



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41091

Entry Year 2023

Acreage: 1,592

County Delta

Management Area: Garden Thompson Plains

Stand Examiner: Adam Petrelius

Legal Description:

T40N R18W, Sections 21, 22, 23, 24

Identified Planning Goals:

The main goal of this compartment is to conduct multiple resource management for current and future generations.

Soil and topography:

The topography within the compartment is variable and includes some steep ridges in the west. Elevation values peak at 748 feet and drop to 581 at the Lake Michigan shoreline. With the exception of a few small stands, the entire compartment is forested. Forested land is very diverse and contains many cover types including some large oak stands. The two most abundant soils are Rubicon Sand and Tawas Muck. PVE is the most common habitat type.

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

State land within this compartment was acquired between 1907 and 2011. The compartment boundary borders private, state land, and some school forest land. The compartment is used mostly by hunters, ORV users, and snowmobile riders.

Unique Natural Features:

None known.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

None known.

Watershed and Fisheries Considerations:

NLMMU – John Bauman: This compartment borders Big Bay de Noc located within the northeastern region of Green Bay. Green Bay is located on the northern shore of Lake Michigan and is the world's largest freshwater estuary. 100' plus 5' per 1% increase in slope; buffers are recommended to protect Big Bay de Noc shoreline and shoreland areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 91 lies within eastern Delta county at the top of the Garden Peninsula in the Escanaba/Door Peninsula ecological sub-subsection and is a part of the Garden Thompson Plains Management area with American woodcock, ruffed grouse, white-tailed deer and wild turkey as featured species. This compartment is also part of the Garden Grade Grouse Enhanced Management Site (GEMS). The growing season is approximately 140 days. Extreme minimum winter temperature is -35 F. Snowfall in this area is relatively light averaging about 70 inches per year.

Pre-settlement notes showed some forest stands contained deciduous species such as beech, sugar maple, hemlock, and yellow birch. Others held red, white, and jack pine. In section 23, the pine forest contained interspersed open plains. Comments were made regarding the regenerating forest within burned over and windthrow stands of pine. Aspen, white birch, balsam fir, and pine saplings were found in these situations. Cedar was the dominant forest type in the lowlands; however, tamarack and spruce were also common. Surveyors also found evidence of fire within the cedar stands. Upland conditions within this compartment today are substantially different from those at the time of the original survey. Oak, aspen, and red pine plantation dominate the upland forest types. Lowlands appear to be similar in species composition to the pre-settlement vegetation, however, the age and structure has changed.

Wildlife habitat management objectives for this compartment are diverse. GEMS forest stands will be managed according to the Garden Grade GEMS management plan. Priority habitat objectives include promoting age and structural diversity within the early successional forest types, managing oak optimum mast production and maintaining closed canopy hemlock stands.

Other wildlife priorities include maintaining open-land habitat, retaining soft and hard mast producing species in harvested stands and ensuring connectivity of forest types along the Lake Michigan shoreline for neotropical migrants. Other wildlife species of interest include the common loon, bald eagle, gray wolf, ovenbird, downy woodpecker, gray squirrel, and red fox.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial oil & gas production in this part of the state, and there is no known metallic mineral potential in this area. The nearest active mineral production sites are just over three miles south. Construction aggregate from glacial drift have been produced in this area. There is also potential for bedrock limestone in some areas where glacial and lacustrine sediments are thin or absent. There appears to be mostly potential for sand within the compartment. No current mineral leasing activity exists in the area.

Vehicle Access:

There is good vehicle access throughout the entire compartment. State highway M183 travels along the western boundary.

Survey Needs:

Survey needed to complete some treatments.

Recreational Facilities and Opportunities:

The Cooks Garden Grade snowmobile trail travels north and south through this compartment.

Fire Protection:

Response time to fire will be fairly fast due to good access and distance from Thompson office. A variety of fuels exist, mostly upland and spring fires would be the concern here.

Additional Compartment Information:

The following reports from the Inventory are attached:

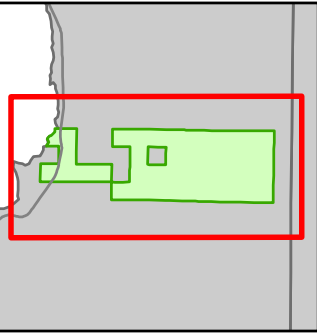
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

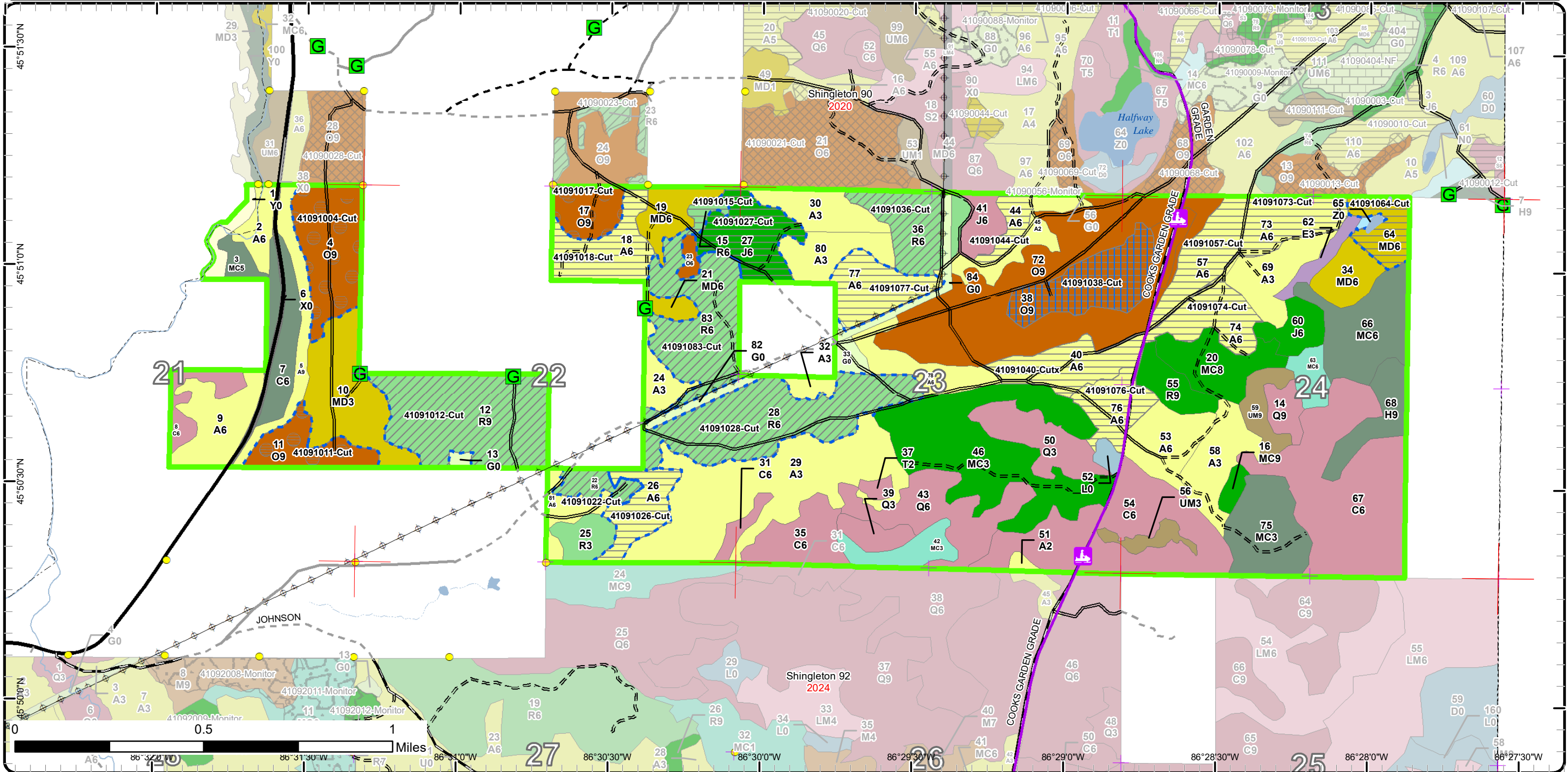
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 91
 T40N, R18W, Sec. 21-24
 County: Delta
 Unit: Shingleton
 Mgmt Area: Garden Thompson
 Plains
 YOE: 2023
 Acres: 1592.1 GIS Calculated
 Examiner: Adam Petrelius
 Map Revised: 1/28/2022
 Map Phase: Post Review

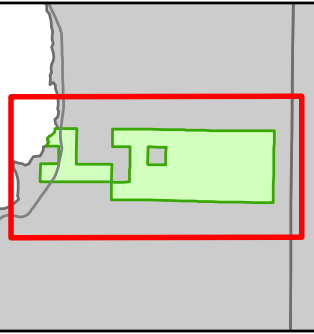


- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- == DNR - Forest Access Route
- Federal / State Highway
- Federal / State - Dirt / Gravel Road
- Private - Paved Road
- Private - Dirt / Gravel Road
- 🚙 Snowmobile Trails
- 🚚 Designated Snowmobile Trails
- 🚪 Gate
- Intermittent Stream
- Lake/Pond
- Perennial River
- Shoreline
- Lakes and Rivers
- ⚡ Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Patch/Strip Cut (Femelschlag)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 710 - Sand/Soil

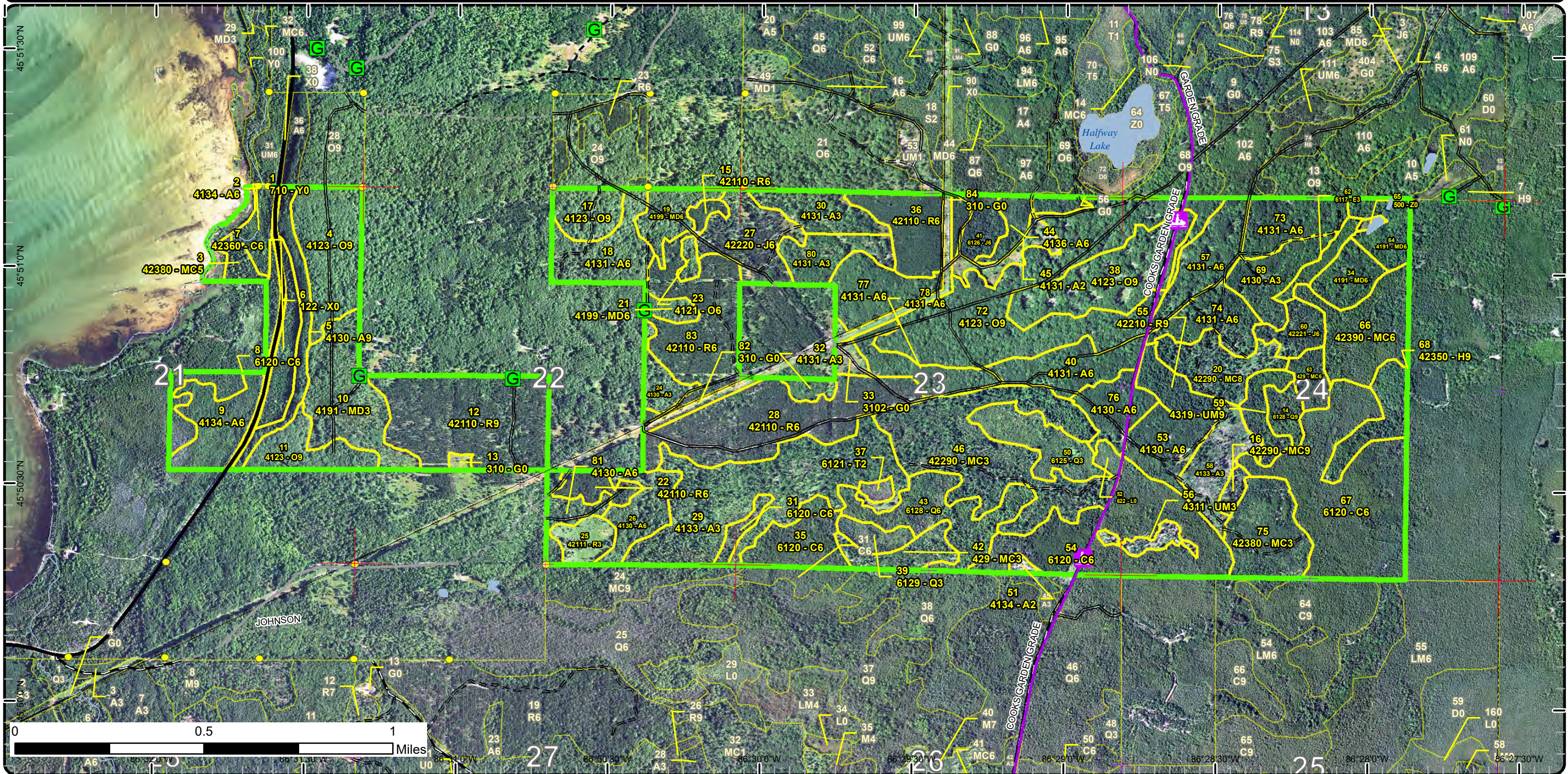


Stand Boundary Map

Compartment: 91
 T40N, R18W, Sec. 21-24
 County: Delta
 Unit: Shingleton
 Mgmt Area: Garden Thompson Plains
 YOE: 2023
 Acres: 1592.1 GIS Calculated
 Examiner: Adam Petrelus
 Map Revised: 1/28/2022
 Map Phase: Post Review

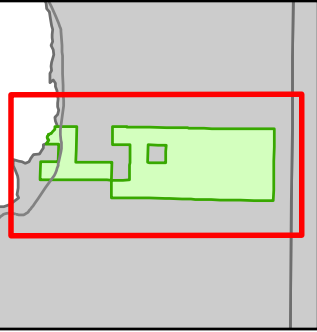


- Miris Corners
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 - Survey Grade Corners
 - Counties
 - DNR - Primary Forest Road
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 - Federal / State Highway
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 - Snowmobile Trails
 - Designated Snowmobile Trails
 - Gate
 - Intermittent Stream
 - Lake/Pond
 - Perennial River
 - Shoreline
 - Lakes and Rivers
 - Powerline
 - Compartment Boundary
 - Stand Boundaries
- 430 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 122 - Roads/Parking Lot
 - 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub
 - 710 - Sand/Soil
 - 412 - Oak Types
 - 413 - Aspen
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers

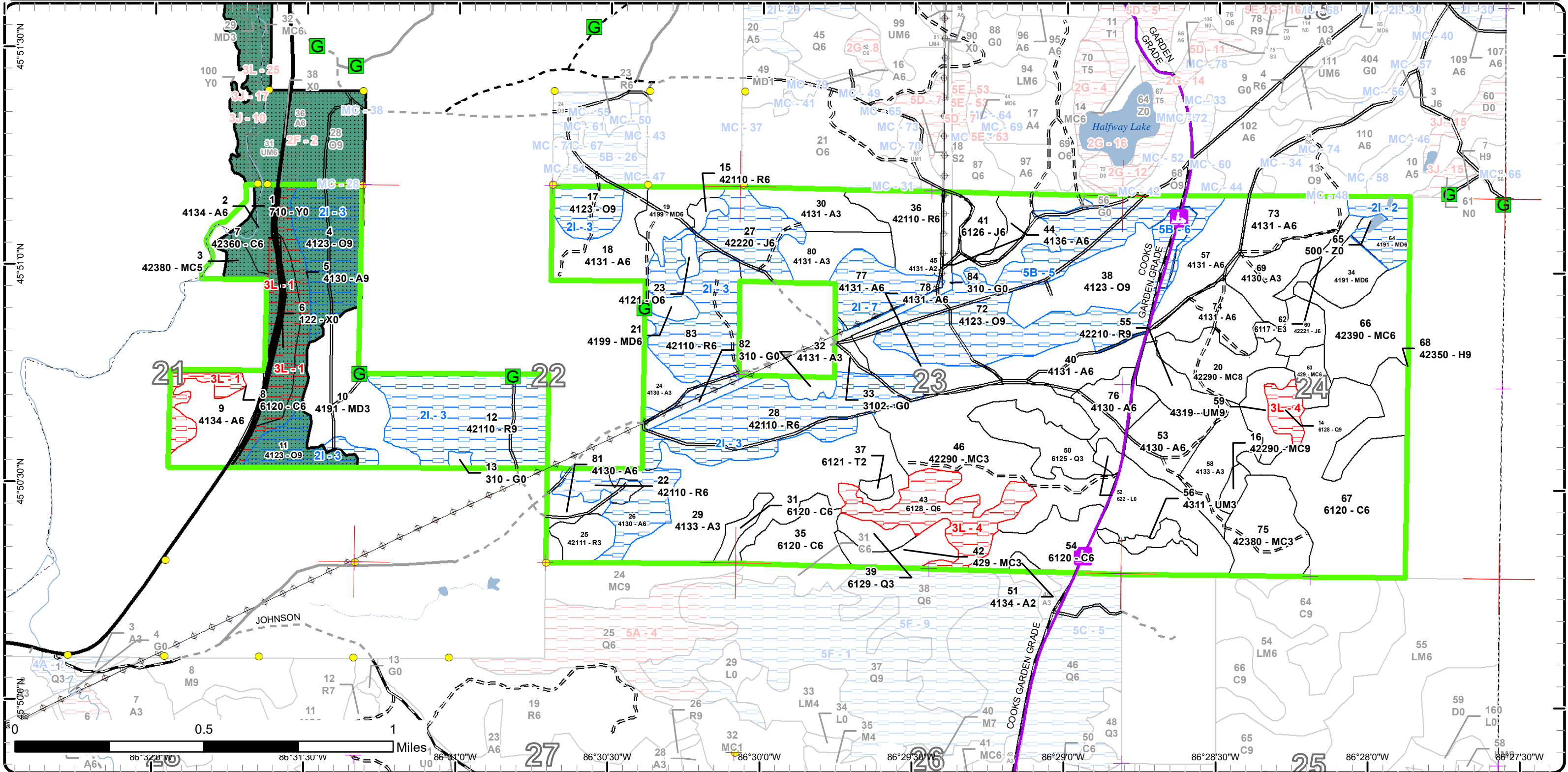


Special Conservation Areas

Compartment: 91
 T40N, R18W, Sec. 21-24
 County: Delta
 Unit: Shingleton
 Mgmt Area: Garden Thompson
 Plains
 YOE: 2023
 Acres: 1592.1 GIS Calculated
 Examiner: Adam Petrelius
 Map Revised: 1/28/2022
 Map Phase: Post Review



- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
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- Private - Dirt / Gravel Road
- Snowmobile Trails
- Designated Snowmobile Trails
- G Gate
- Intermittent Stream
- Lake/Pond
- Perennial River
- Shoreline
- Lakes and Rivers
- Powerline
- Compartment Boundary
- Available w/ Constraints
- 2I: Survey needed
- 5B: Maintain for regeneration purposes
- Unavailable
- 3L: Other wildlife concerns
- Stand Boundaries
- SCA
- Habitat Corridor



Report 1 – Total Acres by Cover Type and Age Class



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	57	131	0	195	0	63	0	16	0	0	0	0	0	0	0	0	0	462
Cedar	0	0	0	0	0	0	0	11	147	0	20	26	0	0	0	0	0	0	203
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	16
Herbaceous Openland	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Jack Pine	0	0	0	0	10	0	38	0	0	0	0	0	0	0	0	0	0	0	48
Lowland Conifers	0	0	0	22	0	8	0	0	0	0	8	35	0	0	0	0	0	0	73
Lowland Deciduous	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Shrub	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Mixed Upland Deciduous	0	0	40	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	87
Natural Mixed Pines	0	0	0	76	0	0	0	0	27	0	0	0	0	0	0	0	0	0	103
Oak	0	0	0	0	0	0	0	3	0	154	55	0	0	0	0	0	0	0	212
Red Pine	0	0	10	0	27	0	187	0	12	0	0	0	0	0	0	0	0	0	235
Sand, Soil	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Tamarack	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Conifers	0	0	0	13	30	0	8	0	34	5	0	0	0	0	0	0	0	0	90
Upland Mixed Forest	0	6	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	17
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	37	63	181	117	309	11	296	14	247	159	83	61	17	0	0	0	0	0	1589



Report 2 – Treatment Summary

Shingleton Mgt. Unit

Year of Entry: 2023

Acres of Harvest

Compartment 91

Total Compartment Acres: 1,592

Commercial Harvest - 194
 Harvests with Site Condition - 334
 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	175	0	0	0	0	0	0	0	0	175
Jack Pine	27	0	0	0	0	0	0	0	0	27
Mixed Upland Deciduous	15	0	0	0	0	0	0	0	0	15
Oak	0	0	70	33	0	0	0	0	0	102
Red Pine	3	0	0	0	0	206	0	0	0	210
Total	220	0	70	33	0	206	0	0	0	529

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	529	0	0	0	0	0	0	0	0	529
Next Step	0	63	30	0	0	61	353	0	0	507
Total	529	63	30	0	0	61	353	0	0	1035



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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Approved Treatments:

4	41091004-Cut	36.2	4123 - Red Oak	Sawtimber Well	96	111-140	Harvest	Strip/Patch/Gap Cut (Femelschlag)	412 - Oak Types	Two-Aged	No
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Prescription Canopy gap harvest to promote oak regeneration. All trees located with canopy gaps should be harvested down to 2 inches. Canopy gaps should be at minimum 1/2 acre in size and contain a sufficient crown opening to allow oak regeneration and recruitment into the overstory. No harvesting shall occur outside canopy gaps unless trails are needed to move equipment between canopy gaps.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak regeneration is desired however any species onsite will be acceptable.

Regen:

Other

Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2022

11	41091011-Cut	18.6	4123 - Red Oak	Sawtimber Well	96	111-140	Harvest	Strip/Patch/Gap Cut (Femelschlag)	412 - Oak Types	Two-Aged	No
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Prescription Canopy gap harvest to promote oak regeneration. All trees located with canopy gaps should be harvested down to 2 inches. Canopy gaps should be at minimum 1/2 acre in size and contain a sufficient crown opening to allow oak regeneration and recruitment into the overstory. No harvesting shall occur outside canopy gaps unless trails are needed to move equipment between canopy gaps.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak is desired, however any species onsite will be acceptable.

Regen:

Other

Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2022

12	41091012-Cut	64.8	42110 - Planted Red Pine	Sawtimber Well	59	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
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Prescription Thin. Target basal area of 120, however overall may be lower due to pre-existing low basal area pockets and other species present. Focus on removing majority of trees that are approaching 18 inches dbh.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2022



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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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15	41091015-Cut	3.4	42110 - Planted Red Pine	Poletimber Well	59	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
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Prescription Cut all trees greater than 2 inches live and dead for plantation management. Less than 3% retention acceptable due to small stand size.
Specs:

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

Acceptable red pine
Regen:

Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2022

17	41091017-Cut	14.7	4123 - Red Oak	Sawtimber Well	84	111- 140	Harvest	Strip/Patch/Gap Cut (Femelschlag)	412 - Oak Types	Two-Aged	No
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Prescription Canopy gap harvest to promote oak regeneration. All trees located with canopy gaps should be harvested down to 2 inches. Canopy gaps
Specs: should be at minimum 1/2 acre in size and contain a sufficient crown opening to allow oak regeneration and recruitment into the overstory. No harvesting shall occur outside canopy gaps unless trails are needed to move equipment between canopy gaps.

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

Acceptable Oak regeneration is desired, however any species onsite will be acceptable.
Regen:

Other
Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2022

18	41091018-Cut	25.2	4131 - Aspen, Oak	Poletimber Well	37	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
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Prescription Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile
Specs: trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.

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

Acceptable Aspen regeneration is expected, however any deciduous and coniferous mixture is acceptable.
Regen:

Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2031

22	41091022-Cut	8.9	42110 - Planted Red Pine	Poletimber Well	56	111- 140	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	No
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Prescription Thin with a target residual basal area of 120
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2022

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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
26 41091026-Cut	18.1	4130 - Aspen	Poletimber Well	37	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.</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> Aspen regeneration is desired, however mixed coniferous and deciduous are acceptable.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2026</p>										
27 41091027-Cut	26.9	42220 - Natural Jack Pine	Poletimber Well	56	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Cut all trees live and dead for plantation management. Retention should be placed along edge of stand.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> SitePrep, Trenching; Pesticide, Skidder - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Pesticide, Skidder - Release</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> red pine</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2022</p>										
28 41091028-Cut	61.7	42110 - Planted Red Pine	Poletimber Well	59	141-170	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Thin with target basal area of 120.</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> May need to use a different color paint than orange to mark due to residual paint from last harvest.</p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2022</p>										
36 41091036-Cut	23.1	42110 - Planted Red Pine	Poletimber Well	36	141-170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> 3rd row thinning</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 /2022</p>										



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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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38	41091038-Cut	32.7	4123 - Red Oak	Sawtimber Well	86	81-110	Harvest	Seed Tree with Retention	412 - Oak Types	Even-Aged	No
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Prescription Cut all trees down to 4 inches. Leave 10 to 30 sq. ft oak leave trees to remain as seed and mast producers.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory); SitePrep, Scarification

Treatments:

Acceptable Oak regeneration is expected, however any species onsite is acceptable.

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 4 /13/2021

40	41091040-Cutx	23.4	4131 - Aspen, Oak	Poletimber Well	37	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No
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Prescription Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen regeneration is desired, however any mixed coniferous and deciduous are acceptable.

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2031

44	41091044-Cut	7.7	4136 - Aspen, Mixed Conifer	Poletimber Well	36	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
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Prescription Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable.

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

57	41091057-Cut	21.7	4131 - Aspen, Oak	Poletimber Well	51	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
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Prescription Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable.

Regen:

Other

Comment: Do not cut serviceberry and dogwood.

Site Condition

Proposed Start Date: 10/1 /2021



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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
64 41091064-Cut	14.6	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	39	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.</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> Aspen regeneration is expected, however mixed coniferous and deciduous are acceptable.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2031</p>										
73 41091073-Cut	20.5	4131 - Aspen, Oak	Poletimber Well	51	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.</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> Aspen regeneration is expected, however mixed coniferous and deciduous is acceptable.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2026</p>										
74 41091074-Cut	19.7	4131 - Aspen, Oak	Poletimber Well	51	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.</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> Aspen regeneration is likely, however mixed coniferous and deciduous is acceptable.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2031</p>										

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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
76 41091076-Cut	17.0	4130 - Aspen	Poletimber Well	37	51-80	Harvest	Clearcut	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.</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</u> Aspen regeneration is desired, however mixed coniferous and deciduous are acceptable.</p> <p><u>Regen:</u></p> <p><u>Other</u></p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2026</p>										
77 41091077-Cut	22.1	4131 - Aspen, Oak	Poletimber Well	37	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Minimize impacts to snowmobile trail if possible. Less than 3% retention is acceptable to promote best possible aspen regeneration. Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs.</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</u> Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable.</p> <p><u>Regen:</u></p> <p><u>Other</u> Do not cut serviceberry and dogwood.</p> <p><u>Comment:</u></p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>										
83 41091083-Cut	47.7	42110 - Planted Red Pine	Poletimber Well	59	111-140	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Thin with residual target basal area of 120.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u></p> <p><u>Regen:</u></p> <p><u>Other</u></p> <p><u>Comment:</u></p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2022</p>										

Total Treatment 528.7
Acreage Proposed:

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 91
Year of Entry: 2023

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions		
		With Condition	Not Available		2I	5B	3L
462	405	40	16	Aspen	40		16
203	173	0	30	Cedar			30
16	16	0	0	Hemlock			
19	18	0	0	Herbaceous Openland	0		
48	21	27	0	Jack Pine	27		
72	30	0	42	Lowland Conifers			42
6	6	0	0	Lowland Deciduous			
3	3	0	0	Lowland Shrub			
86	72	15	0	Mixed Upland Deciduous	15		
103	103	0	0	Natural Mixed Pines			
212	36	176	0	Oak	69	107	
236	52	183	0	Red Pine	183		
6	6	0	0	Sand, Soil			
3	3	0	0	Tamarack			
91	91	0	0	Upland Conifers			
17	17	0	0	Upland Mixed Forest			
6	6	0	0	Urban			
1	1	0	0	Water			
1,592	1,063	441	88	Total Forested Acres	334	107	88
	67%	28%	6%	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	3L: Other wildlife concerns	46	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Retain an intact canopy in upland coniferous (non-pine) stands near the lakeshore and lowland coniferous stands throughout the SCA in order to provide a functional travel corridor for migrating birds. These stands provide food in the form of insects and seeds, cover, concealment, and resting areas for migrating, neo-tropical birds.</p>							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 91
Year of Entry: 2023

2	Available	2I: Survey needed	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	2I: Survey needed	298	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	3L: Other wildlife concerns	43	Unspecified	Unspecified	Unspecified	Unspecified
Comments: hemlock cutting restraints							
5	Available	5B: Maintain for regeneration purposes	98	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand is being held until results of adjacent harvest are seen through regeneration check.							
6	Available	5B: Maintain for regeneration purposes	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand is being held until results of adjacent harvest are seen through regeneration check.							
7	Available	2I: Survey needed	22	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



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
	Habitat Area	Habitat Corridor	SCA	103
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
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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1	710 - Sand, Soil	Nonstocked	6.5			No	
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2	4134 - Aspen, Spruce/Fir	Poletimber Well	9.3	37	51-80	N/A				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Northern White Cedar		15	Sapling/Pole	4		Northern White Cedar		Medium	5 - 10 feet	Sapling
Balsam Fir		20	Pole/Sapling	5		Balsam Fir		Full	5 - 10 feet	Sapling
Paper Birch		5	Pole/Sapling	5						
Quaking Aspen		60	Pole/Sapling	6	37					

3	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Medium	5.4	81	51-80	N/A	birch is dying and stand is converting to fir.
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Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Balsam Fir		30	Pole	8	42	Northern White Cedar		High	10 - 20 feet	Sapling
Red Maple		10	Pole	9		Balsam Fir		Full	10 - 20 feet	Sapling
Northern White Cedar		20	Pole	7						
Paper Birch		30	Pole	9	81					
Black Spruce		10	Pole	8						

4	4123 - Red Oak	Sawtimber Well	36.2	96	111-140	N/A	Stand was thinned about 20 years ago.
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Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak		100	Log	14	96	Bigtooth Aspen		High	10 - 20 feet	Sapling
						Red Maple		High	10 - 20 feet	Sapling
						Red Oak		Medium	10 - 20 feet	Sapling

5	4130 - Aspen	Sawtimber Well	16.2	77	171-200	N/A	steep hill
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Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Bigtooth Aspen		65	Log/Pole	12	77	Balsam Fir		Low	5 - 10 feet	Sapling
Paper Birch		25	Log/Pole	12		Red Maple		Low	10 - 20 feet	Sapling
Red Maple		10	Log/Pole	12						

6	122 - Road/Parking Lot	Nonstocked	6.5		Immature	No	
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7	42360 - Upland Cedar	Poletimber Well	20.1	91	111-140	N/A	
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Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Northern White Cedar		70	Pole	8	91	Balsam Fir		Medium	10 - 20 feet	Sapling
Paper Birch		10	Pole	8		Northern White Cedar		High	10 - 20 feet	Sapling
Black Spruce		20	Pole/Log	9						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
8	6120 - Lowland Cedar	Poletimber Well	10.7	67	51-80	N/A	underground creeks present
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Black Spruce		10	Pole	6		Northern White Cedar	
Tamarack		10	Pole	6		Balsam Fir	
Northern White Cedar		80	Pole/Sapling	6	67		
9	4134 - Aspen, Spruce/Fir	Poletimber Well	24.2	37	51-80	N/A	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Paper Birch		10	Sapling	4		Northern White Cedar	
Northern White Cedar		5	Sapling	2		Balsam Fir	
Balsam Fir		25	Pole/Sapling	5			
Bigtooth Aspen		60	Pole/Sapling	5	37		
10	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	39.8	16	1-50	N/A	Stand cut spring 2004, 41-028-03-01. Trenched and planted with 43,000 jack pine. 2007 regen count showed 587 jack pine. 2009 regen count showed 572 jack pine. 6 of 43 acres were not trenched due to residual oak and aspen clones. Even though this stand did not reach the minimum 600 tpa of jack pine to be fully stocked, FTP 1132 will be closed. Where jack pine was planted, the stand has over 600 tpa and the below acceptable count is likely due to the 6 acres of oak/aspen within the stand.
Canopy Species		% Cover	Size Class	DBH	Age		
Red Maple		20	Sapling	3			
Bigtooth Aspen		15	Sapling	3			
Red Oak		25	Pole/Log	8			
11	4123 - Red Oak	Sawtimber Well	18.6	96	111-140	N/A	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Oak		85	Log/Pole	13	96	White Pine	
Bigtooth Aspen		5	Pole/Log	9		Red Pine	
Red Pine		5	Pole/Log	8		Balsam Fir	
Red Maple		5	Pole	7		Red Oak	
12	42110 - Planted Red Pine	Sawtimber Well	64.8	59	111-140	N/A	Stand thinned in spring 2004. 41-028-03-01 Sand Pit Pine and again in 2014 under Treed Santa Pine.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Jack Pine		3	Pole	8		White Pine	
Bigtooth Aspen		3	Pole	9			
Red Oak		5	Log	12			
Red Pine		89	Log/Pole	11	59		
13	310 - Herbaceous Openland	Nonstocked	1.5	0		No	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
14	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	7.8	91	141-170	N/A	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Northern White Cedar		45	Log/Pole	12	91	Northern White Cedar	
Paper Birch		10	Pole	8		Balsam Fir	
Red Maple		15	Log/Pole	10			
Hemlock		25	Log	14			
Bigtooth Aspen		5	Log	10			
15	42110 - Planted Red Pine	Poletimber Well	3.4	59	81-110	N/A	Stand was cut as part of Treed Santa Sale # 41-042-13-01. TCR Date 7/22/2014.
Canopy Species		% Cover	Size Class	DBH	Age		
Jack Pine		2	Pole	8			
Red Oak		2	Log	14			
Red Pine		96	Pole	9	59		
16	42290 - Natural Mixed Pine	Sawtimber Well	3.8	77	1-50	N/A	10/28/2015 TIJ Stand was cut as part of Big Squirrel Country Sale #41-051-13-01. TCR date 8/15/15.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Pine		50	Log	16	77	Balsam Fir	
White Pine		50	Log	16	77	White Pine	
						Bigtooth Aspen	
17	4123 - Red Oak	Sawtimber Well	14.7	84	111-140	N/A	Stand was cut in 1984. excellent oak regen and recruitment
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Oak		100	Log/Pole	12	84	Red Oak	
						Red Maple	
18	4131 - Aspen, Oak	Poletimber Well	25.2	37	51-80	N/A	stand was cut in 1985. even mix of aspen oak regen. scattered large oak. GEMS treatment planned in 2032. SW corner was a separate stand, however due to size it was combined with this stand. Aspen exists in SW, but just more sparse.
Canopy Species		% Cover	Size Class	DBH	Age		
Bigtooth Aspen		45	Pole/Sapling	7	37		
Red Maple		10	Sapling/Pole	4			
Red Oak		45	Pole/Sapling	7	37		
19	4199 - Other Mixed Upland Deciduous	Poletimber Well	13.7	37	81-110	N/A	Stand was cut in 1985 but has some mature aspen remaining.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Bigtooth Aspen		30	Pole/Sapling	7		Red Oak	
Red Maple		10	Pole/Sapling	6			
Red Pine		5	Log/XLog	16			
Red Oak		55	Pole/Log/Sap	8	37		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																					
20	42290 - Natural Mixed Pine	Sawtimber Medium	23.0	77	51-80	N/A																																						
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21	4199 - Other Mixed Upland Deciduous	Poletimber Well	4.9	37	51-80	N/A																																						
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25	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	10.2	12	1-50	N/A																																						
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
26	4130 - Aspen	Poletimber Well	18.1	37	81-110	N/A	GEMS treatment planned in 2027
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Black Cherry		5	Pole/Sapling	5		Balsam Fir	
Red Oak		15	Log	12		White Pine	
Bigtooth Aspen		75	Pole/Sapling	6	37		
Red Maple		5	Pole/Sapling	6			
						Density	Avg. Height
						Low	5 - 10 feet
						Low	5 - 10 feet
							Size
							Sapling
							Sapling
27	42220 - Natural Jack Pine	Poletimber Well	26.9	56	81-110	N/A	poor stocking..open grow trees, mortality
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Jack Pine		92	Pole	9	56	Jack Pine	
Bigtooth Aspen		5	Pole	9			
Red Oak		3	Log	14			
						Density	Avg. Height
						Low	< 5 feet
							Size
							Sapling
28	42110 - Planted Red Pine	Poletimber Well	61.7	59	141-170	N/A	Stand was cut as part of Treed Santa Sale # 41-042-13-01. TCR Date 7/22/2014.
Canopy Species		% Cover	Size Class	DBH	Age		
Red Pine		96	Pole	9	59		
Red Oak		2	Log	14			
Jack Pine		2	Pole	8			
29	4133 - Aspen, Mixed Pine	Sapling Well	83.0	18	1-50	N/A	Management objective last year of entry was for white pine. Stand was cut in spring 2004. Residual basal areas from cruise were red pine - 10, white pine - 10, hemlock - 5, cedar - 8, oak - 2, total of 35 sq. ft.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
White Pine		25	Pole/Log/Sap	9		White Pine	
Balsam Fir		10	Sapling	3		Balsam Fir	
Red Maple		10	Sapling	1			
Red Pine		5	Pole/Log/Sap	9			
Quaking Aspen		50	Sapling	3	18		
						Density	Avg. Height
						Medium	5 - 10 feet
						Medium	5 - 10 feet
							Size
							Sapling
							Sapling
30	4131 - Aspen, Oak	Sapling Well	17.6	16	1-50	N/A	Stand was cut in 2005. TSI was completed in 2006. 13 sq. ft. of oak exist from timbersale cruise. Stand was supposed to get scarified, but that never happened in time. Prior to harvest, it was an even mixture of jack pine and aspen. GEMS treatment planned in 2047
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Jack Pine		5	Sapling	3		Red Oak	
Bigtooth Aspen		65	Sapling	3	16		
Red Maple		5	Sapling	3			
Red Oak		25	Pole	9			
						Density	Avg. Height
						Medium	5 - 10 feet
							Size
							Sapling
31	6120 - Lowland Cedar	Poletimber Well	4.8	101	51-80	N/A	stand species thinned in 2004..lots of blow down
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
White Pine		10	Log/Pole	12		Black Spruce	
Hemlock		30	Pole/Log	9			
Northern White Cedar		60	Pole	8	101		
						Density	Avg. Height
						Medium	< 5 feet
							Size
							Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																										
32	4131 - Aspen, Oak	Sapling Well	4.5	16	1-50	N/A	stand cut in spring 2006, 41-028-03-01																																																										
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33	3102 - Grass	Nonstocked	4.3		Unspecified	Managed Opening	Stand was cut as part of Treed Santa Sale.																																																										
34	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	13.7	39	81-110	N/A	GEMS treatment planned in year 2037																																																										
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35	6120 - Lowland Cedar	Poletimber Well	20.9	100	111-140	N/A	size and quality of cedar decreases towards the south																																																										
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36	42110 - Planted Red Pine	Poletimber Well	26.6	36	141-170	N/A	high quality plantation																																																										
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37	6121 - Tamarack	Sapling Medium	2.8	41	1-50	N/A	former treed bog																																																										
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38	4123 - Red Oak	Sawtimber Well	41.5	86	81-110	N/A	Aspen/red maple removed in 1985. Regeneration in holes is starting to reach canopy.[10/28/15 TI] Part of the stand was cut with Big Squirrel Country Sale #41-051-13-01. TCR date 8/18/15. 2020 regen check showed success is minimal due to heavy deer browse																																																										
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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39 6129 - Mixed Coniferous Lowland Forest Sapling Well 8.0 41 1-50 N/A former treed bog...scattered mature trees

Canopy Species	% Cover	Size Class	DBH	Age
Northern White Cedar	35	Sapling/Pole	4	41
Black Spruce	20	Sapling/Pole	2	
Tamarack	35	Sapling/Pole	2	
White Pine	10	Sapling/Pole	2	

40 4131 - Aspen, Oak Poletimber Well 23.4 37 81-110 N/A Stand cut in 1985. GEMS treatment period 2032

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	55	Pole	7	37	White Pine	Low	< 5 feet	Sapling
Red Oak	45	Log/Pole	12		Bigtooth Aspen	Low	10 - 20 feet	Sapling
					Red Oak	Low	10 - 20 feet	Sapling

41 6126 - Lowland Jack Pine Poletimber Well 10.3 36 51-80 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	10	Pole/Sapling	5		Jack Pine	Medium	5 - 10 feet	Sapling
Jack Pine	63	Pole/Sapling	7	36	Black Spruce	Medium	5 - 10 feet	Sapling
Tamarack	12	Sapling/Pole	4					
Black Spruce	15	Pole/Sapling	5					

42 429 - Mixed Upland Conifers Sapling Well 12.9 27 1-50 N/A very mixed stand

Canopy Species	% Cover	Size Class	DBH	Age
Black Spruce	15	Sapling	2	
Balsam Fir	10	Sapling	3	
Jack Pine	15	Sapling	3	
Red Maple	5	Sapling	3	
White Pine	10	Sapling/Pole	4	
Quaking Aspen	35	Sapling	4	27
Red Pine	10	Sapling/Pole	3	

43 6128 - Lowland Coniferous, Mixed Poletimber Well 34.6 100 111-140 N/A cedar and hemlock to thick to operate in most areas
Deciduous

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	10	Pole	8		Black Spruce	Low	< 5 feet	Sapling
Paper Birch	15	Pole	9		Hemlock	Low	10 - 20 feet	Sapling
Hemlock	25	Pole/Log	9		Balsam Fir	Low	5 - 10 feet	Sapling
Northern White Cedar	35	Pole	8	100				
Red Maple	10	Pole	8					
White Pine	5	Log/Pole	13					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
44	4136 - Aspen, Mixed Conifer	Poletimber Well	7.7	36	81-110	N/A	GEMS treatment planned in 2022.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Bigtooth Aspen		70	Pole/Sapling	6	36	Balsam Fir	
Black Spruce		10	Pole/Sapling	6		Low	
Jack Pine		10	Pole/Sapling	5		5 - 10 feet	
Red Oak		10	Log/Pole	12		Sapling	
45	4131 - Aspen, Oak	Sapling Medium	12.8	7	1-50	N/A	GEMS treatment planned in 2052
Canopy Species		% Cover	Size Class	DBH	Age		
Red Maple		15	Sapling	1	7		
Red Oak		20	Log/Pole	10			
Bigtooth Aspen		65	Sapling	1	7		
46	42290 - Natural Mixed Pine	Sapling Well	76.4	21	1-50	N/A	stand has been scarified.trenched.seeded. and.planted in various areas since it was cut..excellent mixed ..regen became established between '2000 and 2008
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Maple		3	Sapling	1		White Pine	
Red Pine		24	Pole/Sap/Log	8		Medium	
Bigtooth Aspen		3	Sapling	1		< 5 feet	
Jack Pine		40	Sapling	4	21	Sapling	
Black Spruce		3	Sapling	1		Medium	
White Pine		27	Pole/Sap/Log	9		< 5 feet	
50	6125 - Lowland Black Spruce, Jack Pine	Sapling Well	21.9	27		N/A	
Canopy Species		% Cover	Size Class	DBH	Age		
Tamarack		5	Sapling	2			
Northern White Cedar		30	Sapling/Pole	4			
Jack Pine		5	Sapling	2			
White Pine		10	Sapling	2			
Black Spruce		45	Sapling	2	27		
Red Pine		5	Sapling	2			
51	4134 - Aspen, Spruce/Fir	Sapling Medium	1.8	8	1-50	N/A	[10/28/15 TI] Stand was cut as part of Big Squirrel Country Sale # 41-051-13-01.
Canopy Species		% Cover	Size Class	DBH	Age		
Red Maple		30	Sapling	1			
Bigtooth Aspen		40	Sapling	1	8		
Balsam Fir		30	Sapling	1	8		
52	622 - Lowland Shrub	Nonstocked	3.1		Immature	No	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
53	4130 - Aspen	Poletimber Well	20.8	37	51-80	N/A	GEMS treatment planned in 2042
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Balsam Fir		5	Pole/Sapling	5		Balsam Fir	
White Pine		5	Pole/Sapling	5		Bigtooth Aspen	
Red Oak		5	Log/Pole	12		Density	
Bigtooth Aspen		85	Pole	7	37	Avg. Height	
						Size	
54	6120 - Lowland Cedar	Poletimber Well	65.4	73	81-110	N/A	cedar size varies in stand
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Northern White Cedar		85	Pole/Sapling	7	73	Balsam Fir	
White Spruce		10	Pole	7		Northern White Cedar	
Paper Birch		5	Pole/Sapling	7		Density	
						Avg. Height	
						Size	
55	42210 - Natural Red Pine	Sawtimber Well	12.2	71	81-110	N/A	other species were cut out of stand in past leaving a sparse canopy of red pine and white pine. Regen is mostly aspen/fir and almost reaching the canopy.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Oak		5	Log	14		White Spruce	
Red Pine		75	Log	14	71	Red Maple	
White Pine		20	Log	14		Bigtooth Aspen	
						Balsam Fir	
						Density	
						Avg. Height	
						Size	
56	4311 - Pine, Aspen Mix	Sapling Well	5.9	8	1-50	N/A	[10/28/15 TI] Stand was cut as part of Big Squirrel Country Sale # 41-051-13-01.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
White Pine		10	Log	14			
Balsam Fir		25	Sapling	2	8		
Red Pine		10	Log	14			
Bigtooth Aspen		55	Sapling	2	8		
57	4131 - Aspen, Oak	Poletimber Well	22.9	51	81-110	N/A	GEMS treatment planned in 2022.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Bigtooth Aspen		65	Pole	7	51	Bigtooth Aspen	
White Pine		5	Pole/Log	9		Balsam Fir	
Red Pine		5	Log/Pole	12		Red Maple	
Red Oak		20	Log/Pole	13		White Pine	
Jack Pine		5	Pole	6		Red Oak	
						Density	
						Avg. Height	
						Size	
58	4133 - Aspen, Mixed Pine	Sapling Well	21.6	7	1-50	N/A	10/28/2015 TI] Stand was cut as part of Big Squirrel Country Sale #41-051-13-01. TCR date 8/15/15. Residual: white pine 15', hemlock 2', red pine 13'.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
White Pine		20	Log	14			
Balsam Fir		10	Sapling	1			
Bigtooth Aspen		60	Sapling	1	7		
Red Maple		10	Sapling	1			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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59 4319 - Mixed Upland Forest Sawtimber Well 11.4 77 141-170 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	10	Log/Pole	10		Northern White Cedar	Low	< 5 feet	Sapling
White Pine	20	Log	12		Balsam Fir	Medium	10 - 20 feet	Sapling
Bigtooth Aspen	25	Log	12	77				
Red Pine	10	Log	12					
Northern White Cedar	5	Log/Pole	12					
Balsam Fir	5	Pole	9					
Red Maple	20	Log/Pole	10					
Hemlock	5	Log	14					

60 42221 - Natural Jack Pine, Mixed Deciduous Poletimber Well 11.2 52 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Jack Pine	60	Pole	8	52	Jack Pine	Medium	5 - 10 feet	Sapling
White Pine	5	Log/Pole	12		Balsam Fir	Medium	5 - 10 feet	Sapling
Red Pine	5	Log/Pole	12					
Bigtooth Aspen	30	Pole	6					

62 6117 - Lowland Deciduous, Mixed Coniferous Sapling Well 6.2 27 1-50 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	20	Sapling	3		Balsam Fir	High	5 - 10 feet	Sapling
Bigtooth Aspen	20	Sapling	3		Alder	Medium	5 - 10 feet	Tall Shrub
Paper Birch	30	Sapling	3	27				
Balsam Fir	30	Sapling	3	27				

63 429 - Mixed Upland Conifers Poletimber Well 8.4 57 81-110 N/A even mix of high and low ground. jp on ridges,bs on low ground

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	5	Log	14		Northern White Cedar	Low	5 - 10 feet	Sapling
Balsam Fir	5	Pole	8		Balsam Fir	Low	5 - 10 feet	Sapling
Paper Birch	5	Pole	6		Black Spruce	Medium	5 - 10 feet	Sapling
Red Pine	5	Log	14					
Northern White Cedar	10	Pole/Sapling	5					
Red Maple	5	Pole	9					
Black Spruce	35	Pole	8	57				
Jack Pine	30	Pole	9	57				



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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64 4191 - Mixed Upland Deciduous with Conifer Poletimber Well 14.4 39 81-110 N/A GEMS treatment planned in year 2032

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	35	Pole/Sapling	5	39	Balsam Fir	Low	5 - 10 feet	Sapling
Red Oak	25	Log	12		Red Oak	Low	10 - 20 feet	Sapling
Paper Birch	5	Pole	5		White Pine	Low	5 - 10 feet	Sapling
Red Maple	10	Pole/Sapling	7		Red Maple	Low	10 - 20 feet	Sapling
Red Pine	15	Log/Pole	12		Aspen (spp.)	Medium	10 - 20 feet	Sapling
White Pine	10	Log/Pole	12					

65 500 - Water Nonstocked 1.2 No

66 42390 - Mixed Non-Pine Upland Conifers Poletimber Well 33.9 76 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	20	Pole	8		Balsam Fir	Medium	< 5 feet	Sapling
Northern White Cedar	20	Pole	8	76				
Red Maple	20	Pole	8					
Hemlock	20	Pole	10					
Balsam Fir	20	Pole	8					

67 6120 - Lowland Cedar Poletimber Well 81.1 76 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	90	Pole	6	76	Balsam Fir	Medium	< 5 feet	Sapling
Black Spruce	10	Pole/Sapling	5					

68 42350 - Upland Hemlock Sawtimber Well 16.5 113 111-140 N/A

69 4130 - Aspen Sapling Well 19.9 5 1-50 N/A Stand was cut as part of Sale #41-001-17-01 Garden Grade GEM 2017. GEMS treatment planned in 2057.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	90	Sapling	1	5
Red Oak	10	Pole	7	

72 4123 - Red Oak Sawtimber Well 98.2 82 111-140 N/A Aspen/red maple removed in 1985.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	10	Pole	7		White Pine	Medium	5 - 10 feet	Sapling
Red Maple	5	Pole	7		Red Oak	High	10 - 20 feet	Sapling
Red Oak	85	Log/Pole	12	82				



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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73	4131 - Aspen, Oak	Poletimber Well	20.5	51	81-110	N/A	GEMS treatment planned in 2027
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	65	Pole	7	51	Bigtooth Aspen	Medium	10 - 20 feet	Sapling
White Pine	5	Pole/Log	9		Red Oak	Low	10 - 20 feet	Sapling
Red Pine	5	Log/Pole	12		Balsam Fir	Low	5 - 10 feet	Sapling
Red Oak	20	Log/Pole	12		Red Maple	Low	10 - 20 feet	Sapling
Jack Pine	5	Pole	6		White Pine	Low	10 - 20 feet	Sapling

74	4131 - Aspen, Oak	Poletimber Well	19.7	51	81-110	N/A	GEMS treatment planned in 2032.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	65	Pole	7	51	Bigtooth Aspen	Medium	10 - 20 feet	Sapling
Red Pine	5	Log/Pole	12		Balsam Fir	Low	5 - 10 feet	Sapling
White Pine	5	Pole/Log	9		Red Oak	Low	10 - 20 feet	Sapling
Red Oak	20	Log/Pole	13		Red Maple	Low	10 - 20 feet	Sapling
Jack Pine	5	Pole	6		White Pine	Low	10 - 20 feet	Sapling

75	42380 - Non Pine Upland Conifer, Mixed Deciduous	Sapling Well	30.4	36	1-50	N/A	limestone rock, poor site. Gems treatment planned 2052. Stand was originally 2 GEMS treatments, however due to poor, rocky, site conditions it was combined into 1 treatment with a late period. Southern portion is mostly balsam.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Spruce	15	Sapling	2		Balsam Fir	High	5 - 10 feet	Sapling
Balsam Fir	40	Sapling	4					
Bigtooth Aspen	40	Sapling/Pole	4	36				

76	4130 - Aspen	Poletimber Well	17.0	37	51-80	N/A	GEMS treatment planned in 2027
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	5	Pole/Sapling	5		Bigtooth Aspen	Medium	10 - 20 feet	Sapling
Red Oak	5	Log/Pole	12		Balsam Fir	Medium	10 - 20 feet	Sapling
Bigtooth Aspen	85	Pole	7	37				
Balsam Fir	5	Pole/Sapling	5					

77	4131 - Aspen, Oak	Poletimber Well	22.0	37	81-110	N/A	Stand cut in 1985. GEMS treatment planned in 2022.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	25	Log/Pole	12		Red Oak	Low	10 - 20 feet	Sapling
Bigtooth Aspen	75	Pole	8	37	White Pine	Low	< 5 feet	Sapling
					Bigtooth Aspen	Low	10 - 20 feet	Sapling

78	4131 - Aspen, Oak	Poletimber Well	17.2	37	81-110	N/A	Stand cut in 1985. GEMS treatment period of 2037
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	75	Pole	8	37	Bigtooth Aspen	Low	10 - 20 feet	Sapling
Red Oak	25	Log/Pole	12		Red Oak	Low	10 - 20 feet	Sapling
					White Pine	Low	< 5 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																		
80	4131 - Aspen, Oak	Sapling Well	17.2	16	1-50	N/A	Stand was cut in 2005. TSI was completed in 2006. 13 sq. ft. of oak exist from timbersale cruise. Stand was supposed to get scarified, but that never happened in time. Prior to harvest, it was an even mixture of jack pine and aspen. GEMS treatment planned in 2042																																		
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81	4130 - Aspen	Poletimber Well	9.8	37	51-80	N/A	GEMS treatment planned in 2047																																		
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82	310 - Herbaceous Openland	Nonstocked	4.8	0		No																																			
83	42110 - Planted Red Pine	Poletimber Well	47.7	59	111-140	N/A	Stand was cut as part of Treed Santa Sale # 41-042-13-01. TCR Date 7/22/2014.																																		
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