Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41090
Entry Year 2020
Acreage: 1,767
County Delta
Management Area: Garden Thompson Plains

Revision Date: 2018-07-16

Stand Examiner: Adam Petrelius

Legal Description:

40N 18W Sections 13-16

Identified Planning Goals:

Multiple resource management for current and future generations.

Soil and topography:

The topography within the compartment is mostly flat with steeper hills bordering Halfway Lake, Lake 13, and Lake Michigan. Elevation values range between 581-728 feet. Most of the compartment is forested with only a few stands classified as marsh or treed bog. It has a diverse mixture of forest cover types including lowland conifers, aspen, jack pine, red pine, northern hardwood, and oak. The major soil types found are Rubicon and Roscommon. Additional soil types are Augres, Carbondale, Rousseau, Dawson, Duel, Kinross, Iosco, and Croswell. Habitat types within the compartment, in order of abundance, are PVE, Unclassified Lowland, PArVAa, and PArV. It lies within the Thompson Plains Land Type Association, and the Garden Thompson Plain Management Area.

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

State land within this compartment was acquired between 1907 and 1974. The compartment boundary borders both private and state land. Camps occupy some of the private land. The compartment is used mostly by hunters, ORV users, and snowmobile riders.

Unique Natural Features:

Stands of oak, a rare cover type in the Shingleton Management Unit, are found within the compartment. These stands are actively managed for timber and wildlife purposes.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Various stands within the compartment and adjacent compartments lie within the Garden Grade Grouse Enhanced Management System (GEMS). Harvesting and management of these stands follow guidelines outlined in the GEMS plan.

Watershed and Fisheries Considerations:

Eastern regions of this compartment contain Halfway Lake, Lake Thirteen, in addition to several unnamed waterbodies. 100’ plus 5’ per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to these waterbodies in accordance with Best Management Practices (specifically stands 68 and 69).
The western region of this compartment borders Big Bay de Noc located within Green Bay of Lake Michigan.

Wildlife Habitat Considerations:

Compartment 90 is located on the north end of the Garden Peninsula within the Escanaba/Door Peninsula ecological sub-subsection; the western boundary of the compartment abuts Lake Michigan. Pre-settlement land cover consisted of a mix of wetlands, pine, and oak, with lesser amounts of northern hardwoods and hemlock in the north. Aspen is now an important component of the compartment, mixing with the pine and hardwood species. Aspen associations are at various age classes. Wildlife objectives include providing age class diversity for aspen association stands, maintaining openings, and maintaining cedar stands as well as leaving oak and hemlock where present. Any oak, hemlock, and most cedar should be retained in areas to be harvested for a source of hard mast, to provide cover, and to maintain diversity.

Mineral Resource and Development Concerns and/or Restrictions

A former sand pit is located in Section 16, and there may be some additional sand potential within the compartment. Numerous wetlands and a shallow water table might limit development. There is no known metallic mineral potential in this area, and there is no history of mineral leasing. There is no commercial oil and gas production in the UP

Vehicle Access:

Except for the areas containing low ground, the compartment has a good system of forest roads that can be driven during the snow free months. A few of the forest roads are gated when entering private ownership. State Highway M183 travels along the western boundary. Access to the interior portions can be gained by traveling south of US2 on the Cooks/Garden Grade snowmobile trail

Survey Needs:

Survey work is needed.

Recreational Facilities and Opportunities:

The Cooks/Garden snowmobile trail travels through the middle of the compartment and receives moderate use by ORV riders also. Opportunities for hunting, fishing, and other forms of recreational activity exist within or adjacent to this compartment.

Fire Protection:

Response time to fires within this compartment from the Thompson field office will be moderate. The compartment receives moderate use throughout fire season and human caused fires are a concern. Both spring and summer fires are likely to occur here and fuel types are highly variable. Lake Michigan, Halfway Lake, and Lake 13 can be used as a water source if needed.

Additional Compartment Information:

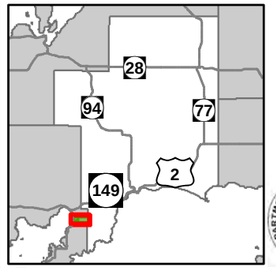
The following reports from the Inventory are attached:

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

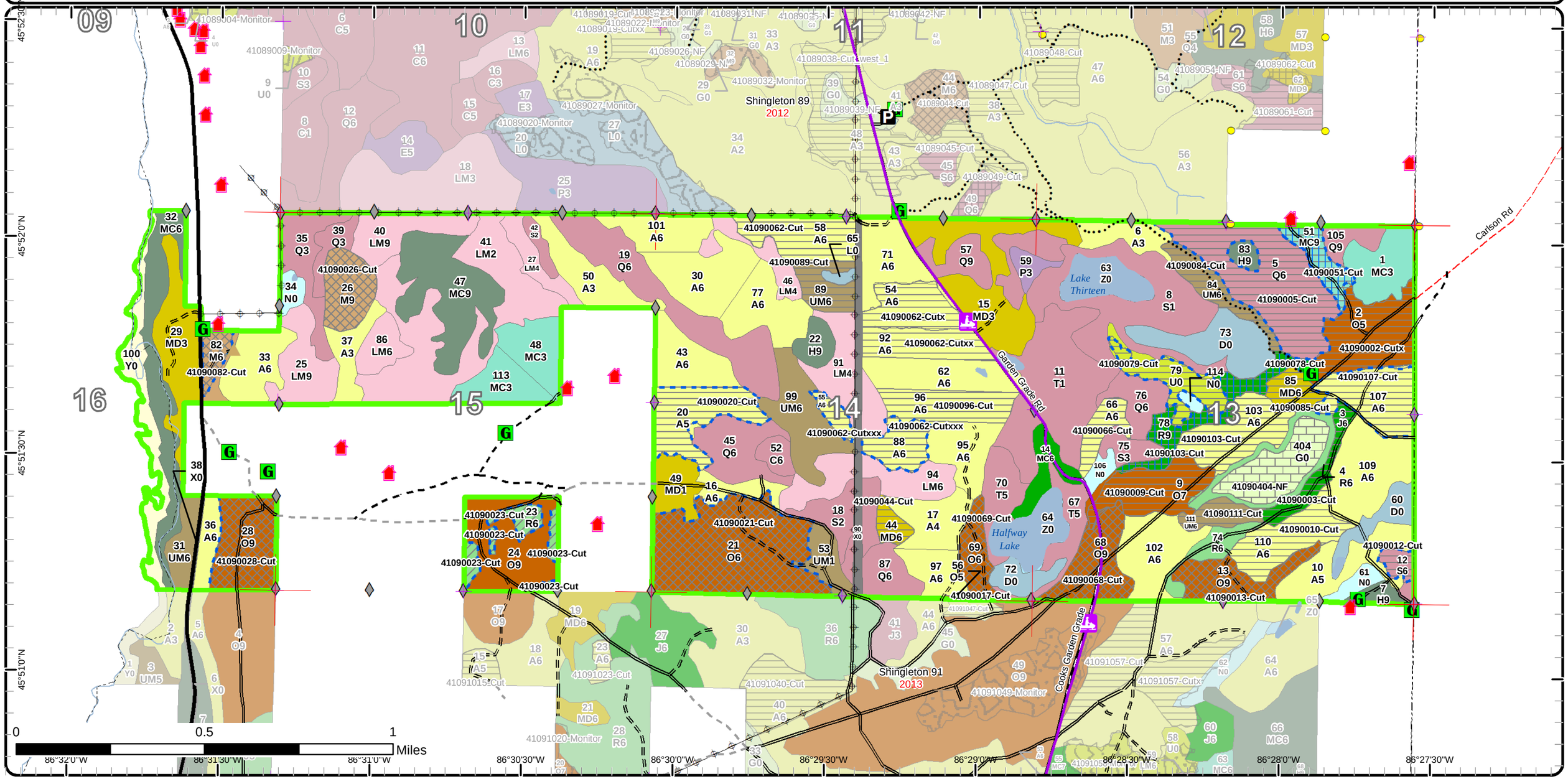
Cover Type & Treatments Map



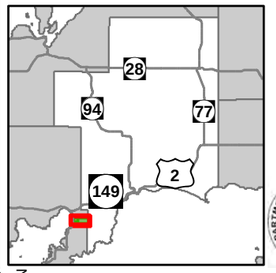
N

Compartment: 90
T40N,R18W, Sec: 13-16
County: Delta
Unit: Shingleton
Mgmt Area: Garden Thompson Plains
YOE: 2020
Acres: 1,767 GIS Calculated
Examiner: Adam Petrelius
Map Revised: 12/17/2018
Map Phase: Post Review

- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- Field Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State - Dirt / Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Snowmobile Trails
- Designated Snowmobile Trails
- Unspecified Structure
- Berms
- Gate
- Parking Lot
- Structures
- Trailhead
- Lake/Pond
- Perennial River
- Shoreline
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Habitat Structures
- 411 - Northern Hardwood
- 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
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 710 - Sand/Soil
- Lakes



Stand Boundary Map



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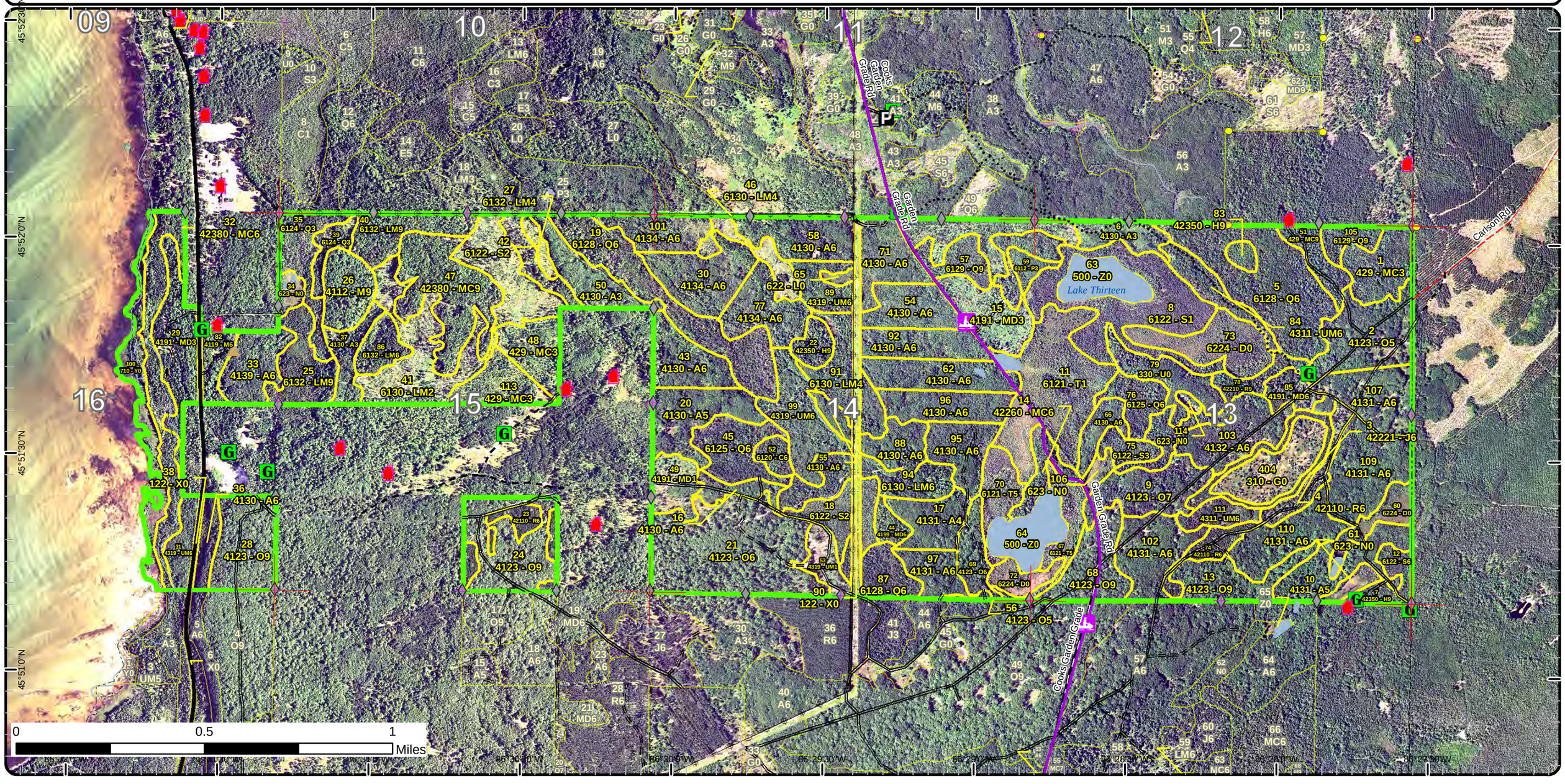
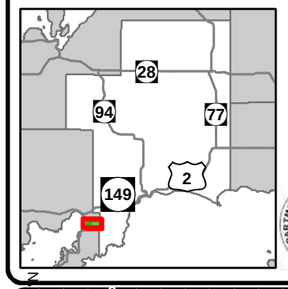


Special Conservation Areas & Site Conditions Map



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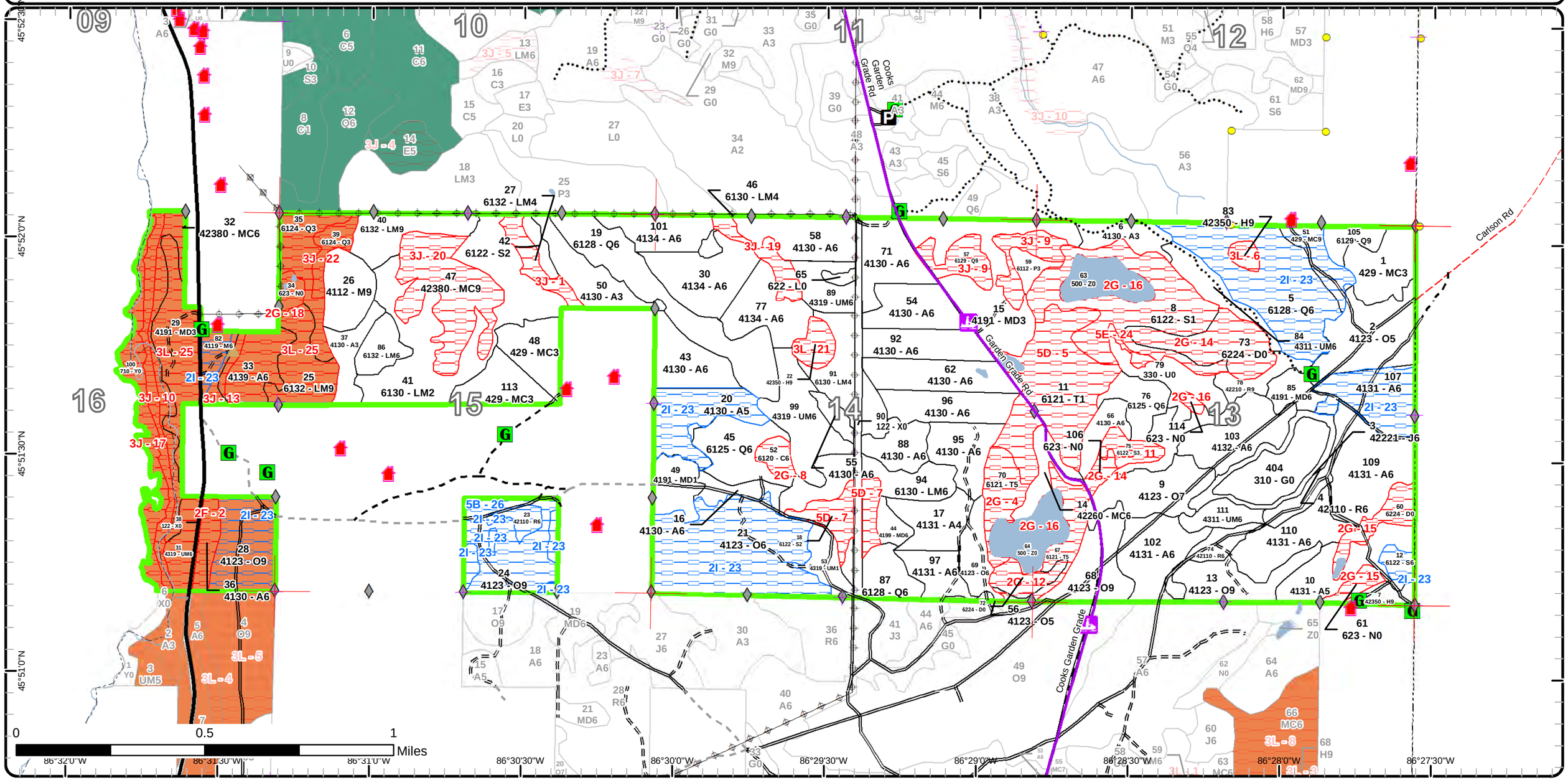
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable

- 2I: Survey needed
- 5B: Maintain for regeneration purposes
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- 3L: Other wildlife concerns
- 5D: Unproductive Forest Land
- 5E: Long-Term Retention
- Stand Boundaries
- Habitat Corridor
- Other Habitat Area



Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 90** **Year of Entry 2020**

Adam Petrelius : Examiner

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	11	17	87	287	76	0	0	8	0	0	0	0	0	0	0	0	0	**486**
Cedar	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	**5**
Hemlock	0	0	0	0	0	0	0	0	0	4	3	0	7	0	0	0	0	0	**14**
Herbaceous Openland	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
Jack Pine	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	**10**
Low-Density Trees	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
Lowland Aspen/Balsam Poplar	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Lowland Conifers	0	0	0	0	43	24	0	0	40	57	20	0	0	0	0	0	0	0	**182**
Lowland Mixed Forest	0	60	0	52	0	0	0	0	9	0	45	0	0	0	0	0	0	0	**166**
Lowland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Lowland Spruce/Fir	0	4	0	0	0	70	0	6	0	0	0	0	0	0	0	0	0	0	**79**
Marsh	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
Mixed Upland Deciduous	0	51	0	25	0	0	8	5	0	0	0	0	0	0	0	0	0	0	**89**
Natural Mixed Pines	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
Northern Hardwood	0	0	0	0	0	0	0	0	8	16	0	0	0	0	0	0	0	0	**24**
Oak	0	0	0	0	0	0	0	0	27	196	0	0	0	0	0	0	0	0	**223**
Red Pine	0	0	0	18	0	0	11	0	0	17	0	0	0	0	0	0	0	0	**46**
Sand, Soil	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
Tamarack	0	0	0	51	0	0	12	0	0	0	13	0	0	0	0	0	0	0	**76**
Treed Bog	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
Upland Conifers	0	0	30	18	0	30	0	0	0	10	38	0	0	0	0	0	0	0	**126**
Upland Mixed Forest	0	9	0	33	11	12	8	0	0	0	0	0	0	0	0	0	0	0	**73**
Urban	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
Water	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
Total	**159**	**135**	**47**	**284**	**355**	**212**	**49**	**11**	**92**	**300**	**124**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**1772**

Report 2 – Treatment Summary

Shingleton Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 90

Total Compartment Acres: 1,767

Commercial Harvest - 311

Harvests with Site Condition - 244

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	185	0	0	0	0	0	0	0	0	**185**
Jack Pine	10	0	0	0	0	0	0	0	0	**10**
Lowland Conifers	50	0	0	0	0	0	0	0	0	**50**
Lowland Spruce/Fir	4	0	0	0	0	0	0	0	0	**4**
Mixed Upland Deciduous	12	0	0	0	0	0	0	0	0	**12**
Northern Hardwood	0	21	0	0	0	0	0	0	0	**21**
Oak	52	139	0	0	0	0	0	0	0	**191**
Red Pine	0	0	0	17	0	11	0	0	0	**28**
Tamarack	14	0	0	0	0	0	0	0	0	**14**
Upland Conifers	0	0	0	10	0	0	0	0	0	**10**
Upland Mixed Forest	31	0	0	0	0	0	0	0	0	**31**
Total	**357**	**160**	**0**	**27**	**0**	**11**	**0**	**0**	**0**	**555**

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	555	0	0	0	0	0	0	0	21	**576**
Next Step	0	0	0	0	0	0	535	21	80	**636**
Total	**555**	**0**	**0**	**0**	**0**	**0**	**535**	**21**	**101**	**1213**

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	41090002-Cutx	29.8	4123 - Red Oak	Poletimber Medium	81	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
3	41090003-Cut	9.6	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	50	51-80	Harvest	Clearcut	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees except oak if present. Less than 3% retention is acceptable. Slash should be piled to facilitate WLD planting operations.

Next Step Treatments: NonForestMgt, Other - Specify

Acceptable Regen: Any regeneration is acceptable, however goal is to convert to grass and plant with various WLD shrubs.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
5	41090005-Cut	49.9	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	88	111-140	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: Cut all trees except hemlock and oak if present. Buffer hemlock stand in middle since it is fairly wet adjacent to it. This will be retention along with other patches of dense cedar.

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

Acceptable Regen: any species located presently onsite

Other Comment: Stand will need survey work. Possible green-up issues with adjacent GEMS treatment.

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
9	41090009-Cut	21.9	4123 - Red Oak	Sawtimber Poor	81	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
109	41090010-Cut	20.9	4131 - Aspen, Oak	Poletimber Well	38	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
12	41090012-Cut	4.3	6122 - Black Spruce	Poletimber Well	66	81-110	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: Cut all species except hemlock and oak if present. Exclude SE corner for BMP reasons. This will be retention area. Survey work may be needed.

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

Acceptable Regen: Any species currently present onsite.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
13	41090013-Cut	18.4	4123 - Red Oak	Sawtimber Well	83	81-110	Harvest	Group Selection	412 - Oak Types	Two-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Gap harvest. All trees within gaps should be harvested and gaps should be large enough to allow oak regeneration and recruitment into canopy. Focus placing gaps where regeneration does not currently exist. Entire treatment may not be harvested, only areas that require need regeneration.

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

Acceptable Regen: Harvest is designed to promote oak regeneration, however any species is acceptable.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
97	41090017-Cut	1.1	4131 - Aspen, Oak	Poletimber Well	30	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees except hemlock and oak where present. Two inch spec should be used on hardwood trees. Less than 3% retention is acceptable. 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	41090020-Cut	23.0	4130 - Aspen	Poletimber Medium	37	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: 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. Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
21	41090021-Cut	63.1	4123 - Red Oak	Poletimber Well	83	81-110	Harvest	Group Selection	4123 - Red Oak	Uneven-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: Gap harvest. Cut all trees in gaps down to 2 inches. Focus gaps in areas where red maple and aspen regeneration to not exist. Gaps should be sufficient size to allow oak regeneration and recruitment into canopy. Northern edge of stand has grass openings present. Edges should be widened to allow future WLD plantings.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory); NonForestMgt, Other - Specify

Acceptable Regen: Oak is preferred, however any species mixture currently found onsite is acceptable. Possible WLD plantings to occur also in grass openings.

Other Comment: Survey work may be needed. May want to consider mark and tally for entire treatment as volume determination method due to irregular shape and location of gaps.

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
23	41090023-Cut	10.7	42110 - Planted Red Pine	Poletimber Well	56	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: This will be the 3rd thinning of this plantation. Mark to 120 basal area. Avoid cutting oak unless needed for operations.

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
26	41090026-Cut	15.7	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Target 80 sq. ft. basal area for residual. Overall residual basal area will be lower than this though. Create more regeneration gaps than usual since previous harvest failed to produce regeneration. Access through private will be needed.

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

Acceptable Regen: Mixed deciduous and coniferous species.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
28	41090028-Cut	25.5	4123 - Red Oak	Sawtimber Well	73	81-110	Harvest	Group Selection	412 - Oak Types	Two-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: 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 Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Harvest is designed to promote red oak regeneration, however any species onsite may be considered acceptable regeneration.

Other Comment: Survey work will be needed. Treatment boundary should stay on top of the bluff to avoid potential T & E habitat.

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
44	41090044-Cut	4.7	4199 - Other Mixed Upland Deciduous	Poletimber Well	62	81-110	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees except hemlock and oak if present. Dense patch of cedar can be excluded in SE for retention.

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

Acceptable Regen: any species currently present onsite. will likely convert to aspen/fir

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
51	41090051-Cut	9.7	429 - Mixed Upland Conifers	Sawtimber Well	88	81-110	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: Cut all trees except hemlock and oak if present. Leave scattered white pine and red pine seed trees. Retention can be placed adjacent to camp in north where cedar / hemlock is more prevalent.

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

Acceptable Regen: any species currently present onsite

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
58	41090062-Cut	19.9	4130 - Aspen	Poletimber Well	38	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

Acceptable Regen: Aspen regeneration is expected, however mixed coniferous and deciduous trees are acceptable.

Other Comment: Leave at minimum 1, 8 inch, 8 feet long log on site for drumming logs per acre. Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
54	41090062-Cutx	16.7	4130 - Aspen	Poletimber Well	38	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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. Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
92	41090062-Cutxx	16.5	4130 - Aspen	Poletimber Well	38	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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. Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
30	41090062-Cutxxx	15.4	4134 - Aspen, Spruce/Fir	Poletimber Well	25	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No **Site Condition: BMPs**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
66	41090066-Cut	8.2	4130 - Aspen	Poletimber Well	40	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
68	41090068-Cut	21.4	4123 - Red Oak	Sawtimber Well	81	81-110	Harvest	Group Selection	412 - Oak Types	Two-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Create gaps in canopy. Cut all trees greater than 2 inches within gaps. Focus on areas where jack pine and white pine exist when possible since the jack pine is reaching maturity. Gaps should be large enough to allow oak establishment and recruitment into canopy. Stay out of lowlands near Halfway Lake.

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

Acceptable Regen: Harvest is designed to promote red oak regeneration, however any species will be acceptable.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
69	41090069-Cut	10.5	4123 - Red Oak	Poletimber Well	83	81-110	Harvest	Group Selection	412 - Oak Types	Two-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Create gaps in canopy. Cut all species down to 2 inches within gaps. Gaps should be large enough to allow for oak establishment and recruitment into canopy. Treatment should stay out of lowlands adjacent to Halfway Lake.

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

Acceptable Regen: Harvest is structured to promote red oak regeneration, however any species is acceptable.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
78	41090078-Cut	17.2	42210 - Natural Red Pine	Sawtimber Well	84	111-140	Harvest	Seed Tree with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Leave white pine and red pine for seed trees to maintain a component of stand. Cut all other species except hemlock and oak if present. Retention can be left along boundaries of adjacent stands which have been harvested by incorporating into the red line.

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

Acceptable Regen: Any species present onsite. Stand is mostly red pine currently, however due to the size, location, and shape of stand intensive red pine managment is not desired. Stand will convert to upland mixed cover type.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
11	41090079-Cut	14.1	6121 - Tamarack	Sapling Poor	26	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No **Site Condition:** **Unproductive**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
82	41090082-Cut	5.7	4119 - Mixed Northern Hardwoods	Poletimber Well	78	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: Mark hardwood to 70 where higher basal areas exist. Focus on removing paper birch, balsam fir, and aspen that are reaching maturity around edges of small grass openings. Creek should be buffered 50 feet or at location in which elevation slopes away from it. This will be retention area.

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

Acceptable Regen: any species present onsite

Other Comment: Survey work is needed. Possible trespass to north. MDOT permit may be needed to harvest in ROW.

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
84	41090084-Cut	11.8	4311 - Pine, Aspen Mix	Poletimber Well	40	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

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

Other Comment: Stand is mostly red pine with a heavy aspen component. Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
85	41090085-Cut	7.6	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	56	51-80	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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. Do not cut serviceberry and dogwood.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory); NonForestMgt, Fruit Tree/Shrub Planting

Acceptable Regen: Any species currently found onsite. Open areas lacking aspen regeneration may be left as grass or planted per WLD specifications.

Other Comment:

Proposed Start Date: 10/1 /2019

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
89	41090089-Cut	11.0	4319 - Mixed Upland Forest	Poletimber Well	38	51-80	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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. Aspen regeneration is expected, but mixed coniferous and deciduous are acceptable. Do not cut service berry and dogwood.

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

Acceptable Regen: Aspen regeneration is expected, however mixed coniferous and deciduous are acceptable.

Other Comment:

Proposed Start Date: 10/1 /2026

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
96	41090096-Cut	18.1	4130 - Aspen	Poletimber Well	38	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

Acceptable Regen: Aspen regeneration is expected, however mixed deciduous and coniferous are acceptable.

Other Comment:

Proposed Start Date: 10/1 /2026

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
103	41090103-Cut	22.3	4132 - Aspen, Jack Pine	Poletimber Well	40	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

Acceptable Regen: Aspen regeneration is expected, however mixed coniferous and deciduous are acceptable.

Other Comment:

Proposed Start Date: 10/1 /2026

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
107	41090107-Cut	22.7	4131 - Aspen, Oak	Poletimber Well	47	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: 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.

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

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

Other Comment: Do not cut serviceberry and dogwood.

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
111	41090111-Cut	7.8	4311 - Pine, Aspen Mix	Poletimber Well	50	111-140	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: 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.

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

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

Other Comment:

Proposed Start Date: 10/1 /2021

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
404	41090404-NF	21.1	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Brushpile/Woody Debris Creation	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: **No** **Site Condition:**

Prescription Specs: Remove woody vegetation including stumps. Slash can be piled on edges, burned, or piled in opening. Future non-forest management decisions per WLD specifications.

W41- 1639: Opening Enhancement. Prescribed fire, farming (dozing, disking, raking, seeding (native or naturalized species only), fertilizing and liming), brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple and others.

Next Step Treatments: Other, Other

Acceptable Regen: Non-forest management

Other Comment:

Proposed Start Date: 10/1 /2019

Total Treatment Acreage Proposed: **576.3**

Report 4 – Site Conditions

Shingleton Mgt. Unit

Adam Petrelius : Examiner

Compartment: 90

Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	*Acres Avail With Condition*	Acres Not Available		Dominant Site Conditions *2I*	*5B*	2F	2G	3J	3L	5D	5E
485	414	***45***	25	**Aspen**	***45***		7		2	15		
5	0	***0***	5	**Cedar**				5				
14	4	***0***	10	**Hemlock**						10		
21	21	***0***	0	**Herbaceous Openland**								
10	10	***0***	0	**Jack Pine**	***0***							
16	15	***0***	2	**Low-Density Trees**								2
4	4	***0***	0	**Lowland Aspen/Balsam Poplar**								
183	90	***50***	44	**Lowland Conifers**	***50***				27	17		
165	129	***0***	36	**Lowland Mixed Forest**					17	19		
2	2	***0***	0	**Lowland Shrub**								
78	5	***4***	69	**Lowland Spruce/Fir**	***4***			48			21	
13	0	***0***	13	**Marsh**				13				
87	63	***0***	25	**Mixed Upland Deciduous**	***0***					25		
10	10	***0***	0	**Natural Mixed Pines**								
24	16	***6***	3	**Northern Hardwood**	***6***				3			
222	104	***118***	0	**Oak**	***89***	***29***						
46	35	***11***	0	**Red Pine**	***11***							
21	0	***0***	21	**Sand, Soil**					21			
76	0	***0***	76	**Tamarack**				25			51	
40	0	***0***	40	**Treed Bog**				40				
126	48	***10***	68	**Upland Conifers**	***10***				53	15		
73	64	***0***	9	**Upland Mixed Forest**						9		
16	16	***0***	0	**Urban**								
30	0	***0***	30	**Water**				30				
1,767	1,049	***244***	475	Total Forested Acres	***215***	***29***	7	161	122	110	72	2
	59%	***14%***	27%	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**	**3J: Water quality / BMPs (stream, river, or lake)**	9	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified

Comments:

River buffer

2	**Unavailable**	**2F: Too steep**	8	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

4	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	13	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Bog adjacent to Halfway Lake

5	**Unavailable**	**5D: Unproductive Forest Land**	51	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified

Comments:

6	**Unavailable**	**3L: Other wildlife concerns**	3	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
pure hemlock stand

7	**Unavailable**	**5D: Unproductive Forest Land**	15	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

8	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	5	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified

Comments:
wet bowl of hemlock and cedar

9	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	20	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified
	Comments: creek and hemlock cutting restraints						
10	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	**Unavailable**	**5D: Unproductive Forest Land**	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	20	3J: Water quality / BMPs (stream, river, or lake)	5D: Unproductive Forest Land	Unspecified	Unspecified
	Comments:						
13	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
14	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	73	5D: Unproductive Forest Land	Unspecified	Unspecified	Unspecified
	Comments: bog surrounding lake 13						

15	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	15	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
16	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	31	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: water						
17	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: road, powerline, lake shore						
18	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
19	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
20	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	38	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified
	Comments: Numerous creeks present. Hemlock cutting restraints also.						

21	**Unavailable**	**3L: Other wildlife concerns**	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: hemlock						
22	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
23	**Available**	**2I: Survey needed**	215	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
24	**Unavailable**	**5E: Long-Term Retention**	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
25	**Unavailable**	**3L: Other wildlife concerns**	100	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: SCA- WLD will provide guidance.						
26	**Available**	**5B: Maintain for regeneration purposes**	29	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	**Error**	63

Comments

These stands provide unique attributes related to a mature cover type based upon age and location and include high insect production rates for neotropical migrants, valuable snow intercept, and escape travel cover as used for a wildlife corridor

	Habitat Area	Habitat Corridor	**Error**	128

Comments

These stands provide unique attributes related to a mature cover type based upon age and location and include high insect production rates for neotropical migrants, valuable snow intercept, and escape travel cover as used for a wildlife corridor

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

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	429 - Mixed Upland Conifers	Sapling Well	17.9	25	1-50	Minimal amounts of jack pine present. Former jack pine stand which converted to aspen. Stand was covered under FTP-554, stand was never scarified or at least no record of it, it was re-inventoried in 2000 and it was determined to be fully stocked A3, cult codes were not carried forward, the FTP was cancelled with a blanket letter. GEMS treatment scheduled for 2037.
2	4123 - Red Oak	Poletimber Medium	29.6	81	1-50	Harvested in fall 2017 with GEMS 2017 sale
3	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	9.7	50	51-80	
4	42110 - Planted Red Pine	Poletimber Well	10.0	22	51-80	Stand was covered under FTP-680, 10 rows of red pine were planted around grass opening to eliminate encroaching competition.
5	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	49.9	88	111-140	
6	4130 - Aspen	Sapling Well	10.6	7	1-50	[4/8/10 bb] Stand is now on proposal 006-10, Lake 13 Sale. Actual stand acres = 9, Unit 3. Residual BA = 2 sq ft hemlock, 1 sq ft white pine. FTP W41-1449 submitted for Aspen TSI when sale is complete. GEMS treatment scheduled in 2052.
7	42350 - Upland Hemlock	Sawtimber Well	4.2	88	111-140	
8	6122 - Black Spruce	Sapling Poor	47.5	43	1-50	
9	4123 - Red Oak	Sawtimber Poor	23.0	81	1-50	Stand harvested in fall 2017 with GEMS sale.
10	4131 - Aspen, Oak	Poletimber Medium	20.6	38	1-50	Stand appears younger than 37, however that is what it shows in records. Originally scheduled for GEMS treatment in 2017, however it was dropped due to non-merch wood. Needs new treatment period scheduled in plan. Following discussion with WLD, it was decided to change the treatment period in plan for this stand to 2047.
11	6121 - Tamarack	Sapling Poor	51.2	26	1-50	Stand has a history of flooding.
12	6122 - Black Spruce	Poletimber Well	5.5	66	81-110	SE portion of stand may have a creek and has denser pockets of cedar.
13	4123 - Red Oak	Sawtimber Well	18.4	83	81-110	Oak was cut in the summer/fall of 2002. Understory is a mixture of aspen and oak.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	9.7	33	51-80	
15	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	38.6	7	1-50	4/8/10 bb] Stand is now on proposal 006-10, Lake 13 Sale. Actual stand acres = 38, Unit 2&3. Residual BA = 8 sq ft hemlock, 5 sq ft cedar, 1 sq ft oak.
16	4130 - Aspen	Poletimber Well	7.4	38	81-110	Originally listed on GEM plan for 2052 harvest. This may be too late. Continue to monitor if a sooner harvest is required. Following discussion with WLD, it was decided to change the treatment period in plan for this stand to 2027.
17	4131 - Aspen, Oak	Poletimber Poor	15.5	30	Immature	Following discussion with WLD, it was decided to change the treatment period in plan for this stand to 2032.
18	6122 - Black Spruce	Sapling Medium	14.5	43	1-50	
19	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	39.6	75	111-140	Cedar is patchy. There is some spruce and mixed hardwood to harvest in the future. Cedar patches may need to be delineated out if this were to happen.
20	4130 - Aspen	Poletimber Medium	23.3	37	81-110	
21	4123 - Red Oak	Poletimber Well	63.1	83	81-110	Cut in 2001 16-00 Sand-Cut Collage.
22	42350 - Upland Hemlock	Sawtimber Well	6.7	112	111-140	Decent hemlock regeneration present.
23	42110 - Planted Red Pine	Poletimber Well	10.7	56	111-140	Stand was cut in 2001 with 16-00 Sand-Cut Collage. Also harvested in 2011 - Cowhead Sale This stand would be an excellent candidate in the future to shift red pine acres to a more suitable site within the management area. Stand could be converted to oak.
24	4123 - Red Oak	Sawtimber Well	29.3	81	81-110	Stand is 2 aged. The understory is now a part of the canopy and contains minimal amount of aspen which should be left
25	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	19.2	95	81-110	
26	4112 - Maple, Beech, Cherry Association	Sawtimber Well	15.7	80	111-140	Stand was cut in 2001 16-00 Sand-Cut Collage. Regeneration is lacking.
27	6132 - Mixed Lowland Forest with Cedar	Poletimber Poor	8.7	70	81-110	
28	4123 - Red Oak	Sawtimber Well	25.5	73	81-110	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	24.6	24	1-50	
30	4134 - Aspen, Spruce/Fir	Poletimber Well	24.5	25	1-50	GEMS treatment scheduled in 2037
31	4319 - Mixed Upland Forest	Poletimber Well	9.0	24	1-50	
32	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	29.9	41	51-80	
33	4139 - Aspen, Mixed Deciduous	Poletimber Well	17.4	22	51-80	creek along western edge
35	6124 - Lowland Spruce-Fir	Sapling Well	16.8	37	1-50	
36	4130 - Aspen	Poletimber Well	7.5	70	111-140	
37	4130 - Aspen	Sapling Well	10.8	22	1-50	
39	6124 - Lowland Spruce-Fir	Sapling Well	6.7	37	1-50	Beaver activity noticed in stand.
40	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	16.8	95	81-110	
41	6130 - Fir, Aspen, Maple	Sapling Medium	59.6	4	1-50	Cut with Cowhead Sale in 2013. Residual hemlock and cedar was 20 sq. ft.
42	6122 - Black Spruce	Sapling Medium	3.6	5	1-50	Cut in 2013, Cowhead Sale.
43	4130 - Aspen	Poletimber Well	17.7	37	81-110	GEMS treatment 2042
44	4199 - Other Mixed Upland Deciduous	Poletimber Well	4.7	62	81-110	
45	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	19.0	30	51-80	
46	6130 - Fir, Aspen, Maple	Poletimber Poor	10.0	25	1-50	Beaver flooding
47	42380 - Non Pine Upland Conifer, Mixed Deciduous	Sawtimber Well	38.1	95	111-140	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	429 - Mixed Upland Conifers	Sapling Well	15.3	15	1-50	OPIC - FMD: 12-2-2003 BB] Stand was cut in 2003 16-00 Sand-Cut Collage Was not pure aspen.Stand is a mixture of aspen ridges and swamp conifers in the low areas.GEMS treatment plan is 2052
49	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	11.6	4	1-50	Treatment from previous YOE: Stand is mostly jack pine. A clone of aspen is present in the east. There are a few small openings located within the stand. Planting may be a better option than scarification. Cut all species except oak and red pine. Acceptable alternative management objectives include a similar mixture of species currently located onsite. [4/8/10 bb] Stand is now on proposal 006-10, Lake 13 Sale. Actual stand acres = 10, Unit 1. Residual BA = 1 sq ft oak, FTP C41-1450 submitted for jack pine regen after sale is complete. (7/17/2011 AP) Sale is closed. TCR date 6/20/2011. Stand is on regeneration timeclock. (6/10/2013 AP): Stand was planted in spring of 2013 without being trenched. Regeneration count scheduled for spring 2014.Filed count in spring 2014 and stand was trenched and planted. Passed count with 680 planted jack pine and 60 volunteers. Stand has fully regenerated to mostly jack pine and other mixed species as original goal was intended. No further cultural work is needed.
50	4130 - Aspen	Sapling Well	17.2	15	1-50	OPIC - FMD: Stand was cut in 2003 16-00 Sand-Cut Collage. Some scattered pine is present. GEMS treatment scheduled in 2047
51	429 - Mixed Upland Conifers	Sawtimber Well	9.9	88	81-110	
52	6120 - Lowland Cedar	Poletimber Well	5.0	98	111-140	
53	4319 - Mixed Upland Forest	Sapling Poor	9.2	4	1-50	Previous treatment: Stand is mostly jack pine. A clone of aspen is present in the east. There are a few small openings located within the stand. Planting may be a better option than scarification. Cut all species except oak and red pine. Acceptable alternative management objectives include a similar mixture of species currently located onsite.[4/8/10 bb] Stand is now on proposal 006-10, Lake 13 Sale. Actual stand acres = 10, Unit 1. Residual BA = 1 sq ft oak, FTP C41-1450 submitted for jack pine regen after sale is complete.(7/17/2011 AP) Sale is closed. TCR date 6/20/2011. Stand is on regeneration timeclock.(6/10/2013 AP): Stand was planted in spring of 2013 without being trenched. Regeneration count scheduled for spring 2014.Filed count in spring 2014 and stand was trenched and planted. Passed count with 680 planted jack pine and 60 volunteers.Stand is now fully regenerated to original prescription. No further cultural work is needed.
54	4130 - Aspen	Poletimber Well	17.2	38	51-80	
55	4130 - Aspen	Poletimber Well	4.0	38	51-80	
56	4123 - Red Oak	Poletimber Medium	1.1	75	1-50	Harvested in fall 2017 with GEMS sale

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	20.0	92	111-140	
58	4130 - Aspen	Poletimber Well	20.0	38	81-110	OPIC - FMD: Mostly aspen, but has mixed species including some low pockets.
59	6112 - Lowland Aspen	Sapling Well	4.4	31	1-50	GEMS treatment planned for 2042.
62	4130 - Aspen	Poletimber Well	20.8	38	81-110	GEMS treatment scheduled in 2032
66	4130 - Aspen	Poletimber Well	8.2	40	81-110	2007: Illegal blind located in stand referred to LED. Some jack pine present also. 2017:Ten years later, the same illegal blind is located in the same spot in stand.
67	6121 - Tamarack	Poletimber Medium	12.0	51	1-50	
68	4123 - Red Oak	Sawtimber Well	21.4	81	81-110	Oak was cut in the summer/fall of 2002.
69	4123 - Red Oak	Poletimber Well	10.5	83	81-110	Cut in 2002.
70	6121 - Tamarack	Poletimber Medium	12.6	90	1-50	
71	4130 - Aspen	Poletimber Well	17.7	38	1-50	GEMS treatment period is 2032. Drainage exists along southern boundary which should get looked at prior to harvest.
74	42110 - Planted Red Pine	Poletimber Well	8.2	22	1-50	
75	6122 - Black Spruce	Sapling Well	6.6	46	1-50	mostly unproductive. only merch wood is along edges.
76	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	11.4	40	51-80	
77	4134 - Aspen, Spruce/Fir	Poletimber Well	19.5	25	1-50	GEMS treatment scheduled in 2047
78	42210 - Natural Red Pine	Sawtimber Well	17.4	84	111-140	
82	4119 - Mixed Northern Hardwoods	Poletimber Well	8.3	78	81-110	
83	42350 - Upland Hemlock	Sawtimber Well	3.2	92	111-140	
84	4311 - Pine, Aspen Mix	Poletimber Well	11.8	40	81-110	GEMS treatment scheduled in 2022.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
85	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	7.6	56	51-80	
86	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	9.2	95	81-110	
87	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	13.0	43	51-80	
88	4130 - Aspen	Poletimber Well	11.5	38	51-80	
89	4319 - Mixed Upland Forest	Poletimber Well	11.0	38	51-80	
91	6130 - Fir, Aspen, Maple	Poletimber Poor	19.2	25	1-50	GEMS treatment scheduled for 2042
92	4130 - Aspen	Poletimber Well	16.7	38	81-110	OPIC - FMD: Mostly aspen, but has mixed species including some low pockets.
94	6130 - Fir, Aspen, Maple	Poletimber Well	22.8	25	1-50	Originally listed on GEMS plan for harvest in 2032. This may need to be delayed due to wet areas and amount of conifer present. Following discussion with WLD, it was decided to change the treatment period in plan for this stand to 2052.
95	4130 - Aspen	Poletimber Well	16.1	38	81-110	Original GEMS treatment period is 2047. This stand will be monitiored in case harvest is needed prior to that. Following discussion with WLD, it was decided to change the treatment period in plan for this stand to 2042.
96	4130 - Aspen	Poletimber Well	18.2	38	81-110	GEMS treatment scheduled in 2027
97	4131 - Aspen, Oak	Poletimber Well	11.2	30	51-80	GEMS treatment period is scheduled for 2037. Stand should be ready to harvest then.
99	4319 - Mixed Upland Forest	Poletimber Well	23.8	25	1-50	GEMS treatment period of 2037
101	4134 - Aspen, Spruce/Fir	Poletimber Well	14.9	25	1-50	GEMS treatment scheduled in 2032
102	4131 - Aspen, Oak	Poletimber Well	22.5	40	51-80	GEMS treatment scheduled in 2052
103	4132 - Aspen, Jack Pine	Poletimber Well	22.4	40	81-110	GEMS treatment scheduled in 2027
105	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	6.6	88	51-80	stand is wet and sparse in areas. operability concerns

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
107	4131 - Aspen, Oak	Poletimber Well	23.0	47	81-110	
109	4131 - Aspen, Oak	Poletimber Well	27.5	38	81-110	GEMS treatment scheduled in 2042. This date may need to be moved up sooner, otherwise stand may convert to oak.
110	4131 - Aspen, Oak	Poletimber Well	20.8	38	51-80	
111	4311 - Pine, Aspen Mix	Poletimber Well	7.8	50	111-140	Originally not in GEMS plan. Since it is 1/2 jack pine and 1/2 aspen, it will likely convert to mostly aspen when harvested. Following discussion with WLD, it was decided to add a treatment period of 2022.
113	429 - Mixed Upland Conifers	Sapling Well	14.7	15	1-50	OPIC - FMD: 12-2-2003 BB] Stand was cut in 2003 16-00 Sand-Cut Collage Was not pure aspen. Stand is a mixture of aspen ridges and swamp conifers in the low areas. GEMS treatment plan is 2042

Stand	Cover Type	Acres	Managed Site	General Comments:
34	623 - Emergent Wetland	4.0	No	OPIC - FMD: SCA - Potential Old Growth
38	122 - Road/Parking Lot	3.3	No	
60	6224 - Treed Bog	10.3	No	
61	623 - Emergent Wetland	4.4	No	
63	500 - Water	13.7	No	
64	500 - Water	16.2	No	Halfway Lake. Illegal ATV trail which leads to lake has been referred to LED. ORV grants were used to fill trail with slash in summer 2008.
65	622 - Lowland Shrub	1.7	No	
72	6224 - Treed Bog	7.6	No	
73	6224 - Treed Bog	22.3	No	
79	330 - Low-Density Trees	16.4		Harvested with GEMS 2017 sale in fall 2017.
90	122 - Road/Parking Lot	12.9	No	
100	710 - Sand, Soil	21.1	No	
106	623 - Emergent Wetland	3.4	No	
114	623 - Emergent Wetland	1.5	No	OPIC - FMD: Mixture of aspen and jack pine.
404	310 - Herbaceous Openland	21.1	Yes	OPIC - FMD: Filling in with jack pine and aspen. Opening maintenance with handtools.