

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41034 Entry Year 2019 Acreage: 1,764

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 2017-07-19

Stand Examiner: Adam Petrelius

Legal Description:

T44N R16W Sections 31, 32, and 33

Identified Planning Goals:

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

Soil and topography:

The topography in this compartment is mostly flat with slight elevations changes.

One steep ridge exists and splits the compartment in half separating the lowland peat soils located in the west from the upland sandy soils in the east. About 1/3 of the acreage in the compartment is dominated by aspen, 1/3 lowland brush and marsh, and 1/3 is miscellaneous forest cover types. The major soil types found within the compartment, in order of abundance, are Markey Mucky Peat, Rubicon Sand, Rousseau Fine Sand, Dawson-Greenwood-Loxley, and Rousseau-Neconish-Deford. Habitat types within the compartment, in order of abundance, are unclassified wetland, PVE, PArV, and AFPo

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

State land within this compartment was acquired between 1906 and 1952. With the exception of one private parcel along the northern boundary, this compartment is bordered by state land on the north and south. The western compartment boundary borders the Hiawatha National Forest. The eastern boundary is a mixture of timber industry land, state, and private. Within the last 10 years some of this industry land has transferred to private and camps have been built.

Unique Natural Features:

Oak forest cover types are rare within the Shingleton Management Unit. This compartment has 134 acres of cover types classified as oak stands. Most stands located in the upland soils also have a decent oak component.

Archeological, Historical, and Cultural Features:

In the early 1900's a land development company dug miles of ditches to drain the watershed and promote the land as farmable. Most of the farming efforts failed and the land reverted over to the state. Five ditches are located in the western section of this compartment. They all drain into the Big Ditch which eventually flows into Indian Lake.

Special Management Designations or Considerations:

There are no Special Conservation Areas located within the compartment. Much of the western portion of the compartment was harvested sometime between 1975 and 1996 for sharptail management. Currently most of these areas are grown in and dominated with aspen.

Watershed and Fisheries Considerations:

The Big Ditch is found within this compartment. Standard BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations:

Lying to the north of M-94, the west half of this compartment is substantially impacted by drains connected to the Big Ditch. The pre-settlement data show that the Fletcher's hill portion of this compartment was dominated by a mixture of hemlock, white pine, beech, white birch, and yellow birch. Oak and aspen were also present. The western portion of the compartment was primarily lowland forest of tamarack and spruce. This compartment has been substantially altered from the

circa 1850 condition. The eastern portion now contains and abundance of oak, aspen, red pine and white pine. The western portion of the compartment has been significantly altered by draining and now consists of lowland brush, large openings and aspen. The wildlife habitat management regime consists of perpetuating the oak and enhancing the hemlock component in the east and maintaining the open character in the western portion of the compartment.

Mineral Resource and Development Concerns and/or Restrictions

Gravel pits are not located in the area and sand and gravel potential appears to be limited within the compartment. There is no known metallic mineral potential in this region. There is no commercial oil and gas production in the UP.

Vehicle Access:

There are 3 main forest roads located within the compartment. Vehicles can access the compartment by turning west off the Southside Road, turning north off M-94 onto the Fletchers Hill Road, or the Mint Farm Road. Roads accessing the compartment are not plowed during winter months and winter access is by snowmobile only. Upon entering the southern boundary of the compartment, the Mint Farm Road is of poor quality and is only passable during the driest portions of the summer.

Survey Needs:

Survey needs exist along the eastern boundary.

Recreational Facilities and Opportunities:

There are no recreational facilities located within the compartment. Opportunities for hunting and other forms of recreational activity exist within the compartment.

Fire Protection:

Response time to fires within this compartment will be slow to moderate. The compartment is located approximately half way between the Shingleton and Thompson offices. Although there are 3 main forest roads entering the compartment, much of the compartment is low ground. Peat soils located in the western portion of the compartment can make firefighting efforts difficult during the dry months of the year. The Big Ditch Fire in 1989, located just south of the compartment, is an example of this. Sandy soils in the eastern portion of the compartment support mixed pine and oak forest types which can be fire threats throughout spring, summer, and fall. The compartment has only 1 surface water source, the Big Ditch. However, nearby water sources are located within a couple miles.

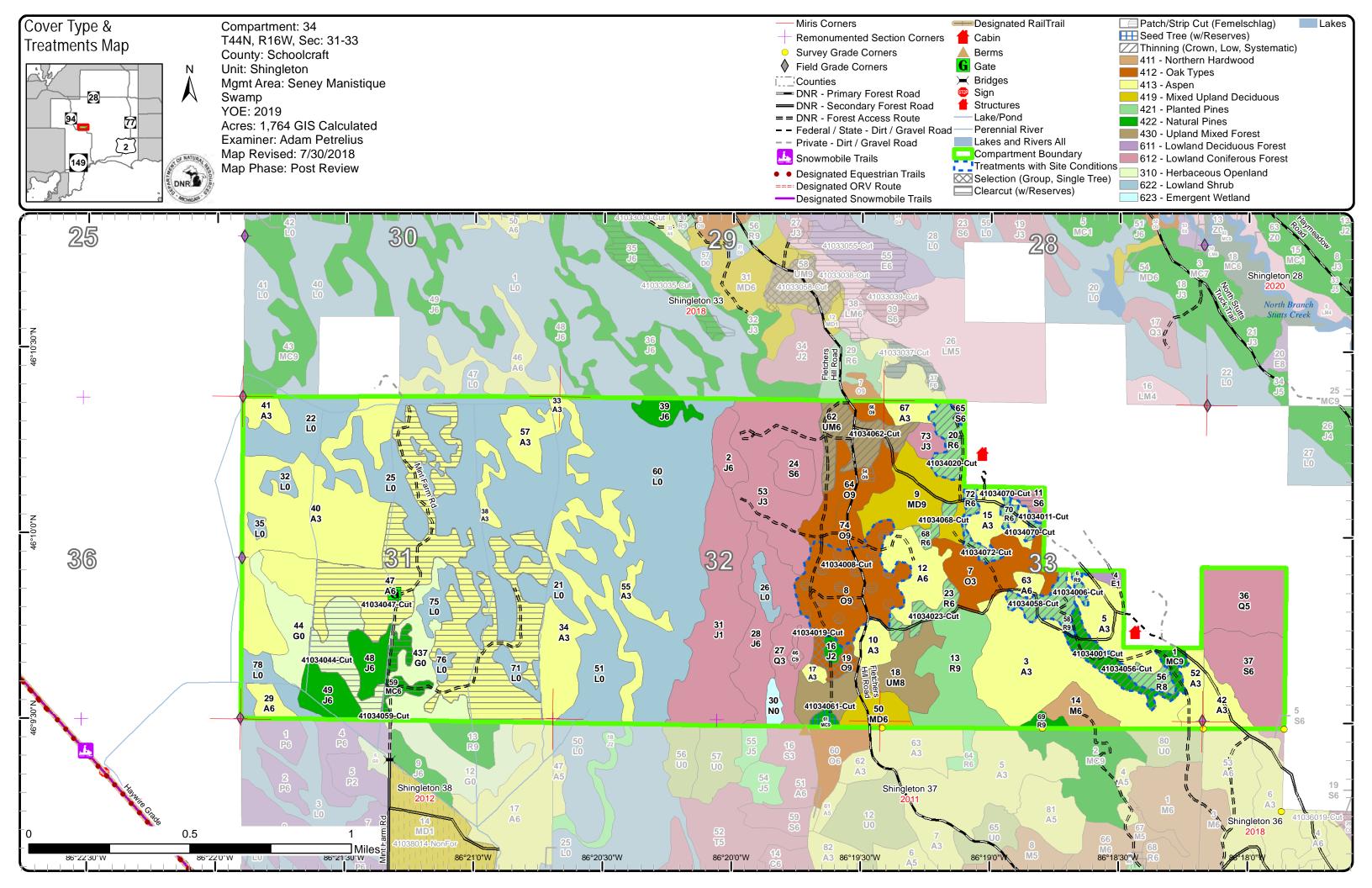
Additional Compartment Information:

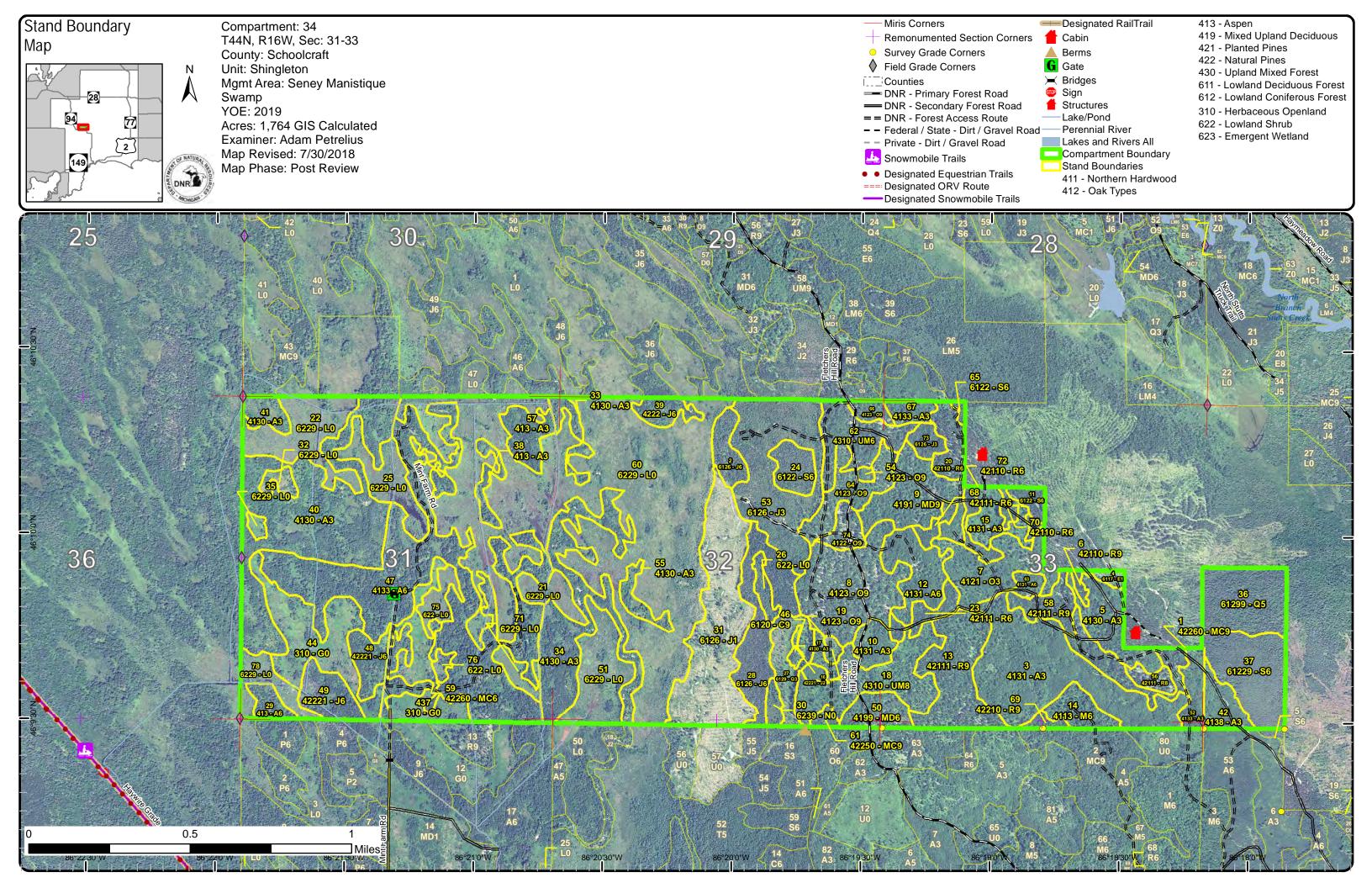
The following reports from the Inventory are attached:

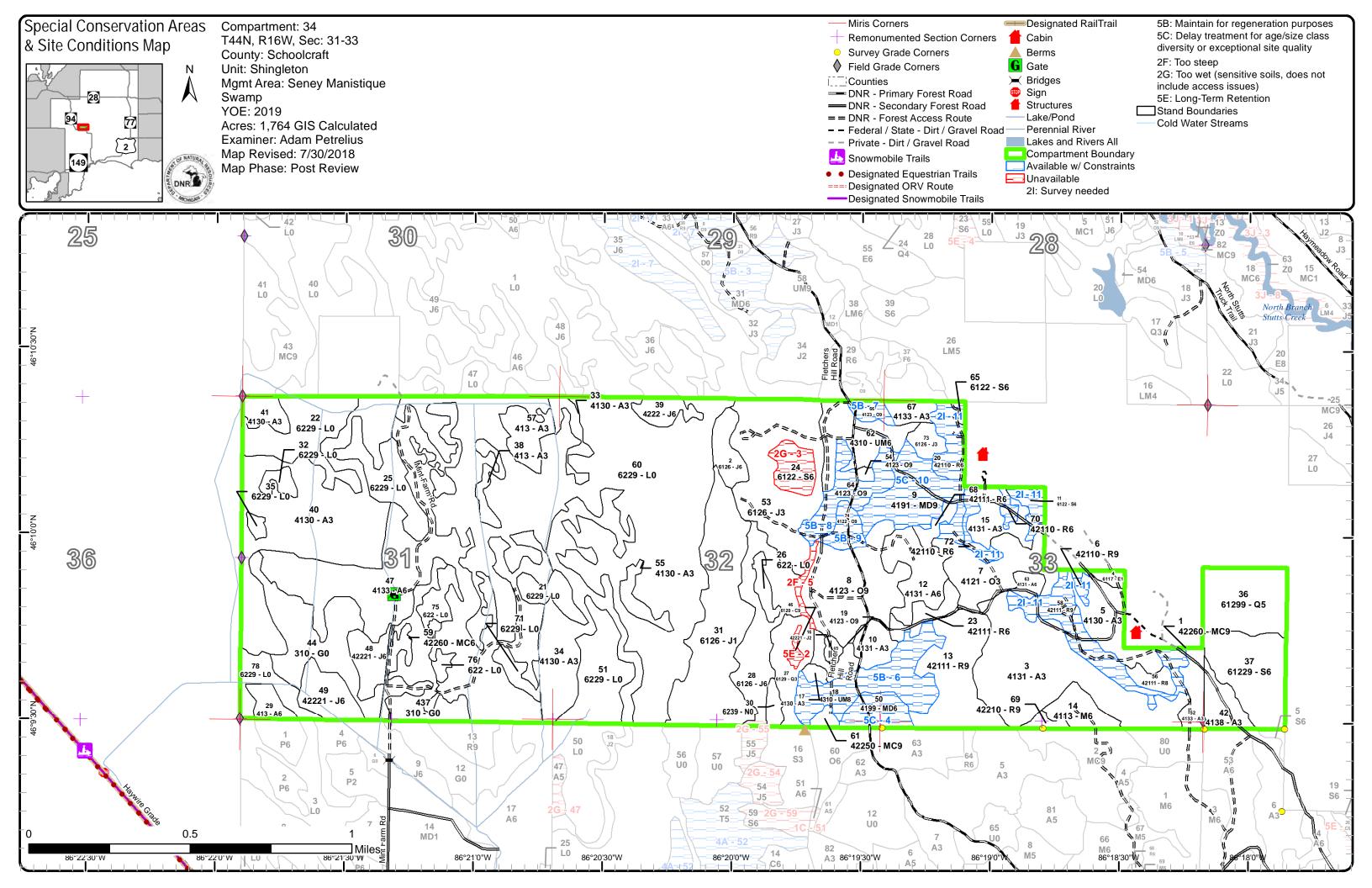
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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

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







Compartment 34 Year of Entry 2019

Shingleton Mgt. Unit Adam Petrelius : Examiner



Age Class

	*oc	A STATE OF THE PROPERTY OF THE		87.78		37 /14	10 to	\$ 		\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		\$ /0 <u>/</u> 0/	20,2	81/8	\$2. \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	%. /s	N. S. J.	St Julia	September 10 / Septem
Aspen	0	20	56	287	29	160	0	0	0	0	0	0	0	0	0	0	0	0	552
Cedar	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Herbaceous Openland	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
Jack Pine	0	72	2	102	0	0	47	0	0	0	0	0	0	0	0	0	0	0	223
Lowland Conifers	0	17	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	51
Lowland Deciduous	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Shrub	433	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	433
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	43	12	0	0	0	0	0	0	0	55
Marsh	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	47
Natural Mixed Pines	0	0	0	0	0	10	0	17	0	3	0	0	0	0	0	0	0	0	30
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12
Oak	0	0	31	0	0	0	0	0	0	94	0	0	0	0	0	0	0	0	124
Red Pine	0	0	0	0	0	41	2	52	3	0	0	0	0	0	0	0	0	0	98
Upland Mixed Forest	0	0	0	0	0	24	0	0	0	37	0	0	0	0	0	0	0	0	61
Total	508	112	89	389	29	235	49	69	3	258	26	0	0	0	0	0	0	0	1766



Report 2 – Treatment Summary

Shingleton Mgt. Unit Year of Entry: 2019

Acres of Harvest

Compartment 34
Total Compartment Acres: 1,764

Commercial Harvest - 232 Harvests with Site Condition - 111 Next Step Harvest - 0 Habitat Cut - 0 Shingleton Mgt. Un

Compartment: 34 Year of Entry: 2019 DNR MICHIGAN

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	41034001-Cut	17.3	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	62	111- 140	Harvest	Low Thinning	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition: Survey Needed

<u>Prescription</u> Cut all species except red pine and oak. Thin red pine where needed. Stand is a mixture of planted and natural pine. Row thinning may be <u>Specs:</u> needed in areas. Exclude finger in south for retention.

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018

6 41034006-Cut 2.1 42110 - Planted Sawtimber 57 111- Harvest Crown Thinning 4211 - Planted Even-Aged Draft Field Red Pine Well 140 Red Pine Boundary

Habitat Cut: No Site Condition: Survey Needed

<u>Prescription</u> Stand would benefit from a light thinning. It has been thinned 2 times already.

Specs:

Next Step
Treatments:

Acceptable

Regen:

Other Survey work would be useful but prepwork could be accomplished using lines established by Weyerhauser.

Comment:

Proposed Start Date: 10/01/2018

8 41034008-Cut 51.3 4123 - Red Oak Sawtimber 80 51-80 Harvest Strip/Patch/Gap 412 - Oak Types Two-Aged Draft Field Cut Boundary (Femelschlag)

Habitat Cut: No Site Condition: Too Steep

Prescription | Create large canopy gaps to encourage oak establishment and recruitment. Gaps must be large enough to allow oak recruitment into overstory. | Specs: Focus gaps in areas that contain mature red pine where possible and harvest single red pine trees also. Existing gaps can also be cleaned up to

ensure oak recruitment into overstory.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Based on the results of the harvest last year of entry oak regeneration and recruitment is expected however any species onsite are acceptable.

Regen:

Other Protect oak regeneration with timbersale spec.

Comment:

Proposed Start Date: 10/01/2018

11 41034011-Cut 5.1 6122 - Black Spruce Poletimber 82 81-110 Harvest Clearcut with 613 - Lowland Even-Aged Draft Field Well Retention Mixed Forest Boundary

Habitat Cut: No Site Condition: Survey Needed

Prescription Cut all trees except hemlock and oak if present. Treatment should include the hillside since operating is easier from the bottom. Less than 3%

retention is acceptable due to small stand size.

Next Step Monitoring, Artificial Regen(1yr); Planting, Initial Plant

Treatments:

Acceptable Stand will likely regenerate to black spruce and jack pine, but all species are considered acceptable regeneration.

Regen:

Specs:

Other Survey work would be useful but prepwork could be accomplished using lines established by Weyerhauser.

Comment:

Proposed Start Date: 10/01/2018

Other Comment:

Regen:

Proposed Start Date: 10/01/2018

41034023-Cut 42111 - Planted Poletimber 49 111-Harvest Systematic 4211 - Planted Even-Aged Draft Field Thinning Red Pine. Mixed Well 140 Red Pine Boundary Deciduous

Habitat Cut: No Site Condition:

<u>Prescription</u> Row thin. Cut all other species except oak. Less than 3% retention is acceptable due to small stand size. Remove red pine that are suppressed under oak canopy. Avoid cutting oak unless needed.

Next Step

Treatments:

<u>Acceptable</u>

Regen:

<u>Other</u>

Comment:

Proposed Start Date: 10/01/2018

44 41034044-Cut 21.8 310 - Herbaceous Nonstocked Unspec Harvest Clearcut 310 - Draft Field Openland ified Herbaceous Openland Openland

Habitat Cut: No Site Condition:

Prescription Cut all species except oak and hemlock if present. Harvest trees down to 2 inches. Less than 3% retention is acceptable since objective is non-

Specs: forest.

Next Step NonForestMgt, Other - Specify

Treatments:

Regen:

Comment:

Acceptable Any species is acceptable regeneration including non-forested. There will be no minimum trees per acre requirement for this stand since open

pockets and low stocking will be acceptable per WLD management goals. Stand originated from sharptail management in 1975.

Other Stand contains some man made ditches. Beaver is a featured species in this managment area. "The goal for beaver in the eastern Upper

Peninsula is to maintain suitable habitat. Management for the species should focus on providing favorable food within 100 feet of streams that are not designated high priority trout streams. " Harvest may occur right up to the edge of these man made ditches. Prevent equipment from

crossing in more than 1 location.

Proposed Start Date: 10/01/2018

Next Step

Comment:

Proposed Start Date: 10/01/2018

41034058-Cut Systematic 11.9 42111 - Planted Sawtimber 46 111-Harvest 4211 - Planted Even-Aged Draft Field Red Pine. Mixed Well 140 Thinning Red Pine Boundary

Deciduous

Habitat Cut: No Site Condition: Survey Needed

Prescription Row thinning. Avoid cutting oak unless needed for operability. Remove suppressed red pine located underneath oak. Cut all other species except

Specs: hemlock and oak.

Next Step

Treatments:

<u>Acceptable</u>

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Other

Comment

Proposed Start Date: 10/01/2018

41034065-Cut 6122 - Black 1.2 6122 - Black Spruce Poletimber 51-80 Harvest Clearcut Even-Aged Draft Field Spruce Boundary

Habitat Cut: No Site Condition: Survey Needed

Prescription Cut all trees except hemlock and oak if present. No other retention needed due to small size.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen: Other Comment:

10/01/2018 **Proposed Start Date:**

Compartment: 34

s

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
68	41034068-Cut	4.4	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	49	111- 140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Row thin. Cut all other species except hemlock and oak. Less than 3% retention is acceptable due to small stand size. Specs:

Next Step

Treatments:

Acceptable

Regen:

<u>Other</u> Comment:

10/01/2018 **Proposed Start Date:**

41034070-Cut 4.0 42110 - Planted Poletimber 111-Harvest Systematic 4211 - Planted Even-Aged Draft Field Red Pine Well 140 Thinning Red Pine Boundary

Habitat Cut: No Site Condition: Survey Needed

Prescription First thinning, row thin. Mark red pine and cut all other species except oak. Oak may be harvested if needed for operability purposes. Less than

Specs: 3% retention is acceptable due to small stand size.

Next Step **Treatments:**

<u>Acceptable</u> Regen:

Other Survey work would be useful but prepwork could be accomplished using lines established by Weyerhauser.

Comment:

Proposed Start Date: 10/01/2018

41034072-Cut 42110 - Planted 5.7 Poletimber 4211 - Planted Draft Field 111-Harvest Systematic Even-Aged Red Pine Well 140 Thinning Red Pine Boundary

Habitat Cut: No Site Condition: Survey Needed

Prescription First thinning. Row thin. Less than 3% retention is acceptable due to small stand size. Cut all other species in stand. Oak should only be

Specs: harvested if needed for operability.

Next Step Treatments:

<u>Acceptable</u>

Regen:

Survey work would be useful but prepwork could be accomplished using lines established by Weyerhauser.

Comment:

Other

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed:

342.2

Shingleton Mgt. Unit
Adam Petrelius: Examiner

Compartment: 34
Year of Entry: 2019

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	s	
Acres	Available	With Condition	Not Available		21	5B	5C	2F	2G	5E
552	552	0	0	Aspen						
2	0	0	2	Cedar						2
71	71	0	0	Herbaceous Openland						
224	223	0	1	Jack Pine					1	
50	50	0	0	Lowland Conifers						
3	3	0	0	Lowland Deciduous						
433	433	0	0	Lowland Shrub						
54	36	6	12	Lowland Spruce/Fir	6				12	
4	4	0	0	Marsh						
47	0	47	0	Mixed Upland Deciduous			47			
30	12	17	0	Natural Mixed Pines	17					
12	12	0	0	Northern Hardwood						
124	87	34	3	Oak		34		3		
98	62	36	0	Red Pine	36					
61	24	37	0	Upland Mixed Forest		37				
1,764	1,569	177	18	Total Forested Acres	59	71	47	3	13	2
	89%	10%	1%	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 Dominant Site No. Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2 Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
3 Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 34 Year of Entry: 2019

Co	omments:				Unspecified	Unspecified	Unspecified
	omments.						
	Unavailable	2F: Too steep	3	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	omments: eep ridge contair	ning mostly oak. Ridge should b	e save	d as long term retention since i	t is questionable if it is o	operable.	
	Available	5B: Maintain for regeneration purposes	37	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
	Available	5B: Maintain for regeneration purposes	5	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
	Available	5B: Maintain for regeneration purposes	21	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
	Available	5B: Maintain for regeneration purposes	8	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 34
Year of Entry: 2019

10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	34	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
11	Available	2l: Survey needed	60	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Mgt. Unit Compartment:
Year of Entry

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.

Conservation Type Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area

s t	Shingletor	Shingleton Mgt. Unit				Stands Compartment: 34 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	17.3	62	111-140	
2	6126 - Lowland Jack Pine	Poletimber Well	10.9	52	51-80	Low ground has spruce and tamarack present. Stand was cut in 1994, 5th edition sale. sale volume had over 80% jack pine volume. This portion of the larger stand was separated in 2017. it contains scattered mature jack pine and also younger trees. It seems like the logger in 1994 ran out of winter to finish the job or determined this area was too wet.
3	4131 - Aspen, Oak	Sapling Well	77.9	27	1-50	
4	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Poor	2.6	6	1-50	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 11, actual acres = 4. Residual Basal Area, Red Pine 2 sq ft.
						(7/12/2012 AP) Sale is closed. Stand has been cut. On list to
						plant. (10/31/2013 AP) FTP 1412 was cancelled at review. Less than 1 acre of high ground exists in this stand and it has regenerated to oak and aspen. Planting or scarification is impractical. Check regeneration next year of entry.
						Stand is fully regenerated to above listed canopy species.
5	4130 - Aspen	Sapling Well	22.2	18	1-50	
6	42110 - Planted Red Pine	Sawtimber Well	2.1	57	111-140	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, Unit 10, actual acres = 3. Residual Basal Area, Red Pine 100 sq ft.
						(7/12/2012 AP) Sale is closed. Stand has been cut.
7	4121 - Oak, Aspen	Sapling Well	30.5	18	1-50	
8	4123 - Red Oak	Sawtimber Well	51.3	80	51-80	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 3, actual acres =45. Residual Basal Area, Red Pine 8 sq ft., red oak 52 sq ft
						(7/12/2012 AP) Sale is closed. Stand has been cut.
						Stand has regenerated well in gaps and oak has recruited above deer height where located in the gaps.
9	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	33.7	82	51-80	
10	4131 - Aspen, Oak	Sapling Well	9.4	18	1-50	
11	6122 - Black Spruce	Poletimber Well	5.1	82	81-110	
12	4131 - Aspen, Oak	Poletimber Well	22.4	36	81-110	Temporary camp has been set up within this stand during hunting seasons multiple years.

S t	Shingleton	Shingleton Mgt. Unit			– Forested	Stands Compartment: 34 Year of Entry: 2019			
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:			
13	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	40.1	68	81-110	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 7, actual acres = 41. Residual Basal Area, Red Pine 57 sq ft., red oak 14 sq ft, white pine 4 sq ft.			
						(7/12/2012 AP) Sale is closed. Stand has been cut.			
14	4113 - R.Maple, Conifer	Poletimber Well	12.1	98	81-110	4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 12, actual acres = 10. Residual Basal Area, wed Pine 6 sq ft., white birch 4 sq ft, hard maple 2 sq ft, beech 7 sq ft, red maple 47 sq ft, hemlock 7 sq ft.			
						(7/12/2012 AP) Sale is closed. Stand has been cut.			
15	4131 - Aspen, Oak	Sapling Well	13.8	7	1-50	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 9, actual acres = 11. Residual Basal Area, Red Pine 2 sq ft., red oak 9 sq ft (7/12/2012 AP) Sale is closed. Stand has been cut.			
						Regeneration is well established and includes a good amount of oak.			
16	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Medium	2.4	18	1-50	frost pocket			
17	4130 - Aspen	Sapling Well	2.3	18	1-50				
18	4310 - Pine, Oak Mix	Sawtimber Medium	36.8	82	141-170	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 5, actual acres = 33. Residual Basal Area, Red Pine 20 sq ft., oak 16 sq ft, white pine 6 sq ft (3/22/11 AP) FTP W41-1411 has been cancelled. (7/12/2012 AP) Sale is closed. Stand has been cut. Maintain canopy to shade out as much aspen as possible. Goal is to increase the oak component.			
19	4123 - Red Oak	Sawtimber Well	6.6	87	51-80	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 4, actual acres = 7. Residual Basal Area, Red Pine 7 sq ft., red oak 41 sq ft			
						(7/12/2012 AP) Sale is closed. Stand has been cut.			
20	42110 - Planted Red Pine	Poletimber Well	12.1	61	81-110	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 8, actual acres = 11. Residual Basal Area, Red Pine 71 sq ft., red oak + 3 sq ft, jack pine 3 sq ft, aspen 6 sq ft			
						(7/12/2012 AP) Sale is closed. Stand has been cut.			
23	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	8.7	49	111-140				
24	6122 - Black Spruce	Poletimber Well	11.7	92	1-50	Low pocket of spruce that was left during previous harvest. Stand was cut in 1994, 5th edition sale. Logger could not harvest it due to wetness. Canopy is being replaced by subcanopy			

S t	Shingleton	Shingleton Mgt. Unit			– Forested	Stands Compartment: 34 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	6129 - Mixed Coniferous Lowland Forest	Sapling Well	17.0	6	1-50	4/8/09 BB Stand is now on proposal 9-09 Fletchers Hill Jack Pine; actual acres = 21. Residual Basal Area = Red Pine 7 sq ft, white pine = 10 sq ft, hemlock 1 sq ft, cedar 12 sq ft
						[9/24/2014] Stand was cut as part of Fletcher Hill Jack Pine. Sale was closed on 8/23/2012. Cutting was completed in Feb/Mar 2012.
						Stand is fully regenerated to mixed swamp conifers.
28	6126 - Lowland Jack Pine	Poletimber Well	35.8	52	51-80	Size of trees within stand varies due to site quality. Some areas are very wet and trees are stunted. Overall the health of the stand is still good.
29	413 - Aspen	Poletimber Well	6.8	37	51-80	Stand should be managed with adjacent compartment since the ditch prevents access.
31	6126 - Lowland Jack Pine	Sapling Poor	72.4	6	1-50	2007 comments: Lowground jack pine stand with a few ridges of red pine present. Quality of jack pine increases towards the western portions of the stand. Jack pine located on low ground is smaller due to site conditions, but mortality was noticed. Site is too wet to scarify, but adjacent stands have regenerated well to a mix of jack pine, spruce, and tamarack. Acceptable alternative management objectives include any species mixture currently present onsite.
						Approximately 38 acres of compartment 37, stands 56 and 57, should be included.
						Harvesting was attempted on portions of this stand during previous years. It was never cut, and was factor limited as too wet.
						4/8/09 BB Stand is now on proposal 9-09 Fletchers Hill Jack Pine; actual acres = 21. Residual Basal Area = Red Pine 6 sq ft, white pine = 1 sq ft
						[9/24/2014] Stand was cut as part of Fletcher Hill Jack Pine. Sale was closed on 8/23/2012. Cutting was completed in Feb/Mar 2012. Stand has been added to the regeneration timeclock and will be checked in 2017.
						2017 comments: Stand has excellent regeneration of lowland jack pine with some black spruce and tamarack.
33	4130 - Aspen	Sapling Well	7.7	22	1-50	Stand was harvested in 1996, swimming rabbit sale. Specs were to harvest all trees down to 4 inches. Volume from sale was a mixture of red pine, jack pine, and aspen.
34	4130 - Aspen	Sapling Well	57.8	22	1-50	Stand was harvested in 1996, swimming rabbit sale. Specs were to harvest all trees down to 4 inches. Volume from sale was a mixture of red pine, jack pine, and aspen.
36	61299 - Mixed Swamp Conifer (OI)	Poletimber Medium	33.5	84	51-80	OPIC - FMD: Stand has a lot of pockets of Lowland brush. Soils are Carbondale Lupton Tawas Muck.
37	61229 - Black Spruce (OI)	Poletimber Well	36.3	84	81-110	OPIC - FMD: Nice spruce stand, 1 more entry will do the stand a lot of good. Soils are Carbondale Lupton Tawas Muck.

s t	Shingletor	ı Mgt. Unit		Report 7	Forested	Stands Compartment: 34 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	413 - Aspen	Sapling Well	6.7	24	1-50	OPIC - FMD: Stand harvested in 1994 for sharptail management. It is currently aspen with pockets of grass, lowland brush, and jack pine. Harvested with the Last Ditch Sale.
39	4222 - Natural Jack Pine	Poletimber Well	8.2	28	1-50	Stand is believed to have been harvested with the Crowes Nest sale in 1998 however the sale map and records do not match.
40	4130 - Aspen	Sapling Well	104.7	24	1-50	
41	4130 - Aspen	Sapling Well	7.8	24	1-50	
42	4138 - Aspen (OI)	Sapling Well	12.0	17	Immature	OPIC - FMD: 41-28-00-01; A few red pine and birch seed trees were left. Sale was cut spring 2001, Awaiting TSI. 12 actual Acres[12-2-02 BB] Stand was TSI'd in summer 2002, real acres are 12Mystery Corner Aspen Sale 28-00Nice aspen regen. Soils are Rubicon Sand
46	6120 - Lowland Cedar	Sawtimber Well	1.9	92	111-140	Stand is retention pocket for stand 27.
47	4133 - Aspen, Mixed Pine	Poletimber Well	159.7	43	51-80	OPIC - FMD: Stand was harvested in 1975 for sharptail management. It is mostly aspen with some jack pine present. A few red pine are scattered throughout. There are also pockets of grass and lowland brush. Numerous FTP's have been completed in this stand during the late 1970's relating to sharptail management. These include herbicide applications, opening maintenance, aspen TSI, and various plantings of rye, vetch oats, and highbush cranberry.
48	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	11.8	26	1-50	Stand was harvested in 1992, ABC pine sale. Specs were to harvest all trees down to 4 inches. Volume from sale was a mixture of red pine, jack pine, and aspen.
49	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	15.3	26	1-50	_
50	4199 - Other Mixed Upland Deciduous	Poletimber Well	13.0	82	51-80	OPIC - FMD: A lot of residual oak remain. Stand is mostly A3, but has some jack pine, white pine, and oak regeneration also.
52	4133 - Aspen, Mixed Pine	Sapling Well	10.1	17	1-50	OPIC - FMD: 41-028-00-01;Sale was cut spring 2001, 10 actual acres, A few red pine and birch seed trees were left. Awaiting TSI
						[12-2-02 BB] Stand was TSI'd in summer 2002, real acres are
						south portion of stand is heavy to red pine
53	6126 - Lowland Jack Pine	Sapling Well	61.2	24	1-50	Stand was cut in 1994, 5th edition sale. sale volume had over 80% jack pine volume.
54	4123 - Red Oak	Sawtimber Well	1.4	82	81-110	

s	Shingleton Mgt. Unit			Report 7	– Forested	Stands Compartment: 34 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	4130 - Aspen	Sapling Well	6.8	22	1-50	Stand was harvested in 1996, swimming rabbit sale. Specs were to harvest all trees down to 4 inches. Volume from sale was a mixture of red pine, jack pine, and aspen.
56	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Medium	5.5	46	1-50	alot of open areas. mixture of failed planting and natural.
57	413 - Aspen	Sapling Well	13.3	24	1-50	Stand harvested in 1994 for sharptail management. It is currently aspen with pockets of grass, lowland brush, and jack pine. Harvested with the Last Ditch Sale.
58	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	11.9	46	111-140	
59	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	9.5	43	51-80	Stand was harvested in 1975 for sharptail management. This was part of a once larger opening.
61	42250 - Pine, Oak	Sawtimber Well	2.7	82	51-80	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 6, actual acres = 3. Residual Basal Area, Red Pine 38 sq ft., red oak 30 sq ft, white pine 3 sq ft
						(7/12/2012 AP) Sale is closed. Stand has been cut.
						was decided at review to hold this stand and harvest in 2021 with stand to the south.
62	4310 - Pine, Oak Mix	Poletimber Well	23.8	46	111-140	
63	4131 - Aspen, Oak	Poletimber Well	4.1	27	1-50	
64	4123 - Red Oak	Sawtimber Well	21.4	80	81-110	Insects/Disease: Oak was found with stand that was heavily infested with Lecanium scale. Comments from Bob Heyd: High scale populations severely reduce tree vigor and cause branch or crown dieback. Pesticides can be used to protect shade trees, but no forest options. Generally, parasites and predators build up in a forest setting, and effectly reduce scale populaitons.
						[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 1, actual acres = 19. Residual Basal Area, Red Pine 2 sq ft., red oak 50 sq ft, white birch 1 sq ft
						(7/12/2012 AP) Sale is closed. Stand has been cut.
						Oak regeneration is excellent and some is starting to recruit into overstory where gaps are present.
65	6122 - Black Spruce	Poletimber Well	1.2	82	51-80	

S t a n d	Shingletor		Report 7	– Forested	Stands Compartment: 34 Year of Entry: 2019	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
66	4123 - Red Oak	Sawtimber Well	4.7	82	81-110	[3/11/08 BB] Stand is now on Proposal 6-08, Fletcher's Hill Mix. Actual Stand acres = 4. Residual Basal Area; oak 88 sq ft.
						[8/27/12 TI] Sale has been closed. TCR date of 4/16/2012. Stand has been added to the regeneration timeclock.
						Canopy is being left to help shade out aspen that regenerated following previous harvest.
67	4133 - Aspen, Mixed Pine	Sapling Well	6.1	7	1-50	
68	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	4.4	49	111-140	
69	42210 - Natural Red Pine	Sawtimber Well	3.1	78	141-170	OPIC - FMD: Small stand. The majority of this stand lies in compartment 37 and this stand should be managed with compartment 37. A note was placed in adjacent stand.
70	42110 - Planted Red Pine	Poletimber Well	4.0	49	111-140	
72	42110 - Planted Red Pine	Poletimber Well	5.7	49	111-140	
73	6126 - Lowland Jack Pine	Sapling Well	5.9	27	1-50	
74	4122 - Oak, Pine	Sawtimber Well	8.2	82	1-50	[4-27-09 BB] Sale is now on proposal 41-001-09 Fletchers Hill Mix, unit 2, actual acres =10. Residual Basal Area, Red Pine 15 sq ft. red oak 13 sq ft (10/31/2013 AP) FTP 1412 was cancelled at review. There were no open pockets develop following harvest and planting is impractical.

Compartment: 34 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
21	6229 - Mixed lowland shrub	10.3	No	
22	6229 - Mixed lowland shrub	33.0	No	
25	6229 - Mixed lowland shrub	21.9	No	
26	622 - Lowland Shrub	5.3	No	
30	6239 - Mixed Emergent Wetland	4.0	No	
32	6229 - Mixed lowland shrub	4.4	No	
35	6229 - Mixed lowland shrub	2.3	No	OPIC - FMD: Stand is mostly lowland brush with some scattered pockets of aspen and grass.
44	310 - Herbaceous Openland	42.8	Yes	Stand was historically managed as opening for sharptail.
51	6229 - Mixed lowland shrub	30.7	No	
60	6229 - Mixed lowland shrub	293.9	No	
71	6229 - Mixed lowland shrub	6.5	No	
75	622 - Lowland Shrub	8.6	No	
76	622 - Lowland Shrub	2.6	No	
78	6229 - Mixed lowland shrub	13.7	No	
437	310 - Herbaceous Openland	28.1	Yes	Stand was cut in 1975 for sharptail management. It consists of mostly grass with pockets of jack pine, aspen, red pine, and lowland brush. FTP's from the late 1970's were completed within this stand and included opening maintenance with herbicide, mechanical opening maintenance, and planting of rye and vetch oats.