn (spp.)	Trace	5 - 10 feet	Tall Shrub							
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub							
Beech	Trace	5 - 10 feet	Sapling							

This could easily be called a forested stand, especially with jack pine in the southern acreage. East edge drops down into adjacent stream corridor. Rare elm and red maple. Small drainage from stand 64 into stream across this stand. Bracken fern is full except under dense balsam fir. South end is forested: a mix of cherry, jack pine, and balsam fir.

67	42290 - Natural Mixed Pine	Sawtimber Well	11.2	77	111-140	N/A	Canopy Species				
							% Cover	Size Class	DBH	Age	
							Quaking Aspen	3	Log/Pole/Sap	12	
							Red Pine	25	Log/Pole/XLog	12	
							White Pine	58	Log/Pole/XLog	14	77
							Balsam Poplar	2	Log	16	
							Bigtooth Aspen	12	Log/Pole/Sap	14	
							Sub-Canopy Species				
								Density	Avg. Height	Size	
							White Pine	Trace	Variable	Sapling	
							Black Cherry	Low	Variable	Sapling	
							Beech	Trace	Variable	Sapling	
							Red Oak	Trace	< 5 feet	Sapling	
							Red Maple	Low	Variable	Sapling	
							White Oak	Trace	< 5 feet	Sapling	
Sugar Maple	Trace	Variable	Sapling								
Bigtooth Aspen	Medium	>20 feet	Sapling								
Balsam Fir	Low	Variable	Sapling								

POG along water's edge appearing to be two-aged: few charred stumps indicate that this may be the result of a moderate-intensity fire in the early/mid 1900s. Old railroad bed through stand. Northern .6ac leg is dense, never-been-thinned red pine plantation inclusion (log/X/Pole bta, rm, wp on the northernmost tip). MiFI limitations on accurately conveying stand structure: two aged, sap/pole bigtooth cut in 1994 mingling with canopy, 7%; log/pole/Xlog residual red/white pine, bigtooth (5%), with trace scattered birch (log), red oak (pole), and red maple (log/pole). Rare subcanopy serviceberry, alder, maple leaved viburnum.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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68	622 - Lowland Shrub	Nonstocked	2.5		Unspecified	No	
		Sub-Canopy Species		Density	Avg. Height	Size	
		Cattail spp.		Low	Unspecified	Non-Wood	
		Northern White Cedar		Trace	Variable	Sapling	
		Apple (spp.)		Trace	10 - 20 feet	Sapling	
		White Pine		Trace	Variable	Sapling	
		Balsam Fir		Medium	Variable	Sapling	
		Black Cherry		Trace	>20 feet	Pole	
		Virgin's Bower		Low	Unspecified	Vine	
		Hawthorn (spp.)		Trace	5 - 10 feet	Tall Shrub	
		Wild Raisin		Trace	< 5 feet	Tall Shrub	
		Tag Alder		Medium	5 - 10 feet	Tall Shrub	
		Jack Pine		Trace	>20 feet	Pole	

Sapling/pole balsam fir, sap/pole/log white pine. Stream corridor with a dam about half way down. Stream spreads with undefined banks in the north and south. Water is a tributary feeding into the Little Pigeon River. Two apple trees along old grade in the southeast. Grass and alder with varying densities and composition of sap/pole trees in patches. Trace oak, aspen, birch, cedar along road edge.

69	42100 - Planted White Pine	Sawtimber Well	1.1	63	171-200	N/A	
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	93	Log/Pole/XLog	12	63	Ironwood	Low	5 - 10 feet	Sapling
Bigtooth Aspen	1	Log	14		Sugar Maple	High	10 - 20 feet	Sapling
Red Oak	2	Log/Pole	12		Striped Maple	Low	Variable	Sapling
Sugar Maple	2	Log/XLog	16		White Oak	Trace	< 5 feet	Sapling
Red Maple	1	Pole	7		Beech	Medium	Variable	Sapling
White Oak	1	Log	12		Red Oak	Low	< 5 feet	Sapling

Stand does not appear to have been thinned. BAs 140-210 white pine + 10-20BA Deciduous. (One red pine on north edge). There's a lot of browse on the subcanopy; deer beds and grouse within stand.

70	42110 - Planted Red Pine	Sawtimber Well	5.8	63	111-140	N/A	
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	90	Log/Pole	10	63	Striped Maple	Low	10 - 20 feet	Sapling
Red Oak	4	XLog/Log/Pole	18		White Pine	Low	Variable	Sapling
Bigtooth Aspen	1	Log/XLog	14		Red Oak	Full	Variable	Sapling
Sugar Maple	1	Log/XLog	14		Bracken Fern	Medium	Unspecified	Non-Wood
Red Maple	4	Log/Pole	12		Red Maple	Medium	Variable	Sapling
					Blueberry/Bilberry/Cranberry	Trace	< 5 feet	Tall Shrub
					White Oak	Low	Variable	Sapling
					Beech	Low	Variable	Sapling
					Ironwood	Trace	5 - 10 feet	Sapling

Thinned in 2004. Current BA is 134, though BAs are inconsistent. Stand has graduated from pole (8" ave) to log (10" ave) in the last 10 years. Trace white oak (one in north), paper birch in canopy. There's a very small aspen clone in the south: high striped maple here, none elsewhere. Ironwood also strongly associated with striped maple.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
71	330 - Low-Density Trees	Nonstocked	5.6		Unspecified	No	40%-50% canopy coverage. Trees listed in stand data are generally of various size classes, those listed being the most prominent (except in the case of paper birch, red and sugar maple: these are Xlog dominated, but that's not an option in MiFI). Northern tip: xlog red and sugar maple with serviceberry. Central portion: X/log sugar maple, quaking aspen, birch, beech, cherry with beech, balsam fir, ironwood subcanopy. West: log quaking aspen, sugar maple, birch with balsam fir subcanopy. Southwest: pole/sap/log dense red and white pine with jack pine. East third of stand is non-forested, dominated by bluestem with bracken and scattered trees. Line 5 sub station adjacent to State land.
Sub-Canopy Species		Density	Avg. Height	Size			
Beech		Trace	5 - 10 feet	Sapling			
Paper Birch		Trace	>20 feet	Log			
Juniper		Trace	< 5 feet	Tall Shrub			
White Oak		Trace	Variable	Sapling			
Balsam Fir		Medium	Variable	Sapling			
Black Cherry		Medium	>20 feet	Pole			
Sugar Maple		Medium	>20 feet	Log			
Jack Pine		Low	Variable	Sapling			
Honeysuckle (spp.)		Trace	5 - 10 feet	Tall Shrub			
Beech		Trace	>20 feet	Pole			
Bigtooth Aspen		Trace	>20 feet	Log			
Little Bluestem		Medium	Unspecified	Non-Wood			
Quaking Aspen		Medium	>20 feet	Log			
Balsam Poplar		Trace	>20 feet	Pole			
Blackberry/Raspberry		Trace	< 5 feet	Tall Shrub			
Ironwood		Low	Variable	Sapling			
Autumn Olive		Trace	5 - 10 feet	Tall Shrub			
Red Maple		Trace	>20 feet	Log			
Serviceberry (Juneberry)		Trace	10 - 20 feet	Tall Shrub			
White Pine		Medium	Variable	Sapling			
Bracken Fern		Medium	Unspecified	Non-Wood			
Red Pine		Low	Variable	Sapling			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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72	4130 - Aspen	Poletimber Well	26.2	28	Unspecified	N/A	1994 harvest. Some areas lingering in the sapling class, especially quaking aspen. South half is dominated with pretty nice, dense hardwood subcanopy except a few beech dominated areas. Old railroad grade through the northwest; trace hemlock just to the east of that. Some areas with high density of residual white pine, especially in the east and northeast. One clump of witch hazel by the road. One scotch pine in east. Trace ironwood, red oak, beech, red maple, hemlock, red pine in the canopy.																																																																																					
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73	122 - Road/Parking Lot	Nonstocked	4.5		Unspecified	Congdon Road.	
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74	42110 - Planted Red Pine	Sawtimber Well	7.3	63	141-170	N/A	Trace red maple, paper birch, sugar maple, quaking aspen in canopy. 40x60' pocket of mortality in the east: five dead, one declining. Survey for HRD. Current BA = 148 (142 RP, 6 other). Higher amount of white pine saps in the south third. One hawthorn, 5-10'.																																																																				
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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75	4130 - Aspen	Sapling Well	11.4	4	Immature	N/A	Harvest complete 2018 as part of Treehorn Aspen, 52-121-14. Elk browsing damage, deer browse too. Trace red/sugar maple, red/white oak, white ash, pin cherry saplings in canopy; trace residual black cherry, red pine in canopy. Higher density residuals along the north edge, also in the east leg. Might shake out to be higher density bigtooth than indicated. Highly variable heights in saplings from browsing pressure. Some are at 16' (2021 observation), others are barely at 4 or 5'. Autumn olive close to road in north. Bit more oak and sugar maple in canopy in the east portion.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Balsam Fir		2	Sapling/Pole	3		Black Cherry		Low	Variable	Sapling	
Ironwood		2	Sapling/Pole	1		Ironwood		Low	Variable	Sapling	
Beech		1	Sapling	1		Bracken Fern		Full	Unspecified	Non-Wood	
White Pine		5	Pole/Log/Sap	8		Autumn Olive		Trace	< 5 feet	Tall Shrub	
Bigtooth Aspen		30	Sapling	1		White Oak		Trace	< 5 feet	Sapling	
Quaking Aspen		55	Sapling	1	4	Red Maple		Trace	< 5 feet	Sapling	
Black Cherry		5	Sapling/Pole/Log	1		White Pine		Low	< 5 feet	Sapling	
						Balsam Fir		Trace	< 5 feet	Sapling	
						Red Oak		Trace	< 5 feet	Seeding	
						Beech		Trace	5 - 10 feet	Sapling	
						Blackberry/Raspberry		Trace	< 5 feet	Tall Shrub	

76	42110 - Planted Red Pine	Sawtimber Well	4.6	63	141-170	N/A	Trace bigtooth aspen on west edge. Rare trailing arbutus. BAs 140-150 with some outliers (90-110, 170).				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		1	Log/Pole	12		White Pine		Low	Variable	Sapling	
Red Pine		98	Log/Pole	11	63	Balsam Fir		Trace	10 - 20 feet	Sapling	
Red Oak		1	XLog/Log/Pole	20		Black Cherry		Trace	10 - 20 feet	Sapling	
						White Oak		Medium	5 - 10 feet	Sapling	
						Sweet Fern		Trace	< 5 feet	Tall Shrub	
						Beech		Trace	Variable	Sapling	
						Blueberry/Bilberry/Cranberry		Medium	< 5 feet	Tall Shrub	
						Red Pine		Trace	< 5 feet	Sapling	
						Red Oak		High	5 - 10 feet	Sapling	
						Red Maple		Medium	Variable	Sapling	
						Bracken Fern		Medium	Unspecified	Non-Wood	

77	4130 - Aspen	Sawtimber Well	3.4	90	51-80	N/A	East edge is moderately hilly; backside is more of a gentle slope. One autumn olive. Developing beech, red maple, sugar maple subcanopy. Canopy red maple is log, multi-stemmed in south third of stand but scattered pole-sized elsewhere. Trace quaking aspen in southwest. Rare white spruce in subcanopy (on east edge only).				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		86	Log/Pole/XLog	14	90	White Pine		Trace	< 5 feet	Sapling	
Basswood		1	Log/Pole	14		Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
Red Maple		4	Log/Pole	12		Bracken Fern		Trace	Unspecified	Non-Wood	
Sugar Maple		6	Log/Pole	10		Ironwood		Trace	>20 feet	Sapling	
Beech		3	Pole/Log	8		Striped Maple		Medium	Variable	Tall Shrub	
						Beech		High	Variable	Sapling	
						Sugar Maple		Low	Variable	Sapling	
						Sugar Maple		Medium	< 5 feet	Seeding	
						Balsam Fir		Trace	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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78 42260 - Natural Pine, Mixed Deciduous Sawtimber Well 31.7 85 111-140 N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Oak	20	Log/XLog/Pole	16	
Paper Birch	1	Pole/Log	8	
White Pine	25	XLog/Log/Pole	18	120
Red Maple	5	Pole/Log	8	
Bigtooth Aspen	8	Log/Pole	14	
Red Pine	40	Log/XLog/Pole	16	85
Quaking Aspen	1	Log/XLog	14	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	Variable	Sapling
White Oak	Low	Variable	Sapling
White Pine	Medium	Variable	Sapling
Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub
Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
Red Maple	Medium	Variable	Sapling
Red Pine	Trace	>20 feet	Sapling
Witch Hazel	Low	5 - 10 feet	Tall Shrub
Balsam Fir	Low	Variable	Sapling

Rather incredible Xlog red and white pine across the stand. West quarter of stand is old growth red/white pine + fire origin pine and quaking aspen. To the east has the appearance of the same (OG + 2nd growth fire origin) plus an older deciduous removal harvest. Two and three age classes. Variable subcanopy depending on disturbance history and local influences.
Long narrow band in center of stand adjacent to and north of the old east-west trail is dominated by pole deciduous (aspen/maple/birch) with log oak. Higher white pine subcanopy to south of that E-W trail. Rare serviceberry, ironwood in the subcanopy.

79 4199 - Other Mixed Upland Deciduous Sapling Well 70.4 6 Immature N/A

Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	2	Sapling	1	6
White Oak	2	Log/XLog	14	
Pin Cherry	1	Sapling	1	
White Pine	2	Sapling/Pole/Log	4	
Red Maple	15	Sapling/Pole	1	
Northern Pin Oak	3	XLog/Log	20	
Northern Pin Oak	25	Sapling	1	6
Bigtooth Aspen	25	Sapling	1	
White Oak	25	Sapling	1	

Sub-Canopy Species	Density	Avg. Height	Size
Witch Hazel	Trace	5 - 10 feet	Tall Shrub
Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub
Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub
Red Pine	Trace	Variable	Sapling
Red Maple	Low	< 5 feet	Sapling
Bracken Fern	Medium	Unspecified	Non-Wood
Serviceberry (Juneberry)	Trace	Variable	Sapling
Northern Pin Oak	Low	< 5 feet	Sapling
White Oak	Low	< 5 feet	Sapling
White Pine	Low	Variable	Sapling
Sweet Fern	Low	< 5 feet	Tall Shrub
Pin Cherry	Trace	< 5 feet	Sapling

Stand was harvested in 2016. Residual (marked) pin and white oak, scattered red and white pine. Residual pine is generally sapling/pole with the exception of a couple log white pine. Subcanopy is largely influenced by the trees that have not and likely will not make it above browse height, expecting mortality on many of these stems over the next 10 years. Depending on extent of mortality, this might type out as a MD2 during the next inventory cycle, still meeting regeneration objectives. Galls on a good number of white oak twigs. Trace trailing arbutus and wintergreen; rare white spruce, balsam fir, black cherry in subcanopy.
Notable lack of Rubus spp except where present under quaking aspen. Quaking aspen and red maple are dominant in the far west bubble, south half only. Bigtooth occupies much of the east half of the stand with scattered clones amongst mixed oak and occasional red maple (with trace pin cherry). A couple small understocked pockets, <1/2 acre in size. Most areas dominated by oak are still within browse height and are uniformly browsed down to 3-5'. Oak and maple are browsed elsewhere but a little more variable in heights.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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80	330 - Low-Density Trees	Nonstocked	7.9		Unspecified	No
Sub-Canopy Species		Density	Avg. Height	Size		
Red Pine	Medium	>20 feet	Pole			
Quaking Aspen	Trace	Variable	Sapling			
White Spruce	Trace	5 - 10 feet	Sapling			
Sweet Fern	Low	< 5 feet	Tall Shrub			
Black Cherry	Low	>20 feet	Pole			
Autumn Olive	Trace	5 - 10 feet	Tall Shrub			
Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub			
Ironwood	Trace	Variable	Sapling			
Scotch Pine	Trace	Variable	Sapling			
Little Bluestem	Full	Unspecified	Non-Wood			
Juniper	Trace	< 5 feet	Tall Shrub			
Sugar Maple	Trace	Variable	Sapling			
Witch Hazel	Trace	5 - 10 feet	Tall Shrub			
White Pine	Medium	Variable	Sapling			
Balsam Fir	Trace	5 - 10 feet	Sapling			

White pine present in sap/pole/log; black cherry in pole/sap/log, red pine in pole/log. Yellow hawkweed, milkweed, blueberry, goldenrod, field strawberry present. Sweet fern only in northwest - less bluestem here. Slight increase in species richness in northwest: presence of juniper, balsam fir, sweet fern, witch hazel, and white spruce.

81	4130 - Aspen	Sapling Well	15.9	5	Immature	N/A
Canopy Species	% Cover	Size Class	DBH	Age		
Bigtooth Aspen	63	Sapling	1	5		
White Pine	1	Sapling/Pole/Log	4			
Red Pine	1	XLog/Log/Pole	18			
Northern Pin Oak	3	Log/XLog	16	104		
Red Maple	15	Sapling	1			
Pin Cherry	2	Sapling	1			
Quaking Aspen	5	Sapling	1			
Northern Pin Oak	10	Sapling	1			
Sub-Canopy Species		Density	Avg. Height	Size		
Sweet Fern	Trace	< 5 feet	Tall Shrub			
Red Maple	Low	< 5 feet	Sapling			
Ironwood	Trace	< 5 feet	Sapling			
Wintergreen	Trace	< 5 feet	Tall Shrub			
Northern Pin Oak	Medium	< 5 feet	Sapling			
Pin Cherry	Trace	Variable	Sapling			
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub			
White Oak	Low	< 5 feet	Sapling			
Bracken Fern	High	Unspecified	Non-Wood			
White Pine	Low	< 5 feet	Sapling			

Scattered residual sapling oak, red maple, red and white pine, balsam fir, and ironwood. Residual Xlog/log pin and white oak. Heavy browsing pressure; a couple barren spots. Potential for decline on browsed stems and reduction to an A2 in the next inventory cycle. There's a lot of stems >3' meeting canopy criteria, but they're largely not out of browse height yet, especially for elk. Rare witch hazel in subcanopy. Trace beech (shrub <5') under one clump of residual pin oak. Southwest retention pocket is pole red maple/bta dominated with Xlog red pine and trace white oak, pin oak, white pine (Xlog/log); heavy white pine subcanopy with red maple, oak, and serviceberry. Southeast retention pocket is pole/log bta with Xlog pin oak; red maple, oak, white pine subcanopy. Aspirant Aspen 52-119-14 in 2018.

82	3103 - Rubus-Fern	Nonstocked	1.0		Unspecified	No
Sub-Canopy Species		Density	Avg. Height	Size		
White Pine	Low	Variable	Sapling			
Red Maple	Trace	>20 feet	Pole			
Little Bluestem	Low	Unspecified	Non-Wood			
Beech	Trace	Variable	Sapling			
Bracken Fern	High	Unspecified	Non-Wood			
Black Cherry	Low	Variable	Sapling			

White pine present in sap/pole/log; cherry is sap/pole.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
83	4130 - Aspen	Sapling Medium	40.0	2	Immature	N/A	Stand cut 12/2019. 52-115-14-01 Bob the Builder Mix. Very poor regeneration in the northeast quarter of the stand >3', 0-25%. It's a sea of browsed oak. Fewer than 5% of the trees >5' are from the new cohort of saplings; anything above browse height is residual advanced regeneration from the parent stand. Clockwise from there improves: SE is 25-50 to 50-75 (mostly "successful" aspen regeneration), SW is 75-100 (aspen dominated), NW is 75-100, except transitioning back to <25% forested as you go east. Trace white oak and balsam fir saplings; rare beech in the subcanopy. Witch hazel is more prevalent in the southwest than elsewhere. Heavy browsing persists across much of the stand. Consistent white pine residual saplings and scattered poles evenly distributed. Clumps of residual submerchantable oak and red maple. Within stand retention plus residual submerchantable stems and new saplings lends this to being more of an uneven-aged stand, but still showcasing the sapling cohort as the primary class.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	5	Sapling	1		Sweet Fern	Trace	< 5 feet	Tall Shrub
Red Oak	4	Log/XLog	14		Witch Hazel	Low	Variable	Tall Shrub
White Oak	2	Log/XLog	16		Bracken Fern	High	Unspecified	Non-Wood
Red Pine	5	Log/Pole/Sap	14		Red Oak	Medium	< 5 feet	Sapling
Bigtooth Aspen	61	Sapling	1	2	White Oak	Low	< 5 feet	Sapling
White Pine	3	Log/XLog	16		Bigtooth Aspen	Low	< 5 feet	Sapling
Red Maple	10	Sapling/Pole	1		White Pine	Trace	Variable	Sapling
White Pine	10	Sapling	2		Blueberry/Bilberry/Cranberry	High	< 5 feet	Tall Shrub
84	429 - Mixed Upland Conifers	Sapling Well	5.5	18	1-50	N/A	Trace white pine, bigtooth aspen in sapling canopy. Trace residual red maple, quaking aspen, black cherry in the "super" canopy. Clump of log/pole quaking aspen, pole/log red maple, pole black cherry along the north edge of the stand. Mature sugar maple, basswood, in the east spurs. One apple tree, 9" dbh; autumn olive nearby. Rare white ash, maple leaved viburnum in the subcanopy.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Beech	2	Sapling	1		Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Red Oak	1	Sapling	1		Black Cherry	Trace	Variable	Sapling
Jack Pine	57	Sapling	3	18	Bracken Fern	Low	Unspecified	Non-Wood
Sugar Maple	3	Log/XLog/Pole	16		Red Maple	Low	< 5 feet	Sapling
Quaking Aspen	25	Sapling	2		Balsam Fir	Low	Variable	Sapling
Balsam Fir	3	Sapling	2		White Oak	Low	Variable	Sapling
Red Maple	6	Sapling/Pole	1		Beech	Medium	Variable	Sapling
White Oak	3	Sapling	1		Red Oak	Trace	< 5 feet	Sapling
85	4130 - Aspen	Sapling Medium	6.8	4	Immature	N/A	Rare serviceberry and striped maple in subcanopy. Heavy browse on maple; pockets of heavy browse in aspen (deer and elk). Decent density of regeneration except in the west, a wet pocket adjacent to the Q stand currently dominated by alder, bulrush, balsam fir, cattails, red osier dogwood, and black spruce seedlings (and one cedar). Might become more fully stocked if some of the browsing pressure relaxes. Cut in 2018 as apart of Treehorn Aspen, 52-121-14.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	1	Sapling	1		Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub
Black Cherry	2	Sapling	1		Bracken Fern	Medium	Unspecified	Non-Wood
Quaking Aspen	89	Sapling	1	4	Alder	Trace	5 - 10 feet	Tall Shrub
Beech	1	Sapling	1		Sugar Maple	Trace	< 5 feet	Sapling
Balsam Fir	2	Sapling	2		Beech	Medium	< 5 feet	Sapling
Bigtooth Aspen	5	Sapling	1		Bulrush	Trace	Unspecified	Non-Wood
					Red Maple	Low	< 5 feet	Sapling
					Cattail spp.	Trace	Unspecified	Non-Wood
					Balsam Fir	Medium	Variable	Sapling
					Red Osier Dogwood	Trace	< 5 feet	Tall Shrub
					White Oak	Trace	< 5 feet	Sapling
					Red Oak	Trace	< 5 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
86	330 - Low-Density Trees	Nonstocked	15.5		Unspecified	No	Spreading aspen clones, increasing white pine volunteers. Reindeer moss, blue cladonia present. Oak is present in sap/pole/log; cherry P/S/L; red maple P/S/L; red pine S/L, white pine S/P/L; BTA P/L/S; QA P/L. Clubmoss present (trace).				
								Sub-Canopy Species	Density	Avg. Height	Size
								Red Pine	Low	Variable	Sapling
								Sweet Fern	Medium	< 5 feet	Tall Shrub
								Bracken Fern	Low	Unspecified	Non-Wood
								Balsam Poplar	Trace	5 - 10 feet	Sapling
								Northern Pin Oak	Low	Variable	Sapling
								Serviceberry (Juneberry)	Trace	5 - 10 feet	Sapling
								Red Maple	Low	>20 feet	Pole
								Quaking Aspen	Trace	>20 feet	Pole
								Honeysuckle (spp.)	Trace	5 - 10 feet	Tall Shrub
								Bigtooth Aspen	Low	>20 feet	Pole
								Pin Cherry	Trace	5 - 10 feet	Tall Shrub
								White Oak	Low	Variable	Sapling
								Black Cherry	Medium	>20 feet	Pole
								Juniper	Trace	< 5 feet	Tall Shrub
Little Bluestem	Medium	Unspecified	Non-Wood								
White Pine	Medium	Variable	Sapling								
87	3303 - Mixed Low Density Trees	Nonstocked	1.3	0	Unspecified	No	Old campsite, looped two track. Consistent red maple (P/S/L), red oak (P/L/S), and white pine (S/P/L) across the stand. (White oak is Log/Sap.)				
								Sub-Canopy Species	Density	Avg. Height	Size
								Red Oak	Medium	>20 feet	Pole
								Bracken Fern	Low	Unspecified	Non-Wood
								Red Pine	Trace	5 - 10 feet	Sapling
								Bigtooth Aspen	Trace	>20 feet	Pole
								White Pine	Medium	Variable	Sapling
								Red Maple	Medium	>20 feet	Pole
								Black Cherry	Trace	Variable	Pole
								Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub
								White Oak	Trace	Variable	Log
								Little Bluestem	Trace	Unspecified	Non-Wood
								Pin Cherry	Trace	Variable	Tall Shrub
								Sweet Fern	Medium	< 5 feet	Tall Shrub
88	3103 - Rubus-Fern	Nonstocked	1.3		Unspecified	No	Good potential to become a scramble area through ORV misuse. Some degradation occurring. Trace hardwood encroaching on edges. Queen Ann's Lace present.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Bracken Fern	Low	Unspecified	Non-Wood
								Blackberry/Raspberry	High	< 5 feet	Tall Shrub
								Little Bluestem	Trace	Unspecified	Non-Wood
								Spotted Knapweed	Medium	Unspecified	Non-Wood



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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89 4110 - Sugar Maple Association Sawtimber Well 36.9 100 51-80 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	44	Log/Pole	10	100	White Pine	Low	Variable	Sapling
Bigtooth Aspen	5	Log	14		Basswood	Trace	< 5 feet	Seeding
Beech	5	Log/Pole	12		Black Cherry	Trace	< 5 feet	Sapling
Quaking Aspen	2	Log	14		Striped Maple	Trace	Variable	Sapling
White Pine	1	Log/Pole	14		Beech	Full	10 - 20 feet	Sapling
Red Maple	1	Pole	8		White Pine	Trace	>20 feet	Pole
Basswood	42	Log/Pole	12		Ironwood	High	Variable	Sapling
					Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
					Balsam Fir	Trace	Variable	Sapling

Trace balsam fir and elm in the canopy. Rare hemlock, autumn olive, white ash in the subcanopy. Prolific beech brush; BBD is an issue (roughly 50% mortality in beech). Trace raspberry still in skid trails. Basal area in the wake of EAB and BBD is 50-100, averaging 78.

90 6124 - Lowland Spruce-Fir Poletimber Medium 8.7 81 51-80 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Tamarack	15	Pole/Log/Sap	7		Willow spp.	Trace	Variable	Tall Shrub
Paper Birch	1	Sapling/Pole	4		Tamarack	Trace	Variable	Sapling
Quaking Aspen	2	Log/Pole/XLog	12		Red Osier Dogwood	Trace	< 5 feet	Tall Shrub
Black Spruce	40	Pole/Sap/Log	6	81	Balsam Fir	Low	Variable	Sapling
Balsam Fir	13	Pole/Sap/Log	7	81	Black Spruce	Trace	Variable	Sapling
Balsam Poplar	1	Pole/Log/Sap	7		Northern White Cedar	Low	< 5 feet	Seeding
Northern White Cedar	25	Pole/Sap/Log	8		Green Ash	Trace	Variable	Sapling
Red Maple	3	Pole/Log/Sap	6		Tag Alder	Low	Variable	Tall Shrub
					Alder Leaved Buckthorn	Trace	< 5 feet	Tall Shrub
					Cattail spp.	Trace	Unspecified	Non-Wood
					Swamp Black Currant	Trace	< 5 feet	Tall Shrub
					Sphagnum Moss	Medium	Unspecified	Non-Wood

EAB has come and gone. Trace elm, yellow birch, sugar maple in canopy. Rare blueberry, beech, hemlock in subcanopy. Bedstraw, swamp thistle, shinleaf, bunchberry, greenbrier, nightshade, beedlily, leatherleaf, yew present. Flowing water with undefined channel through floating mats through the south, becomes defined in the north with an inundated lowland around it. Pockets of higher density larch. Northern most tip is slightly less wet with quaking aspen, balsam fir, red maple, basswood, sugar maple. The majority of the paper birch is here. One white pine on north edge. Little bit of brooming in the spruce in the west. Areas with higher density larch have smaller diameter cedar and decent larch/cedar regen.

91 3104 - Degraded Nonstocked 2.5 Unspecified No

Sub-Canopy Species	Density	Avg. Height	Size
Ironwood	Trace	10 - 20 feet	Sapling
Black Cherry	Trace	>20 feet	Pole
White Pine	Trace	5 - 10 feet	Sapling
Sugar Maple	Trace	Variable	Sapling
Spotted Knapweed	High	Unspecified	Non-Wood

Not yet full knapweed, but getting there. Mullein, goldenrod, milkweed present. Trees are growing together in small clumps. Cherry is pole/sap/log.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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92 4130 - Aspen Poletimber Well 25.5 26 Unspecified N/A

Canopy Species	% Cover	Size Class	DBH	Age
Balsam Poplar	10	Pole/Sapling	6	
American Elm	1	Sapling/Pole	4	
Black Cherry	1	Pole/Sapling	6	
Bigtooth Aspen	60	Pole/Sapling	6	26
Quaking Aspen	20	Sapling/Pole	4	
Pin Cherry	1	Pole/Sapling	5	
Paper Birch	1	Sapling/Pole	3	
Red Maple	5	Pole/Sapling	5	
Balsam Fir	1	Pole/Sap/Log	8	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Medium	< 5 feet	Seeding
Pin Cherry	Trace	>20 feet	Sapling
Sugar Maple	Medium	Variable	Sapling
Black Cherry	Trace	Variable	Sapling
Striped Maple	Low	Variable	Sapling
Red Maple	Low	Variable	Sapling
Witch Hazel	Trace	5 - 10 feet	Tall Shrub
White Ash	Low	Variable	Sapling
Ironwood	Low	Variable	Sapling
Beech	Medium	Variable	Sapling
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub
Red Oak	Trace	Variable	Sapling
Balsam Fir	Low	Variable	Sapling

CHECK CUTTING RECORD
Stand is still very heavily stocked with saplings. A couple pockets of bigtooth are developing into logs. Trace white ash, hemlock, white pine, yellow birch, and red oak in canopy. Rare occurrences of dogwood, white pine, basswood, and spruce (white and black) in subcanopy. Furthest east island is dominated by pole bta with beech/fir/ash-dominated subcanopy; middle island is 70% bta, 28% quaking, 2% cherry/birch/other in canopy, subcanopy of red maple >20', scattered beech, ironwood, sugar maple, balsam fir, striped maple, and maple leaved viburnum. West island is rather variable, upland with lowland, dominated by bigtooth but has a good mix of quaking and bam; includes trace white pine, cherry, and paper birch.. Southernmost tip includes yellow birch and hemlock. Seeps, drainages in west island. Wet areas contain more bam, also a mix of lowland associates: elm, willow, viburnum, trace cattails.

93 42110 - Planted Red Pine Sawtimber Medium 8.2 67 111-140 N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Pine	100	Log/Pole	13	67

Sub-Canopy Species	Density	Avg. Height	Size
Ironwood	Trace	Variable	Sapling
White Oak	Medium	Variable	Sapling
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Striped Maple	Trace	Variable	Sapling
Sugar Maple	Medium	Variable	Sapling
White Pine	Trace	Variable	Sapling
Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
Red Oak	Trace	Variable	Sapling
Red Pine	Low	Variable	Sapling
Beech	Medium	Variable	Sapling
Jack Pine	Medium	5 - 10 feet	Sapling
Red Maple	Low	Variable	Sapling

Thinned in 2007, Paltry Pine (52-113-04). Current BA is 123. This would be a good candidate for an overstory removal and/or seed tree. Highly diverse and desirable subcanopy featuring deciduous and coniferous species. Rare bracken fern in the south. Striped maple is mostly confined to the north/northwest.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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94	4130 - Aspen	Poletimber Well	6.3	28	Unspecified	N/A	<p>Trace white spruce, beech, black cherry, quaking aspen, and hemlock in the canopy. Rare serviceberry, pin cherry in the subcanopy. Helleborine, wintergreen, one red oak seedling present. There's a slight curvature to the west stand boundary with a sliver of log/pole bigtooth that wasn't harvested (probably some uncertainty in the property boundary and erred on the side of caution).</p> <p>A few small pockets of excellent hardwood regeneration, sugar maple (2" dbh) and red maple (3" dbh). A couple more open pockets with bracken, scattered maple, cherry, pine, especially in the south-center.</p> <p>Located a 1" PVC pipe in the ground in the north-central part of the stand.</p>				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Sugar Maple		2	Sapling	2		Ironwood		Low	Variable	Sapling	
White Pine		10	Log/Pole/XLog	16		Sugar Maple		Medium	< 5 feet	Seeding	
Red Maple		4	Sapling/Pole	4		Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
Bigtooth Aspen		84	Pole/Sapling	6	28	Red Maple		Low	>20 feet	Sapling	
						Black Cherry		Trace	Variable	Sapling	
						Beech		Medium	Variable	Sapling	
						Balsam Fir		Trace	Variable	Sapling	
						White Pine		Trace	Variable	Sapling	
						Bracken Fern		Low	Unspecified	Non-Wood	
						Sugar Maple		Low	Variable	Sapling	

95	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	55.9	100	81-110	N/A	<p>MiFI is deceptive with two oak cohorts. The Xlog/log class account for maybe 20% of the canopy; 15% is in the pole/log class, half the age. Pin and red oak across the site.</p> <p>Trace quaking aspen, sugar maple in canopy. Rare sugar maple, hemlock in subcanopy. White pine subcanopy is inconsistent. A couple jack pine snags.</p> <p>Two oak cohorts, 100+ YO and 48 year old. Some better hardwood soil in the north-central portion of the stand: ironwood, paper birch, red and sugar maple, trace beech (oak is still dominant). It's still rubicon, but there's a local influence making it more hospitable to hardwood.</p> <p>There is a LOT of deer activity in this stand. As such, the subcanopy is rather simplified; most deciduous species are browsed and held at <6' with scattered red maple saplings achieving 10 or more feet.</p>				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Oak		36	Log/XLog/Pole	16	100	White Oak		Trace	< 5 feet	Sapling	
White Oak		2	Log/Pole/XLog	12		Bracken Fern		Low	Unspecified	Non-Wood	
Bigtooth Aspen		27	Pole/Sap/Log	8	48	Red Maple		Low	Variable	Sapling	
White Pine		15	Log/Pole/XLog	16		White Pine		Medium	Variable	Sapling	
Paper Birch		1	Pole/Sap/Log	8		Sweet Fern		Trace	< 5 feet	Tall Shrub	
Red Pine		5	Log/Pole/XLog	16		Red Oak		Low	< 5 feet	Sapling	
Red Maple		14	Pole/Sapling	6		Hemlock		Trace	>20 feet	Pole	
						Witch Hazel		Low	5 - 10 feet	Tall Shrub	
						Red Pine		Trace	Variable	Sapling	
						Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
						Beech		Trace	< 5 feet	Sapling	
						Balsam Fir		Trace	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
96	4111 - S.Maple, Hard Mast Association	Sawtimber Well	97.9	100	51-80	N/A	<p>Thinned in 2008. Current BA is 88. Trace white pine (in SW, mostly), hemlock (in south), balsam fir, and black cherry in canopy. Rare autumn olive, white spruce, elderberry, maple leaved viburnum, and white oak in subcanopy. Trace red pine saps on road edges and disturbed edges in sun. Trace Xlog sugar maple. Lower quality hardwood in the south; west is pretty decent quality. Full beech brush across most of the stand. More pine, raspberry in skid trails, but still beech dominated. Approximately 25% beech mortality from BBD. EAB has devastated the ash with very few saplings surviving in the subcanopy. Subcanopy hemlock present in pole/sap/log.</p> <p>Drainage and potential for vernal pools in the southwest. Hemlock increases here. One cedar present.</p> <p>A large stand and therefore a lot of variability in canopy and subcanopy composition (though beech brush is fairly consistent, save one half-acre pocket of ironwood). There are a few interesting pockets with an increase in species richness and varying degrees of quality hardwood.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Sugar Maple	50	Log/Pole	10	100	Ironwood	Medium		Variable	Sapling
Red Maple	10	Pole/Log	8		Hemlock	Low		>20 feet	Pole
Basswood	15	Log/Pole/XLog	12		White Ash	Trace		Variable	Sapling
Quaking Aspen	1	Log/Pole	12		American Elm	Trace		< 5 feet	Sapling
Beech	15	Log/Pole/XLog	12	100	Sugar Maple	Low		Variable	Sapling
Bigtooth Aspen	8	Log/Pole/XLog	14		Red Oak	Trace		< 5 feet	Seeding
Red Oak	1	Log/Pole	12		Basswood	Low		< 5 feet	Seeding
					Balsam Fir	Low		Variable	Sapling
					Beech	Full		5 - 10 feet	Sapling
					White Pine	Low		Variable	Sapling
					Blackberry/Raspberry	Trace		< 5 feet	Tall Shrub
					Red Pine	Trace		< 5 feet	Seeding
					Sugar Maple	Medium	< 5 feet	Seeding	
					Striped Maple	Trace	Variable	Sapling	
97	42110 - Planted Red Pine	Sawtimber Well	5.0	67	171-200	N/A	<p>One apple tree present.</p> <p>Stand is being divided into two separate stands with a significant difference in diameters and basal area. North half (stand 99) has an average dbh of 14" and 130 BA with a fully stocked subcanopy. South half (new stand 97) has an average dbh of 10" and 200 BA with a highly stocked subcanopy.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	100	Log/Pole	10	67	Ironwood	Low		5 - 10 feet	Sapling
					Beech	High		Variable	Sapling
					Balsam Fir	Medium		Variable	Sapling
					Sugar Maple	Low		Variable	Sapling
					Red Maple	Low	Variable	Sapling	
98	4131 - Aspen, Oak	Poletimber Well	52.9	48	51-80	N/A	<p>BAs are between classes, lingering in the 70-80 range, but creeping into the next class. Rare red pine, beech, white spruce, black cherry in subcanopy. Fun arcing ridge/half bowl in the center of the stand - glacial influence? Large rock present. Two cohorts of oak: 5% Pole/sap/log (48 years old) and 25% Xlog/log (105 years old) represented in the same account. Same for white oak: 2% pole/sap, 2% Xlog/log.</p> <p>Fairly sparse subcanopy; very little between 5-20. A lot of deer present. The natural direction of the stand would be a pine/oak mix with red maple and a simplified subcanopy. Gypsy moth eggs especially heavy on white oak. East half of stand is closer to log sized than the west. Medium to high stocking of witch hazel in the east half.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	1	Log/Pole	12		Wintergreen	Low		< 5 feet	Tall Shrub
Red Maple	10	Pole/Sapling	6		Red Oak	Trace		Variable	Sapling
White Oak	4	Pole/Sap/Log	6		Red Maple	Trace		< 5 feet	Sapling
Bigtooth Aspen	50	Pole/Sap/Log	7	48	Bracken Fern	Low		Unspecified	Non-Wood
White Pine	5	Log/Pole/XLog	14		Witch Hazel	Low		Variable	Tall Shrub
Red Oak	30	XLog/Log/Pole	18	105	White Pine	Low		Variable	Sapling
					Blueberry/Bilberry/Cranberry	Medium		< 5 feet	Tall Shrub
					White Oak	Trace		>20 feet	Sapling
					Balsam Fir	Low		Variable	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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99	42110 - Planted Red Pine	Sawtimber Well	9.7	67	111-140	N/A	Rather advanced beech subcanopy will be a challenge to manage. Rare white pine in the subcanopy. Stand is being divided into two separate stands with a significant difference in diameters and basal area. North half (stand 99) has an average dbh of 14" and 130 BA with a fully stocked subcanopy. South half (new stand 97) has an average dbh of 10" and 200 BA with a highly stocked subcanopy.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		100	Log/Pole	14	67	Jack Pine		Trace	< 5 feet	Sapling	
						Red Pine		Trace	>20 feet	Sapling	
						White Oak		Trace	Variable	Sapling	
						Black Cherry		Trace	Variable	Sapling	
						Balsam Fir		Low	Variable	Sapling	
						Red Maple		Low	5 - 10 feet	Sapling	
						Sugar Maple		Low	Variable	Sapling	
						Ironwood		Trace	5 - 10 feet	Sapling	
						Beech		Full	10 - 20 feet	Sapling	
						Striped Maple		Trace	Variable	Sapling	

100	3103 - Rubus-Fern	Nonstocked	0.2	0	Unspecified		Maintained above ground utility lines. One red oak, one serviceberry, one beech, <5'.
Sub-Canopy Species		Density	Avg. Height	Size			
Quaking Aspen		Trace	< 5 feet	Sapling			
Red Pine		Trace	< 5 feet	Sapling			
Northern White Cedar		Trace	< 5 feet	Sapling			
Autumn Olive		Trace	< 5 feet	Tall Shrub			
Balsam Fir		High	< 5 feet	Sapling			
Bracken Fern		Full	Unspecified	Non-Wood			

101	42110 - Planted Red Pine	Sawtimber Well	11.0	60	141-170	N/A	Trace white pine, red maple, red oak in canopy. Rare striped maple, maple leaved viburnum, elm, white ash in subcanopy. Variable BAs in red pine are due in large part to hardwood inclusion within stand. Current BA averages 155. Basswood seedlings most prevalent in far northwest tip. White pine saps increase in southwest. Sugar maple saplings <5' also present.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Basswood		2	Log	14		Sugar Maple		Medium	10 - 20 feet	Sapling	
Quaking Aspen		3	Log/Pole	12		Basswood		Low	< 5 feet	Seeding	
Red Pine		88	Log/Pole	11	60	Red Oak		Trace	< 5 feet	Sapling	
Ironwood		1	Pole/Log	8		White Oak		Trace	< 5 feet	Sapling	
Black Cherry		1	Pole/Log/Sap	6		White Pine		Trace	< 5 feet	Sapling	
Sugar Maple		5	Log/Pole/XLog	14		Ironwood		Trace	Variable	Sapling	
						Red Maple		Low	Variable	Sapling	
						Serviceberry (Juneberry)		Low	< 5 feet	Tall Shrub	
						Beech		High	10 - 20 feet	Sapling	
						Balsam Fir		Low	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																															
102	42110 - Planted Red Pine	Poletimber Well	2.9	63	81-110	N/A	Third row thinned in fall of 2018. Lower BAs: 70, 100, 90. Trace bigtooth (pole).																																																																															
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103	4125 - Black, N. Pin Oak	Sawtimber Well	54.3	105	81-110	N/A	Two distinct cohorts: Xlog/log oak (white and pin/red) at 35 BA (0-90 range) and scattered log bigtooth making up one cohort. Pole/sap/log red maple (10-30 BA, consistent) and scattered pole/sap aspen clones make up the second cohort. Inconsistent red and white pine in the canopy. Rare black cherry and white spruce in the subcanopy. Aspen is 15% 12" log and 5% 6" pole/sap, 20% total canopy occupancy. North half of stand has rather poor quality aspen and red maple and appears to be better suited for an oak/pine savanna. Aspen and red maple are slightly better quality in the south half, but not much. Slow growing, nutrient poor site. White oak stems are few per acre, but the crowns are large.																																																																															
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104	4131 - Aspen, Oak	Sapling Medium	25.8	6	Immature	N/A	Oak and red maple are in the 2-6' range, suppressed by browsing; much of the oak that could be canopy is <3' again because of browse. Aspen is 8-15'. Galls on oak. Good response from oak following the clearcut, but browsing is excessive and inhibiting the regeneration of a desirable, quality stand. Residual oak across the stand is log/pole/Xlog, but couldn't represent it as such with MiFI limitations. Retention pocket in the middle is RO (L/P/X), BTA (L/P), RM (P/L/S); subcanopy of witch hazel, red maple, white pine, and trace balsam fir.																																																																															
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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105 330 - Low-Density Trees Nonstocked 4.1 Unspecified No Variable size classes on all trees within stand. Stand is close to 50% forested, dominated by white pine, red pine, and red oak. Edges bermed.

Sub-Canopy Species	Density	Avg. Height	Size
Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub
Bracken Fern	Medium	Unspecified	Non-Wood
Red Oak	Low	< 5 feet	Sapling
Red Pine	Medium	>20 feet	Pole
Sweet Fern	High	< 5 feet	Tall Shrub
Black Cherry	Medium	>20 feet	Pole
White Pine	High	Variable	Sapling
Red Oak	Low	>20 feet	Log

106 42110 - Planted Red Pine Poletimber Well 32.8 63 111-140 N/A Last thinned in 2004. Trace quaking aspen, white oak in canopy. Rare balsam fir, black cherry serviceberry, white pine in subcanopy. Some pockets of very dense oak regeneration. Some barren spots within the stand from roads. Blueberry is patchy. Trace sweet fern along roads.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	1	Log	12	
Red Maple	3	Pole/Log	8	
Red Pine	95	Pole/Log	9	63
Red Oak	1	XLog/Log	18	

Sub-Canopy Species	Density	Avg. Height	Size
Blueberry/Bilberry/Cranberry	High	< 5 feet	Tall Shrub
Red Maple	Medium	Variable	Sapling
Beech	Trace	5 - 10 feet	Sapling
White Oak	Low	5 - 10 feet	Sapling
White Pine	Low	Variable	Sapling
Wintergreen	Trace	< 5 feet	Tall Shrub
Bracken Fern	Medium	Unspecified	Non-Wood
Red Oak	High	Variable	Sapling
Red Pine	Low	Variable	Sapling

107 4130 - Aspen Sapling Well 17.0 3 Immature N/A PU2 Tree Horn Aspen, 52-121-14, cut in 2018 by Precision. The harvested portion of this stand is all upland. The retention encompassing the western edge includes a wet drainage, flowing south. Retention meets criteria to be mapped as its own stand, now stand 120. Stand occupies a gentle slope, generally south-facing but slightly undulating and with a small ridge running n-s through the center of the stand. Trace red pine saps in the skid trails. A surprising lack of cherry.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	45	Sapling	1	3
Red Maple	1	Sapling	1	
Balsam Fir	1	Sapling	1	
Quaking Aspen	53	Sapling	1	3

Sub-Canopy Species	Density	Avg. Height	Size
Bracken Fern	Low	Unspecified	Non-Wood
Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub
Ironwood	Low	Variable	Sapling
Balsam Fir	Low	Variable	Sapling
Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
Striped Maple	Trace	< 5 feet	Sapling
Witch Hazel	Trace	< 5 feet	Tall Shrub
Red Maple	Medium	Variable	Sapling
Sugar Maple	Low	< 5 feet	Sapling
Red Oak	Trace	< 5 feet	Sapling
White Pine	Trace	< 5 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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108 6112 - Lowland Aspen Sapling Poor 6.1 28 Unspecified N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	2	Sapling	2		Cattail spp.	Medium	< 5 feet	Non-Wood
Quaking Aspen	35	Sapling/Pole	2	28	Willow spp.	High	Variable	Tall Shrub
Green Ash	1	Sapling	2		Balsam Fir	Low	Variable	Sapling
Willow spp.	25	Sapling	1		Northern White Cedar	Trace	Variable	Sapling
Balsam Poplar	33	Sapling/Pole	2		Green Ash	Trace	Variable	Sapling
American Elm	1	Sapling	3		Beech	Trace	Variable	Sapling
Balsam Fir	2	Sapling	1					
Red Maple	1	Sapling	2					

Formerly part of parent stand 92, separated in 2021. One occurrence of sheep laurel (*Kalmia angustifolia*). Rare bulrush and larch in teh subcanopy. Trace yellow birch, spruce in the canopy. Northwest contains a pocket of log red maple, white cedar, yellow birch, basswood transitioning into the adjacent Q-type. Larger diameters and much higher density here. Hemlock saplings on the south edge of the stand on boarder of private property. A mat of liverwort just across the boundary, too. Swamp thistle and Pyrola, rare.

109 4310 - Pine, Oak Mix Poletimber Well 14.4 63 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	2	Log/Pole	12		Red Maple	Medium	Variable	Sapling
Red Maple	13	Pole/Log	8		White Oak	Medium	Variable	Sapling
White Pine	45	Pole/Log	8	63	Beech	Trace	Variable	Sapling
Bigtooth Aspen	10	Pole/Log/Sap	6		Bracken Fern	Low	Unspecified	Non-Wood
White Oak	15	XLog/Log/Pole	18		Red Oak	High	Variable	Sapling
Red Oak	15	Log/Pole/XLog	14		White Pine	Low	5 - 10 feet	Sapling
					Blueberry/Bilberry/Cranberry	High	< 5 feet	Tall Shrub

Current BA is 92. Many multi-stemmed red maple. Rare witch hazel (in northwest only), balsam fir in subcanopy. Some very impressive white and red oak. Red pine is mostly confined to north where some red pine plantation rows dip into this stand.

110 42110 - Planted Red Pine Poletimber Well 11.7 63 141-170 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	95	Pole/Log/Sap	9	63	White Pine	Low	Variable	Sapling
Red Maple	4	Pole/Log	8		Red Maple	Low	5 - 10 feet	Sapling
Red Oak	1	XLog	20		Beech	Trace	Variable	Sapling
					Black Cherry	Trace	5 - 10 feet	Sapling
					White Oak	Medium	Variable	Sapling
					Witch Hazel	Trace	5 - 10 feet	Tall Shrub
					Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub
					Sweet Fern	Trace	< 5 feet	Tall Shrub
					Black Cherry	Trace	>20 feet	Pole
					Red Oak	Medium	Variable	Sapling
					Juniper	Trace	< 5 feet	Tall Shrub

BAs range 120-220, 170 average. Stand is coming into log class, just not quite there yet. Much heavier red maple component to acreage on the east side of Webb Road. Trace white pine in canopy.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
111	4130 - Aspen	Sapling Medium	14.5	2	Immature	N/A	Stand cut 10/2019. (52-115-14-01 Bob the Builder Mix) Canopy red maple are barely considered canopy (>3') and are very heavily browsed. Very few oak above browse height. Both RM and RO are very shrubby with a bleak outlook for survivability. Trace balsam fir and pin cherry in the north. Trace residual red maple (6" Pole/Log).			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
White Pine	1	XLog	18			Pin Cherry	Trace	< 5 feet	Sapling	
Red Pine	3	Sapling/Pole	2			Red Maple	Low	< 5 feet	Sapling	
Red Maple	5	Sapling	1			Blackberry/Raspberry	Trace	< 5 feet	Tall Shrub	
White Pine	5	Sapling	2			Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub	
Red Oak	1	Sapling	1			Bracken Fern	High	Unspecified	Non-Wood	
Red Oak	1	XLog	18			White Oak	Low	< 5 feet	Sapling	
Bigtooth Aspen	84	Sapling	1	2		Red Oak	Medium	< 5 feet	Sapling	
112	4130 - Aspen	Poletimber Well	25.7	56	81-110	N/A	Two cohorts of oak: 12% 16" L/X, 2% 7" P/S. Trace balsam fir and white oak (pole) in canopy. Trace black cherry (shrubby, 5-10') in the south. BAs range 30-150, averaging 90 (~66BA bta, 10BA WP, 9BA RO, 5BA RM). Heavily browsed oak, maple in subcanopy. One white oak sapling in midcanopy. Bigtooth is still sapling sized under dense oak. Trace red pine in north. Fewer and smaller diameter white pine south of road; oak too. Larger diameters on bigtooth south of road; more consistent.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Bigtooth Aspen	75	Pole/Sap/Log	7	56		White Pine	Medium	Variable	Sapling	
Red Oak	14	Log/XLog/Pole	16	96		Wintergreen	Trace	< 5 feet	Tall Shrub	
White Pine	5	XLog/Log/Pole	18			Red Oak	Medium	Variable	Sapling	
Red Pine	1	Log	14			Bracken Fern	High	Unspecified	Non-Wood	
Red Maple	5	Pole/Sap/Log	6			Blueberry/Bilberry/Cranberry	Medium	< 5 feet	Tall Shrub	
						Red Maple	High	Variable	Sapling	
						Red Pine	Trace	5 - 10 feet	Sapling	
						Balsam Fir	Trace	>20 feet	Sapling	
						White Oak	Trace	Variable	Sapling	
113	4133 - Aspen, Mixed Pine	Sapling Well	12.7	5	Immature	N/A	Trace red oak saplings making it above browse height; red maple sprouts are reduced to shrubs in the subcanopy. Trace residual red maple (sap/pole) and white oak (sapling) - advanced regen unharvested from parent stand. Rare bulrush, wild raisin, black spruce, alder, larch in subcanopy - there's a slight dampness on the east edge where these are located. Decent oak subcanopy under densest white pine, pre-existing (not a response to recent harvest). Aspen regeneration is pretty good despite browsing pressure. Residual white pine is present in Pole/Sap/Log/Xlog. Red oak is Log/Xlog/Pole/Sap. North tip is dominated by oak and red maple saplings, all heavily browsed. Stand composition does not include acreage south of the fence (approx. 2.5 acres of mature bigtooth red pine, white pine, quaking aspen, oak).			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak	5	Log/XLog/Pole	16			White Oak	Low	Variable	Sapling	
White Oak	1	Sapling/Pole	1			Bracken Fern	High	Unspecified	Non-Wood	
White Pine	20	Pole/Sap/Log	8	64		Red Oak	Medium	Variable	Sapling	
Bigtooth Aspen	64	Sapling	1	5		Blueberry/Bilberry/Cranberry	Low	< 5 feet	Tall Shrub	
Red Maple	5	Sapling	1			White Pine	Low	Variable	Sapling	
Quaking Aspen	5	Sapling	1			Red Maple	Low	< 5 feet	Tall Shrub	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																													
114	42101 - Planted White Pine, Mixed Deciduous	Poletimber Well	7.5	63	81-110	N/A	Trace black cherry, scotch pine in canopy (scotch pine in the east-center of stand). Rare sweet fern (trace under oak, some near the road). Old stumps; gentle south- and east-facing slopes, slight undulation; steepest in north. White pine is not highly productive on this site but is nursing along rather nice oak, though there's a lot of browsing pressure. Trace Xlog white pine in northwest. BAs range 70-120, averaging 93.																																																																													
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115	6122 - Black Spruce	Sawtimber Medium	3.0	95	81-110	N/A	Private fence through southern portion of stand; no corners indicating ownership. There's a small upland knob in the center of the stand occupied by white pine, balsam fir, white oak, black spruce, red oak, and quaking aspen. Some blowdown on inside the southwestern edge with QA saplings and black spruce seedlings responding. South arc is heavy to Xlog white pine.																																																																													
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116	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	4.7	72	111-140	N/A	Stand origin/age is representative of the cedar/aspen/hardwood components. Balsam fir is much more uneven-aged, having gradually seeded in, filling in the gaps. Trace balsam poplar, bigtooth aspen, and red oak. Rare cedar, alder, larch in the subcanopy. Northeast long leg of stand is transitional, mostly upland dropping into lowland on the west edge and in the south; fairly diverse: larch, balsam fir, red oak, red maple, quaking aspen. Southwest portion of stand is consistently wet with flowing water; dominated by cedar, balsam fir with larch and quaking aspen. An old road bed runs E-W, overgrown and very wet. Elk tracks across road bed.																																																																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
117	4119 - Mixed Northern Hardwoods	Poletimber Medium	1.8	81	51-80	N/A	This stand is a transition zone, a small rise in topography between lowlands. Trace larch, serviceberry (one pole, one log - seriously) in the canopy.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	White Pine	2	XLog	18		Michigan Holly	Trace	5 - 10 feet	Tall Shrub
	Red Maple	75	Pole/Log/Sap	8	81	Balsam Fir	Medium	Variable	Sapling
	Quaking Aspen	8	Log/XLog	14		Red Oak	Low	< 5 feet	Sapling
	Balsam Fir	5	Pole/Log/Sap	7		Red Maple	Medium	Variable	Sapling
	Black Cherry	4	Pole/Log/Sap	7		Wild Raisin	Trace	5 - 10 feet	Tall Shrub
	White Oak	1	Pole	8		Blueberry/Bilberry/Cranberry	Low	< 5 feet	Tall Shrub
	Paper Birch	5	Log	10		Beech	Low	Variable	Sapling
						Serviceberry (Juneberry)	Trace	Variable	Sapling
118	42330 - Upland Fir	Poletimber Well	7.6	38	81-110	N/A	Red maple is actually pole/log/Xlog, 6" ave dbh. Trace basswood, sugar maple, larch, red pine in canopy. One hemlock. Rare dogwood, larch, cedar, spruce in subcanopy. A couple yellow birch snags. Grouse and deer present. Beaver damage in areas. In general, this is an upland balsam fir stand with an inclusion of lowland and transitional conifer (pine, spruce, cedar, fir) with red maple, quaking aspen, and occasionally paper birch and sugar maple mixed throughout. White pine is generally pole-sized when interspersed with the balsam fir, but more prominently log/xlog on perimeter. South leg is lowland except on the west edge as the slope begins to rise; white cedar, spruce, fir dominated. Old railroad grade goes N-S through the stand. East "V" tip becomes upland (high ridge above the old RR grade) dominated by pole balsam fir with sap/pole red maple, quaking aspen, trace log sugar maple and xlog white pine. To the west becomes nearly pure balsam fir. No signs of SBW or BWA mortality. Jumping north across the drainage, the long piece is still balsam fir dominated but with a better mix of red maple and quaking aspen (sap/pole). The furthest north triangular wedge piece is more QA and paper birch dominated with pole/sap/log balsam fir and pole/log cedar. Trace beech, maple leaved viburnum, and white pine in subcanopy (in north).		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	Paper Birch	3	Log/Pole/Sap	10		Red Oak	Trace	Variable	Sapling
	Northern White Cedar	8	Log/Pole/XLog	10		Black Cherry	Trace	Variable	Tall Shrub
	Quaking Aspen	5	Log/XLog/Pole	16		Balsam Fir	Medium	Variable	Sapling
	Balsam Fir	68	Pole/Sap/Log	7	38	Alder	Trace	Variable	Tall Shrub
	White Pine	10	Log/XLog/Pole	14					
	White Spruce	2	Log/XLog/Pole	14					
	Red Maple	4	Pole/Log/Sap	6					
119	42200 - Natural White Pine	Sapling Medium	1.6	17	Unspecified	N/A	Beaver-guided conifer stand. Beaver have removed most deciduous competition (namely, aspen). Stand's west edge is occupied by pole/log balsam fir, white pine, bigtooth aspen on a west-facing slope into the adjacent flooding. Trace paper birch. Beech, red oak, balsam fir dominate the subcanopy on this edge.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
	Red Pine	3	Sapling/Pole	3		Balsam Fir	Low	< 5 feet	Sapling
	Bigtooth Aspen	15	Sapling	1	17	White Oak	Trace	< 5 feet	Sapling
	White Pine	60	Sapling/Pole	2	17	Red Oak	Low	< 5 feet	Sapling
	Balsam Fir	13	Sapling/Pole	2		White Pine	Low	< 5 feet	Sapling
	Red Maple	3	Sapling	1		Bracken Fern	High	Unspecified	Non-Wood
	Black Cherry	5	Sapling	1		Wintergreen	Low	< 5 feet	Tall Shrub
	Red Oak	1	Sapling	1					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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120 4191 - Mixed Upland Deciduous with Conifer Sawtimber Well 3.6 72 81-110 N/A

STAND 120 IS LONG TERM RETENTION FOR PARENT STAND 107. The retention encompassing the western edge includes a wet drainage, flowing south. Stand is a riparian zone, a south-running wet drainage with moderate to steep slopes dropping into the drainage. Trace red oak on hillside. Trace sugar maple present in north tip of stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	2	Log	16		Beech	Low	Variable	Sapling
Quaking Aspen	25	Log/Pole/XLog	14	72	Balsam Fir	High	Variable	Sapling
Red Maple	40	Log/Pole	14	72	Hemlock	Trace	>20 feet	Pole
Balsam Fir	17	Pole/Log/Sap	8		Maple Leaved Viburnum	Trace	< 5 feet	Tall Shrub
Northern White Cedar	10	Pole/Log	8		Red Maple	Low	Variable	Sapling
Black Spruce	5	Log/Pole	12		Blueberry/Bilberry/Cranberry	Low	< 5 feet	Tall Shrub

121 42110 - Planted Red Pine Sawtimber Well 1.8 66 171-200 N/A

Scattered natural white pine amongst the planted red pine. Average BA = 175. Trace black cherry, red maple, balsam fir in canopy. Rare white oak in subcanopy. Some browse issues along a game trail running N-S through center of stand, otherwise very nice advanced hardwood (SM, RO) regeneration. West edge is white pine transitioning into adjacent lowland white pine stand bog.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	90	Log/Pole	11	66	Serviceberry (Juneberry)	Trace	< 5 feet	Sapling
White Pine	10	Log/XLog/Pole	16		Red Oak	Low	Variable	Sapling
					Sugar Maple	Full	10 - 20 feet	Sapling
					Beech	Medium	Variable	Sapling
					Red Maple	Medium	Variable	Sapling
					Balsam Fir	Low	Variable	Sapling

122 6132 - Mixed Lowland Forest with Cedar Sawtimber Well 6.7 95 111-140 N/A

BAs are variable, 80-170, averaging somewhere around 110/120, but BAs are either around 80 or 140, without a lot in the middle. Trace black spruce, larch, sugar maple in canopy. Rare yellow birch, blueberry, sugar maple in subcanopy. White pine is Xlog/log. This is a transitional stand between upland and lowland. Some rather soggy spots; some seeps. Bunchberry, Pyrola, nightshade present; trace hemlock seedlings under mature hemlock. North half is wetter, cedar dominated with red maple, paper birch, and aspen; 100% canopy closure. Small upland inclusion in northeast with QA, PB, SM, EL, WC. South half is more red maple dominated, 50-75% canopy closure, with a fairly full mid- and sub-canopy of balsam fir. Cedar is consist in clumps. Spruce, quaking aspen, and birch are scattered.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	10	Pole/Log	8		Northern White Cedar	Trace	>20 feet	Sapling
Quaking Aspen	5	XLog/Log	20		Black Spruce	Trace	< 5 feet	Sapling
Paper Birch	2	Log/Pole	12		Red Maple	Trace	Variable	Sapling
Yellow Birch	1	Log/Pole	14		White Spruce	Trace	>20 feet	Sapling
Northern White Cedar	35	Log/Pole/XLog	10	95	Balsam Fir	High	Variable	Sapling
White Spruce	2	Log/Pole	12					
Hemlock	1	Log/XLog/Pole	12					
White Pine	3	XLog	36	150				
Red Maple	41	Log/Pole/XLog	16	95				

123 6220 - Alder/willow Nonstocked 1.6 Unspecified No

Larch present in sap/pole. Scattered dead cedar. Old stumps. Channel through stand: tributary to the Little Pigeon River. Old beaver activity. Cattails take over in far east in beaver flooding. West of Utility Line has a higher density of trees but is still alder/willow dominated. Trace Equisetum. One red osier dogwood, one white pine on perimeter.

Sub-Canopy Species	Density	Avg. Height	Size
Phragmites (native)	Trace	Unspecified	Non-Wood
Willow spp.	High	5 - 10 feet	Tall Shrub
Bulrush	Trace	Unspecified	Non-Wood
Cattail spp.	Medium	Unspecified	Non-Wood
Tag Alder	High	5 - 10 feet	Tall Shrub
Tamarack	Trace	Variable	Sapling
Northern White Cedar	Trace	Variable	Sapling