



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41075

Entry Year 2017

Acreage: 1,538

County Schoolcraft

Management Area: Hiawatha Moraine

Revision Date: 2015-08-04

Stand Examiner: Adam Petrelius

Legal Description:

T42N R15W, Section 6, 7, 8

Identified Planning Goals:

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

Soil and topography:

This compartment lies within the Hiawatha Moraine Management Area. The topography in this compartment is mostly flat, and elevations generally decrease towards the southern boundaries of the compartment. Soils in the northern portions of the compartment support mixed pine/aspens/oak stands, northern hardwoods, and some large grass openings. The southern portions of the compartment include lowland conifer species such as cedar and black spruce. The major soil types found within the compartment, in order of abundance, are Rubicon Sand, McMillan-Stutts Complex, McMillan-Greylock Complex, and Rubicon-Croswell-Deford Complex. The major habitat types with the compartment, in order of abundance, are PARV, AFPO, and PVE. The majority of this compartment lies within the Hiawatha Moraine Land Type Association (LTA) which is located in the northern half of the compartment. The other LTA found within the compartment is the Mint Farm LTA.

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

State land within this compartment was acquired between 1926 and 1943, and was either purchased or tax reverted. The entire northern boundary of the compartment borders state land. Approximately 1/4 of the west and south boundaries are adjacent to state land as well. Approximately 3/4 of the eastern compartment boundary is adjacent to state land. Adjacent private ownership along the compartment boundary includes 6 different parcels, and 3 camps are known to exist adjacent to this compartment.

Unique Natural Features:

Under review.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Most stands in this compartment are located within the deeryard, and are classified as a Special Conservation Area.

Watershed and Fisheries Considerations:

None.

Wildlife Habitat Considerations:

This compartment sets just north of the Sturgeon Hole deer yard and includes a portion of the High Rollways opening complex. The original surveyor's notes indicate that the pre-settlement land cover consisted primarily of hemlock and white pine. Red pine, beech, white birch, and sugar maple were also common components of the forest. Current vegetation is substantially different from pre-settlement conditions. Grassy openings now constitute about 1/3rd of the compartment. Red pine plantation, aspen, and oak have also expanded substantially from the 1850s. Featured species in this compartment are woodcock, ruffed grouse, sharp-tailed grouse, and white-tailed deer. Wildlife habitat objectives consist primarily of maintaining the grassy openings for deer breaking out of the winter yards, promoting oak as a high source of protein for a wide variety of wildlife life, and protecting the closed canopy conifer forests.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness (< 100 feet). The Silurian Manitoulin Dolomite and Cabothead Shale subcrop below the glacial drift. The Manitoulin could be used for stone. Gravel pits are not located in the area, but there may be some potential. There is no commercial oil and gas production in the UP, but a new location was staked three miles to the southwest.

Vehicle Access:

The Low High Rollways Road travels throughout the majority of the compartment. There is good vehicle access throughout the entire compartment, and almost every location in the compartment is within ¼ mile of a forest road that can be driven by a 2-wheel drive vehicle.

Survey Needs:

survey work needed

Recreational Facilities and Opportunities:

There are no recreational facilities within this compartment. A snowmobile trail travels east/west through a portion of the compartment. In prior years the Low High Rollways Road has been plowed during the winter months. This creates ice fishing opportunities on the Manistique River. Numerous late season bow hunters have also taken advantage of the plowed road.

Fire Protection:

Response time to fires within this compartment will be fast. A well established road system will make fire operations easier within the compartment. This compartment has no water source, however the Manistique River is within ¼ mile of the southern compartment boundary. This compartment and adjacent compartments are almost entirely upland with surface fuels consisting of primarily grass and pine litter. There are currently prescriptions on the grass openings which will use prescribed burning as an opening maintenance tool.

Additional Compartment Information:

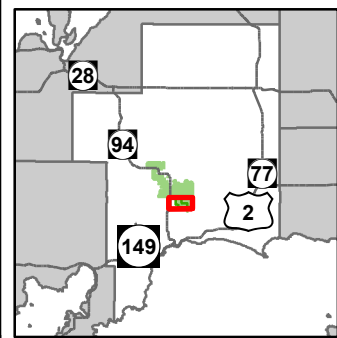
The following reports from the Inventory are attached:

- 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**

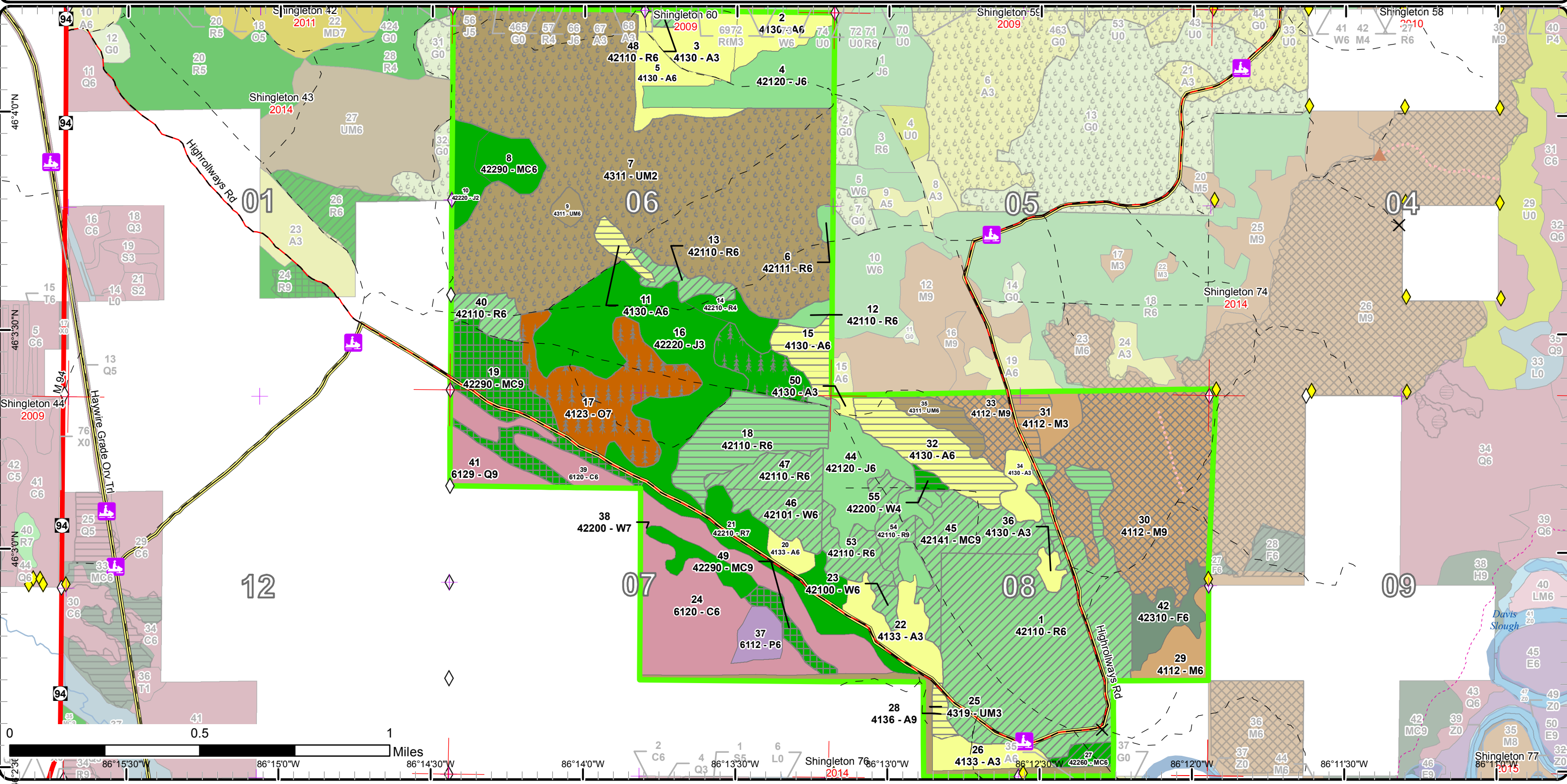
Cover Type & Treatments



Compartment: 75
 T42N, R15W, Sec: 6-8
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Hiawatha Moraine
 YOE: 2017
 Acres: 1538 GIS Calculated
 Examiner: Adam Petrelus
 Map Revised: 8/25/2015
 Map Phase: Review

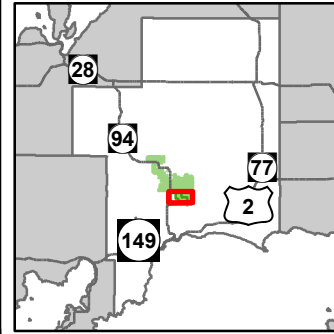


- + Remonumented Section Corners
 - ◆ Survey Grade GPS Corners
 - ◇ Field Grade GPS Corners
 - Miris Corners
 - Highway
 - County Gravel Roads
 - - Poor Dirt Roads
 - County Poor Dirt Roads
 - - - Trail (Non-Recreation)
 - - - Closed Roads
 - X Gate
 - ▲ Berms
 - ORV Routes
 - Snowmobile Trails
 - Rivers
 - Lakes
 - Selection (Group, Single Tree)
 - Clearcut (w/Reserves)
 - Planting (tree species)
 - Prescribed Burn
 - Thinning (Crown, Low, Systematic)
 - Seed Tree (w/Reserves)
- Forest Covertype**
- 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 430 - Upland Mixed Forests
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest

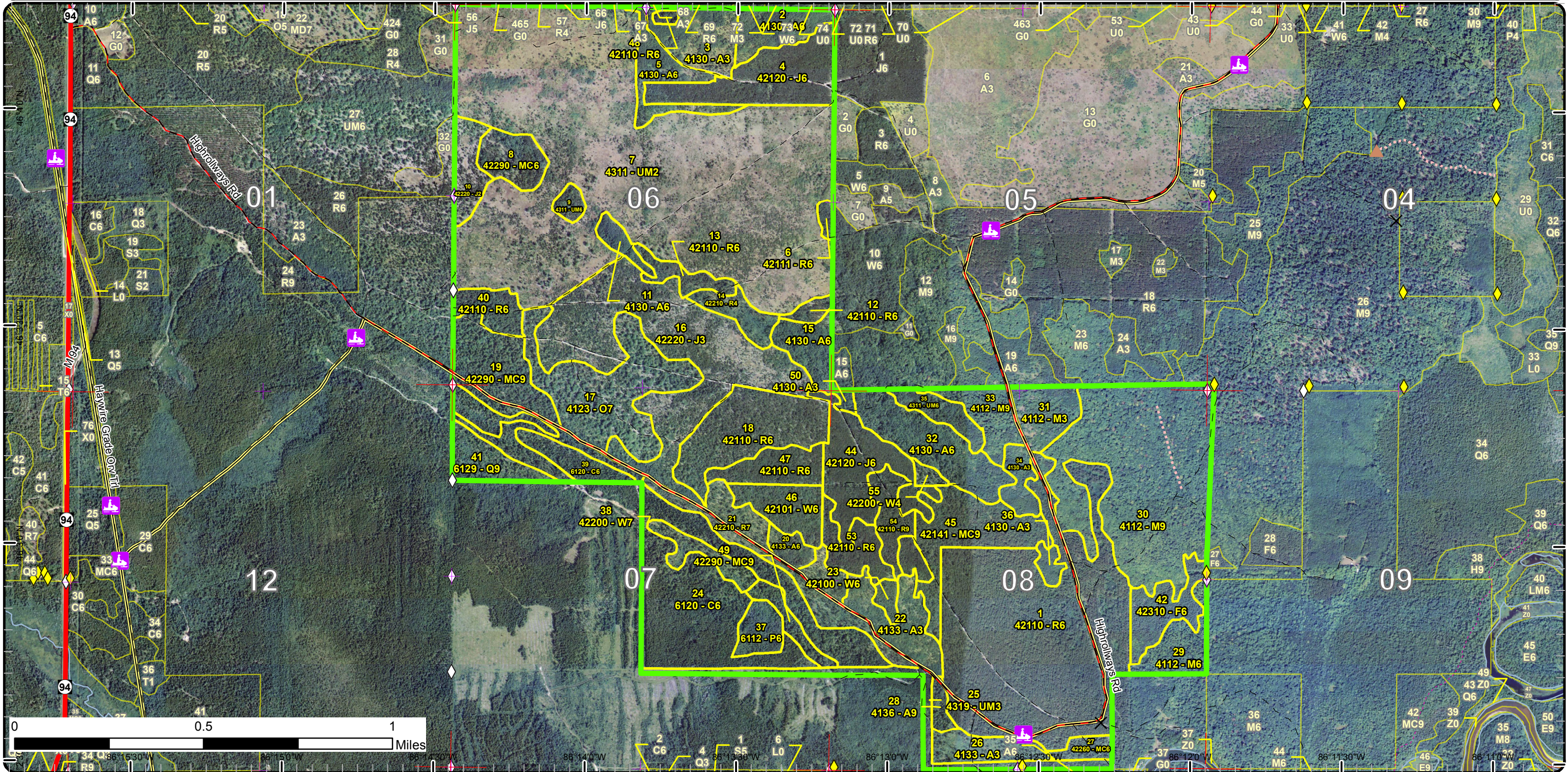


Stand Boundary Map

Compartment: 75
 T42N, R15W, Sec: 6-8
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Hiawatha Moraine
 YOE: 2017
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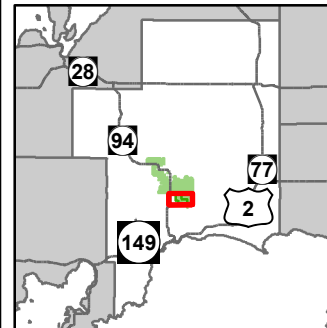


- Remonumented Section Corners
 - Survey Grade GPS Corners
 - Field Grade GPS Corners
 - Miris Corners
 - Highway
 - County Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Gate
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 - Stand Boundaries
- Forest Covertypes**
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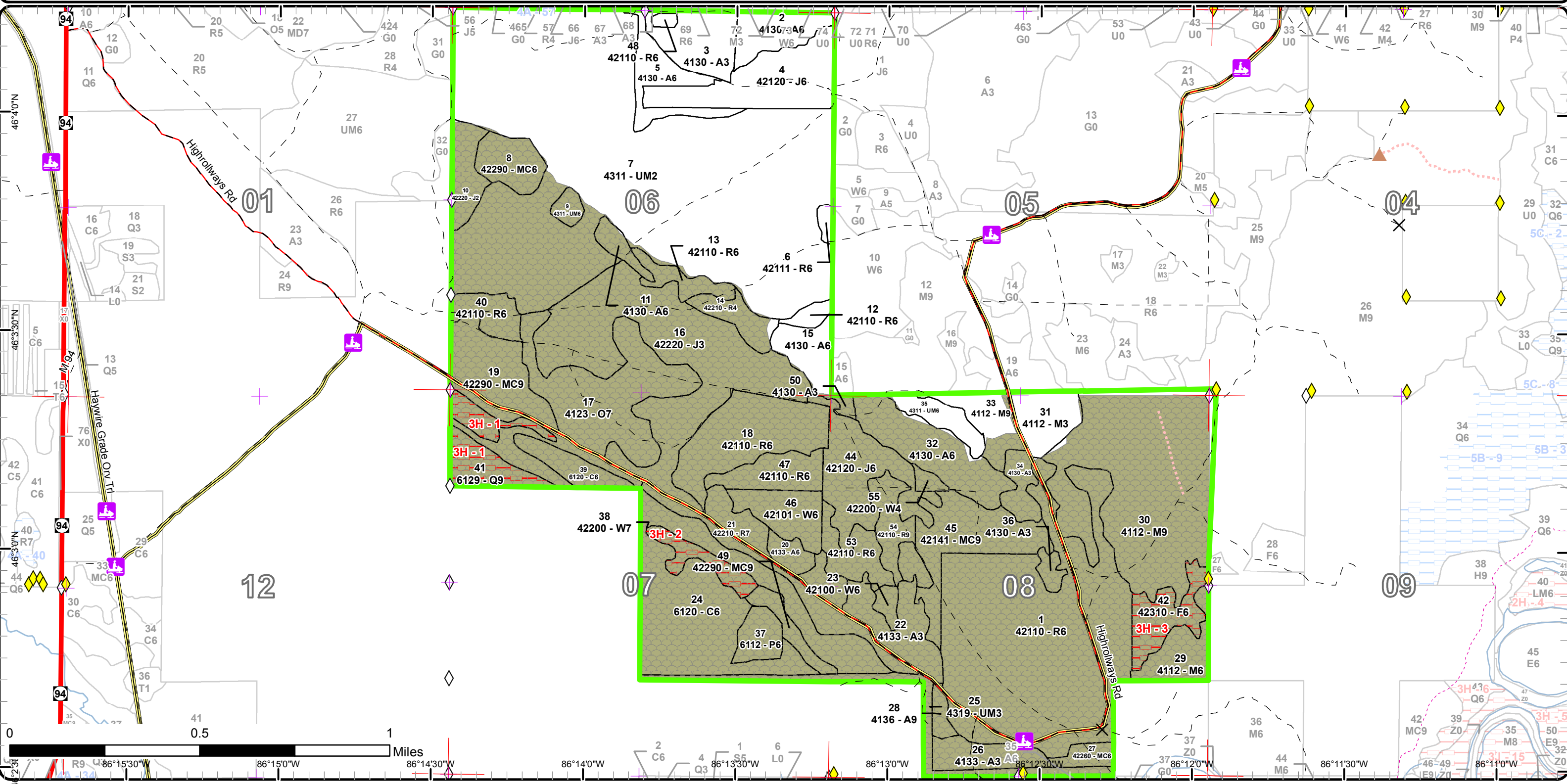


Special Conservation Areas & Site Conditions Map

Compartment: 75
 T42N, R15W, Sec: 6-8
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Hiawatha Moraine
 YOE: 2017
 Acres: 1538 GIS Calculated
 Examiner: Adam Petrelus
 Map Revised: 8/25/2015
 Map Phase: Review



- Remonumented Section Corners
- Survey Grade GPS Corners
- Field Grade GPS Corners
- Miris Corners
- Highway
- County Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Gate
- Berms
- ORV Routes
- Snowmobile Trails
- Rivers
- Stand Boundaries
- Recommendation
- SCA Removal Site Condition
- Unavailable
- Unavailable Factors
- 3H: Deer Wintering Areas
- Special Conservation Areas
- Cold Water Streams
- Potential Old Growth



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	13	41	50	2	0	50	4	0	0	0	0	0	0	0	0	0	0	160
Cedar	0	0	0	0	0	0	0	0	0	11	85	0	0	0	0	0	0	0	96
Jack Pine	0	0	0	114	0	75	0	0	0	0	0	0	0	0	0	0	0	0	189
Lowland Aspen/Balsam Poplar	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	22
Natural Mixed Pines	0	0	0	0	0	0	19	0	0	0	51	0	0	0	0	0	0	0	70
Northern Hardwood	0	0	0	0	15	0	0	0	0	144	0	0	0	0	0	0	0	0	159
Oak	0	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0	0	0	54
Planted Mixed Pines	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	33
Red Pine	0	0	0	0	0	33	73	177	34	0	0	0	0	0	0	0	0	0	317
Upland Mixed Forest	0	0	347	19	0	0	14	0	0	0	0	0	0	0	0	0	0	0	380
Upland Spruce/Fir	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	17
White Pine	0	0	0	0	0	20	3	0	0	0	0	10	0	0	0	0	0	0	33
Total	0	13	388	183	26	128	176	214	34	231	136	10	0	0	0	0	0	0	1539



Report 2 – Treatment Summary

Shingleton Mgt. Unit
Year of Entry: 2017

Acres of Harvest

Compartment 75
Total Compartment Acres: 1,538

Commercial Harvest - 578
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	54	0	0	0	0	0	0	0	0	54
Natural Mixed Pines	0	0	0	51	0	5	0	0	0	56
Northern Hardwood	7	129	0	0	0	0	0	0	0	136
Planted Mixed Pines	0	0	0	0	0	33	0	0	0	33
Red Pine	53	0	0	0	0	214	0	0	0	266
Upland Mixed Forest	10	0	0	0	0	0	0	0	0	10
White Pine	3	0	0	0	0	20	0	0	0	23
Total	126	129	0	51	0	273	0	0	0	578

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	578	0	71	0	347	0	0	0	0	996
Next Step	0	0	128	0	40	0	683	0	0	851
Total	578	0	199	0	387	0	683	0	0	1847



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	Approval Status
1	41075001-Cut	152.4	42110 - Planted Red Pine	Poletimber Well	62	111- 140	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Thin red pine and white pine to 120 sq. ft. basal area. all other species were removed 20 years ago.

Specs:

WLD comment - This prescription will strive to balance red pine age classes within the MA and create a temporary opening, within a mosaic of opening/plantation habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step

Treatments:

Acceptable

Regen:

Other Comment: Minimize impacts to snowmobile trail. May want to deduct acreage for roads while cruising and separate the units with larger size trees in the east. Survey work will be needed. Old next step comments:

Proposed Start Date: 10/1 /2016

1	41075001-Cut	12.4	42110 - Planted Red Pine	Poletimber Well	62	111- 140	Harvest	Clearcut with Retention	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak. Place red paint on some mature red pine to keep it as a component of the stand.

Specs:

Next Step Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable

mixed deciduous and coniferous trees

Regen:

Other Comment: Main red pine stand is being "squared up" for ease of future site prep work. Portion of stand is being converted to hardwood since it is surrounded by hardwood and would be difficult to keep in red pine due to the shape of these fingers. Old next step comments:

Proposed Start Date: 10/1 /2016

7	41075007-Burn	346.6	4311 - Pine, Aspen Mix	Sapling Medium	15	1-50	Burn	Opening	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription 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 or others.

Specs:Next Step

Treatments:

Acceptable

Regen:

Other Comment: Work will be completed under FTP 1619 and 1620 which was approved at 2016 YOE compartment review Old next step comments:

Proposed Start Date: 11/3 /2014

11	41075011-Cut	5.4	4130 - Aspen	Poletimber Well	50	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all species except hemlock, oak, and red pine, and white pine. 2 inch spec on all hardwood. Leave one 8 foot long, 8 inch minimum log per acre for a grouse drumming log.

Specs:Next Step

Treatments:

Acceptable

mixed coniferous and deciduous trees

Regen:

Other Comment: No harvesting April 1 - July 15, sharptail nesting season. Minimize impacts to snowmobile trail. Retention will be red pine, white pine, and any oak / hemlock if present. Old next step comments:

Proposed Start Date: 10/1 /2016



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	Approval Status
13	41075013-Cut	8.3	42110 - Planted Red Pine	Poletimber Well	50	111- 140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Row thin red pine and white pine. Designate all other species for harvest except oak and hemlock if present. May need use wider spacing on
Specs: rows in some areas.

Next Step
Treatments:

Acceptable
Regen:

Other Minimize impacts to snowmobile trail. No retention other than red pine, white pine, and oak. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

15	41075015-Cut	13.5	4130 - Aspen	Poletimber Well	51	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all species except hemlock and oak if present. use 2 inch spec on all hardwood. Leave one 8 foot long, 8 inch minimum log per acre for a
Specs: grouse drumming log.

Next Step
Treatments:

Acceptable mixed deciduous and conifer
Regen:

Other Minimize impacts to snowmobile trail. Retention will be hemlock and oak if present. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

16	41075016- Plant	16.6	42220 - Natural Jack Pine	Sapling Well	25	1-50	Planting	Initial Plant	412 - Oak Types	Even-Aged	Proposal
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Habitat Cut: Yes**Site Condition:**

Prescription Plant oak.
Specs:

Next Step
Treatments:

Acceptable oak and mixed deciduous and coniferous trees. wld will be planting oak
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

17	41075017- Plant	54.3	4123 - Red Oak	Sawtimber Poor	85	51-80	Planting	Underplant	412 - Oak Types	Even-Aged	Proposal
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Habitat Cut: Yes**Site Condition:**

Prescription Plant large oak in canopy gaps or use exclosures to ensure oak recruitment.
Specs:

Next Step
Treatments:

Acceptable oak
Regen:

Other Stand has had a history of being browsed and the oak saplings have not recruited above browse height. This was observed 10 years ago also.
Comment: Plant some large oak that are above the height of deer. Old next step comments:

Proposed Start Date: 10/1 /2016

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18 41075018-Cut	40.2	42110 - Planted Red Pine	Poletimber Well	51	51-80	Harvest	Clearcut	4123 - Red Oak	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**Prescription convert to grassSpecs:

WLD comment - This final harvest will strive to balance age classes within the MA and create a temporary opening, within a mosaic of opening/forested habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step Burn, Slash; Planting, Initial PlantTreatments:Acceptable oak, mixed deciduous and coniferous trees. oak will be planted by wildlife divisionRegen:Other Stocking of red pine is poor and trees are not growing well. Site would be better suited for wildlife management. Old next step comments:Comment:Proposed Start Date: 10/1 /2016

19 41075019-Cut	43.3	42290 - Natural Mixed Pine	Sawtimber Well	96	81-110	Harvest	Seed Tree with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**Prescription Leave less than 30 sq ft residual basal area of mature, large crown seed trees. Designate all other species for harvest except hemlock, oak, and cedar if present.Specs:

WLD comment - This final harvest will strive to balance age classes within the MA and create a temporary opening, within a mosaic of opening/forested habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step Planting, Underplant; Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable mixed coniferous and deciduous species.Regen:Other Minimize impacts to snowmobile trail. Force harvest to bare ground conditions only for scarification purposes. Protect existing pine regeneration.Comment: Retention will be red pine, white pine, and any oak / hemlock if present. VBAR cruising will be needed. Old next step comments:Proposed Start Date: 10/1 /2016

23 41075023-Cut	3.5	42100 - Planted White Pine	Poletimber Well	48	111-140	Harvest	Systematic Thinning	4210 - Planted White Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**Prescription Row thin red pine and white pine. A representative sample of all species present should be left.Specs:

WLD comment - This prescription will strive to balance red pine age classes within the MA and create a temporary opening, within a mosaic of opening/plantation habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next StepTreatments:AcceptableRegen:Other Minimize impacts to snowmobile trail. Retention will be red pine, white pine, and any oak / hemlock if present. Old next step comments:Comment:Proposed Start Date: 10/1 /2016

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
27 41075027-Cut	5.4	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	54	81-110	Harvest	Low Thinning	429 - Mixed Upland Conifers	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Mark red pine and white pine where needed for operability and where high densities exist. Also focus on removing those red pine and white pine
Specs: that have reached maximum value while leaving good seed trees and smaller poles. cut all other species except hemlock and oak.

Next Step
Treatments:

Acceptable
Regen:

Other Minimize impacts to snowmobile trail. harvest in winter for deer. survey work will be needed. Retention of pine, hemlock, and oak is acceptable.
Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

28 41075028-Cut	3.9	4136 - Aspen, Mixed Conifer	Sawtimber Well	65	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except cedar, hemlock, and oak. Use 2 inch spec on hardwood. Leave one 8 foot long, 8 inch minimum log per acre for a grouse
Specs: drumming log.

WLD comment - This final harvest will strive to balance age classes within the MA and create a temporary opening, within a mosaic of opening/forested habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step
Treatments:

Acceptable mixed deciduous and coniferous species
Regen:

Other Minimize impacts to snowmobile trail. Harvest in winter only for deer. Retention of cedar, hemlock, and oak is acceptable. Survey work will be
Comment: needed. Old next step comments:

Proposed Start Date: 10/1 /2016

30 41075030-Cut	113.9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to complete marker standards. designate all beech and ash for harvest. leave some beech that appear to be resistant or have heavy
Specs: bear use in the past. No chipping

Next Step
Treatments:

Acceptable mixed hardwood and coniferous species.
Regen:

Other Minimize impacts to snowmobile trail. Deer wintering layer splits stand. Restrict to winter harvest, but allow latitude to shift dates based on
Comment: weather conditions. Western boundary will be irregular since it borders and adjacent sale. Old next step comments:

Proposed Start Date: 10/1 /2016

31 41075031-Cut	6.9	4112 - Maple, Beech, Cherry Association	Sapling Well	30	51-80	Harvest	Clearcut	412 - Oak Types	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak if present. Use 2 inch spec.
Specs:

Next Step Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable oak and other species recommended by wildlife division
Regen:

Other Minimize impacts to snowmobile trail. Less than 3% retention is acceptable. Old next step comments:
Comment:

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
32	41075032-Cut	31.4	4130 - Aspen	Poletimber Well	50	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak. Use 2 inch spec on hardwood. Leave one 8 foot long, 8 inch minimum log per acre for a grouse drumming log.
Specs:

Next Step
Treatments:

Acceptable mixed coniferous and deciduous trees
Regen:

Other Manage for aspen since there is an abundance of pine to the south. Minimize impacts to snowmobile trail. Retention could be accomplished by patches shared with stand 35 to the north. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

33	41075033-Cut	14.9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Most of this stand was harvested recently and these areas will just need gaps created since regeneration was poor. other portions of stand will need quality gaps created and will need to be marked to complete marker standards. Designate all beech and ash for harvest. Leave some beech that appear to be resistant or have had heavy use by bears if present.
Specs:

Next Step Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable mixed deciduous and coniferous trees
Regen:

Other minimize impact to snowmobile trail. Boundary will cross compartment line slightly. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

35	41075035-Cut	9.8	4311 - Pine, Aspen Mix	Poletimber Well	51	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all species except hemlock and oak. Use 2 inch spec on hardwood.
Specs:

Next Step
Treatments:

Acceptable mixed deciduous and coniferous trees
Regen:

Other Stand is failed WP plantation which is overtopped heavily by aspen. Manage for aspen due to abundance of pine to the immediate south.
Comment: Minimize impacts to snowmobile trail. Retention could be accomplished by shared patches with stand 75 to the south. Old next step comments:

Proposed Start Date: 10/1 /2016

40	41075040-Cut	10.4	42110 - Planted Red Pine	Poletimber Well	51	111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Row thin red pine and white pine. A representative sample of all species present should be left. Do not cut hemlock and oak if present.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Minimize impacts to snowmobile trail. Retention will be red pine, white pine, and any oak / hemlock if present. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
45 41075045-Cut	33.1	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	62	111- 140	Harvest	Systematic Thinning	429 - Mixed Upland Conifers	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Row thinning of red pine and white pine. Row thin red pine and white pine. A representative sample of all species present should be left. Do not cut hemlock and oak if present.. Make sure rows are wide enough to operate. Overall basal area when done may be between 70 and 100 sq. ft. due to the amount of other species being removed.

WLD comment - This prescription will strive to balance red pine age classes within the MA and create a temporary opening, within a mosaic of opening/plantation habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step
Treatments:

Acceptable
Regen:

Other Minimize impacts to snowmobile trail. Retention of mixed pine and oak is acceptable. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

46 41075046-Cut	16.8	42101 - Planted White Pine, Mixed Deciduous	Poletimber Well	48	111- 140	Harvest	Systematic Thinning	4210 - Planted White Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Row thin red pine and white pine. Row thin red pine and white pine. A representative sample of all species present should be left. Do not cut hemlock and oak if present.

WLD comment - This prescription will strive to balance red pine age classes within the MA and create a temporary opening, within a mosaic of opening/plantation habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step
Treatments:

Acceptable
Regen:

Other Minimize impacts to snowmobile trail. No retention other than red pine and white pine. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

47 41075047-Cut	15.3	42110 - Planted Red Pine	Poletimber Well	48	141- 170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Row thin red pine and white pine. Row thin red pine and white pine. A representative sample of all species present should be left. Do not cut hemlock and oak if present.

WLD comment - This prescription will strive to balance red pine age classes within the MA and create a temporary opening, within a mosaic of opening/plantation habitat, which will benefit sharp-tailed grouse and other open-land dependent species.

Next Step
Treatments:

Acceptable
Regen:

Other Minimize impacts to snowmobile trail. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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	Approval Status
48	41075048-Cut	1.5	42110 - Planted Red Pine	Poletimber Well	48	111- 140	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**Prescription Thin stand to 120.Specs:Next StepTreatments:AcceptableRegen:Other Stand should be included with Compartment 60 in 2019 YOY. Old next step comments:Comment:Proposed Start Date: 10/1 /2018

49	41075049-Cut	7.5	42290 - Natural Mixed Pine	Sawtimber Well	96	141- 170	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**Prescription Cut all trees except hemlock and oak. Leave a few red pine and white pine for seed. Buffer creek 100 feet. If accessed from south throughSpecs: private, we may not need a stream crossing. Some cedar will need to be cut at base of ridge to allow for skidding.Next Step

Planting, Underplant; Monitoring, Natural Regen (Re-Inventory)

Treatments:Acceptable

Mixed deciduous and coniferous trees.

Regen:Other Restrict harvest to winter for deer browse. Retention will be pine seed trees and any mixed species located within creek buffer. Will want toComment: VBAR cruise stand. Old next step comments:Proposed Start Date: 10/1 /2016

53	41075053-Cut	13.7	42110 - Planted Red Pine	Poletimber Well	45	111- 140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**Prescription Row thin red pine and white pine. A representative sample of all species present should be left. Do not cut hemlock and oak if present.Specs:Next StepTreatments:AcceptableRegen:Other Minimize impacts to snowmobile trail. Retention will be red pine, white pine, and any oak / hemlock if present. Old next step comments:Comment:Proposed Start Date: 10/1 /2016

54	41075054-Cut	12.2	42110 - Planted Red Pine	Sawtimber Well	62	111- 140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**Prescription Row thin red pine and white pine. A representative sample of all species present should be left. Do not cut hemlock and oak if present.Specs:Next StepTreatments:AcceptableRegen:Other Minimize impacts to snowmobile trail. Retention will be red pine, white pine, and any oak / hemlock if present. Old next step comments:Comment:Proposed Start Date: 10/1 /2016



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
55 41075055-Cut	2.5	42200 - Natural White Pine	Poletimber Poor	50	1-50	Harvest	Clearcut	412 - Oak Types	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Cut all trees except hemlock and oak. Use 2 inch spec on all hardwood.

Specs:

Next Step Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable oak or other preferred wildlife species.

Regen:

Other Stand is sparse and open grown white pine. Would be a good place for oak. Minimize impacts to snowmobile trail. Less than 3% retention is

Comment: acceptable. Old next step comments:

Proposed Start Date: 10/1 /2016

**Total Treatment
Acreage Proposed: 995.6**

Report 5 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 75
Year of Entry: 2017

Dominant Site Conditions

3H

Aspen	
Cedar	
Jack Pine	
Lowland Aspen/Balsam Poplar	
Lowland Conifers	22
Natural Mixed Pines	
Northern Hardwood	
Oak	
Planted Mixed Pines	
Red Pine	
Upland Mixed Forest	
Upland Spruce/Fir	17
White Pine	10
Total Forested Acres	49
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	3H: Deer Wintering Areas	22	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	3H: Deer Wintering Areas	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: overstory is mixture of white pine and hemlock. not enough pine to make it worth while to remove overstory. most of it is large / poor quality and stand is located in deer wintering area.							
3	Unavailable	3H: Deer Wintering Areas	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments: white spruce plantation. provides excellent thermal cover currently. The benefit of thinning this plantation would not be as great as the benefit of the thermal cover.							

**Report 6 – 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
C75 SCA removal	Potential Old Growth		SCA Removal	1106
Comments Was previously listed as other SCA and POG. Remove SCA designation.				



Report 7 – 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	Shingleton Mgt. Unit		Report 8 – Forested Stands			Compartment: 75 Year of Entry: 2017
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	Poletimber Well	164.8	62	111-140	Basal area from 10 cruise points was 131 during inventory. Highest plot was 160. Stand was thinned in 1999. Trees in east are bigger because they were pruned by inmates and better quality soil near hardwoods.
2	4130 - Aspen	Poletimber Well	15.2	24	1-50	
3	4130 - Aspen	Sapling Well	20.4	16	Immature	
4	42120 - Planted Jack Pine	Poletimber Well	36.5	45	81-110	
5	4130 - Aspen	Poletimber Well	16.7	24	1-50	
6	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	2.3	43	111-140	
7	4311 - Pine, Aspen Mix	Sapling Medium	346.9	15	1-50	Burned in 2000. On FTP 1620 already for opening maintenance.
8	42290 - Natural Mixed Pine	Poletimber Well	13.9	50	81-110	ridges have bigger wood
9	4311 - Pine, Aspen Mix	Poletimber Well	3.8	50	81-110	
10	42220 - Natural Jack Pine	Sapling Medium	12.5	23	1-50	Stand was not burned in 2000 when surrounding stands were.
11	4130 - Aspen	Poletimber Well	5.4	50	81-110	
12	42110 - Planted Red Pine	Poletimber Well	3.6	51	81-110	Cut in spring 2008 with Wildshot sale. Residual basal area was 80 red pine, 5 aspen, 3 jack pine.
13	42110 - Planted Red Pine	Poletimber Well	8.3	50	111-140	
14	42210 - Natural Red Pine	Poletimber Poor	10.2	51	1-50	Stand was cut in spring 2008, wild shot sale. 6 acres of TSI work was completed
15	4130 - Aspen	Poletimber Well	13.5	51	81-110	
16	42220 - Natural Jack Pine	Sapling Well	101.1	25	1-50	
17	4123 - Red Oak	Sawtimber Poor	54.3	85	51-80	Zero recruitment of oak saplings within stand. Oak regeneration is heavily browsed. Stand is used heavily by deer.

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Shingleton Mgt. Unit

Report 8 – Forested Stands

Compartment: 75
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	42110 - Planted Red Pine	Poletimber Well	40.2	51	51-80	1 - 3 stick trees. Very poor quality red pine plantation. Some of the worst growth I have ever seen.
19	42290 - Natural Mixed Pine	Sawtimber Well	43.3	96	81-110	
20	4133 - Aspen, Mixed Pine	Poletimber Well	5.8	25	51-80	some pockets of older aspen present within stand. stand
21	42210 - Natural Red Pine	Sawtimber Poor	33.8	71	1-50	Stand was cut in spring of 2010, wild shot sale. residuals were 25 ft red pine, 12 ft white pine
22	4133 - Aspen, Mixed Pine	Sapling Well	20.8	15	Immature	stand was cut in spring 2000, tsi work completed also
23	42100 - Planted White Pine	Poletimber Well	3.5	48	111-140	
24	6120 - Lowland Cedar	Poletimber Well	85.4	91	111-140	
25	4319 - Mixed Upland Forest	Sapling Well	19.1	21	Immature	Stand only exists because there is no survey data to verify actual location of compartment boundary. Once survey is completed we will know if this is actually state land or not.
26	4133 - Aspen, Mixed Pine	Sapling Well	13.3	5	1-50	cut in fall 2000 with Wild Shot Sale. 30 feet of red pine/white pine residual from cruise. regen is nice
27	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	5.4	54	81-110	
28	4136 - Aspen, Mixed Conifer	Sawtimber Well	3.9	65	111-140	boundary may change due to cedar and hemlock exclusions and survey
29	4112 - Maple, Beech, Cherry Association	Poletimber Well	15.0	80	81-110	Cut in the spring of 1999
30	4112 - Maple, Beech, Cherry Association	Sawtimber Well	113.9	80	111-140	Cut in 1992
31	4112 - Maple, Beech, Cherry Association	Sapling Well	15.2	30	51-80	a mixture of open and cherry
32	4130 - Aspen	Poletimber Well	31.4	50	81-110	appears to be 40 and 60 years old .
33	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.9	80	81-110	Cut in 2009. Regen is present but browsed heavily in many areas.
34	4130 - Aspen	Sapling Well	8.6	25	1-50	

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Shingleton Mgt. Unit

Report 8 – Forested Stands

Compartment: 75
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	4311 - Pine, Aspen Mix	Poletimber Well	9.8	51	81-110	failed white pine plantation. Stand is overtopped with mature aspen.
36	4130 - Aspen	Sapling Well	3.7	25	1-50	
37	6112 - Lowland Aspen	Poletimber Well	9.4	36	1-50	
38	42200 - Natural White Pine	Sawtimber Poor	9.6	101	1-50	Stand was cut in 2001. regenerating well
39	6120 - Lowland Cedar	Poletimber Well	10.8	80	81-110	
40	42110 - Planted Red Pine	Poletimber Well	10.4	51	111-140	
41	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	22.0	86	Unspecified	Stand was cut in 2001 with alot of cedar and hemlock residual.
42	42310 - Planted Spruce	Poletimber Well	17.1	54	111-140	
44	42120 - Planted Jack Pine	Poletimber Well	38.3	45	81-110	
45	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	33.1	62	111-140	
46	42101 - Planted White Pine, Mixed Deciduous	Poletimber Well	16.8	48	111-140	
47	42110 - Planted Red Pine	Poletimber Well	15.3	48	141-170	
48	42110 - Planted Red Pine	Poletimber Well	1.5	48	111-140	
49	42290 - Natural Mixed Pine	Sawtimber Well	7.5	96	141-170	
50	4130 - Aspen	Sapling Well	1.7	30	1-50	adjacent stand to the north leaked over compartment boundary and created this stand.
53	42110 - Planted Red Pine	Poletimber Well	13.7	45	111-140	
54	42110 - Planted Red Pine	Sawtimber Well	12.2	62	111-140	
55	42200 - Natural White Pine	Poletimber Poor	2.5	50	1-50	



Stand Cover Type

Acres

Managed
Site

General Comments:

#Type!
