



Compartment Review Presentation

Pigeon River Country Forest Management Unit

Compartment 53051

Entry Year 2019

Acreage: 1,250

County Montmorency

Management Area: Pigeon River Country

Revision Date: 2017-05-25

Stand Examiner: Greg Rekowski

Legal Description:

T32N R01E Sections 5, 6, 7, and 8

Identified Planning Goals:

Maintain the current species mix and apply appropriate management techniques to mature stands of timber that are in need of treatment.

Soil and topography:

The soils in this Compartment are mostly Rubicon and Croswell sands in the upland areas. Tawas-lupton mucks are the primary soil type in lowland stands.

Topography is generally flat to gentling rolling in the upland portions. The uplands are predominantly oak and aspen which is not of very good quality. Lowlands are primarily swamp conifers but there is some variation in topography and species mix, particularly in the stands along the western edge of the Compartment line. The ground here tends to undulate between north-south running upland ridges and lowland drainages, with a species mix of red maple, cedar, and hemlock most common.

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

This Compartment is solid state ownership. The north, south, and west edges are bounded by state land. The east edge borders the Black River Ranch property.

Unique Natural Features:

A large block of lowland conifer stands dominated by a mix of old hemlock and cedar can be found in this Compartment. Several of these stands have trees in excess of 150 years old, making them some of the oldest in the PRC.

Hungerford's crawling water beetle has been identified in this Compartment.

Archeological, Historical, and Cultural Features:

Old features from when this Compartment was under private ownership can still be observed throughout the area.

Special Management Designations or Considerations:

None identified.

Watershed and Fisheries Considerations:

Stewart Creek flows through the southern portion of the Compartment. Numerous small stream originate in the north part of the Compartment, eventually joining the Black River.

Wildlife Habitat Considerations:

A Wildlife Division representative will be available at the Open House and Compartment Review to provide comments on this Compartment.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift is the Devonian Antrim Shale that is quarried for cement products elsewhere in the State. A gravel pit is located three miles to the west and potential is considered good on the uplands. A portion of this area is leased for oil and gas development in the Niagaran reef trend. No Niagaran reefs are located in the Compartment, but additional reefs may be located here. The Antrim Shale appears to be present and locations are located on private lands. The State owns mineral rights to the west halves of Sections 6 and 7 but mineral rights are owned by a private individual in the remainder of the Compartment and may be developed.

Vehicle Access:

Vehicle access is limited throughout most of this Compartment. Most roads are permanently closed, many of which are

overgrown in areas and resemble nothing more than hiking trails at this point. The roads in the far northern end have been improved and are part of a Hunter Walking Trail network that has been developed and which continues north into Compartment 29.

Survey Needs:

None needed at this time. Most corners adjacent to the Black River Ranch property were found.

Recreational Facilities and Opportunities:

There are no recreational facilities in this Compartment.

Fire Protection:

Fire risk is generally low. The highest risk is found in the upland oak stands, which are readily accessible via Blue Lakes Road.

Additional Compartment Information:

Deer and elk browse continue to be a major factor influencing successful tree regeneration in this Compartment. Most aspen harvests in the past 30 years have resulted in very poorly-stocked stands that will limit commercial harvesting opportunities in the future. Current stands proposed for treatment will suffer the same fate unless browsing pressure is somehow reduced.

The following reports from the Inventory are attached:

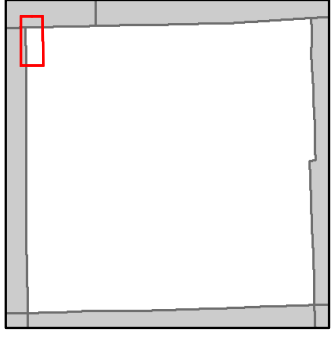
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

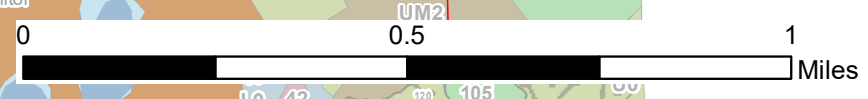
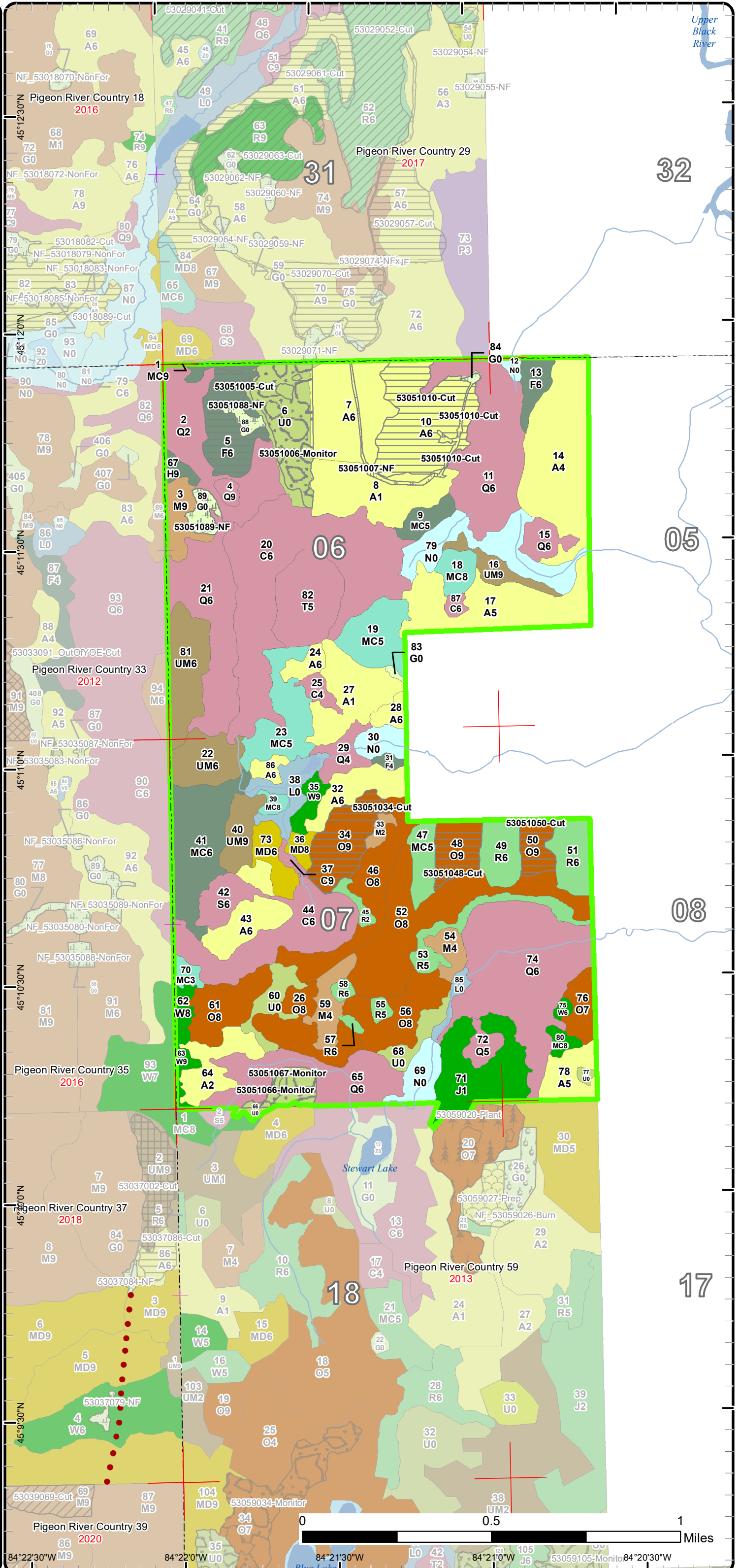
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 51
 T32N, R01E, Sec. 06, 07
 County: Montmorency
 Unit: Pigeon River Country
 Mgmt Area: Pigeon River Country
 YOE: 2019
 Acres: 1249.9 GIS Calculated
 Examiner: Greg Rekowski
 Map Revised: 1/10/2018
 Map Phase: Post-Review



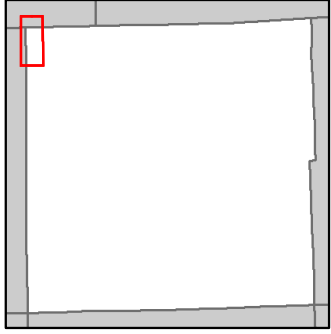
- Miris Corners
- Remonumented Section Corners
- Counties
- Designated Equestrian Trails
- Streams
- Lakes and Rivers All
- Compartment Boundary
- Other Treatment - See Comments
- Clearcut (w/Reserves)
- Regeneration Survey
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



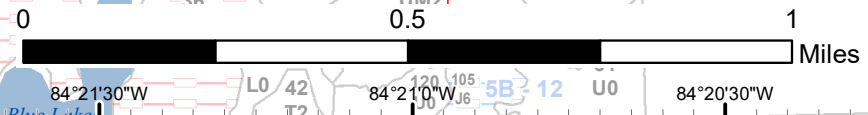
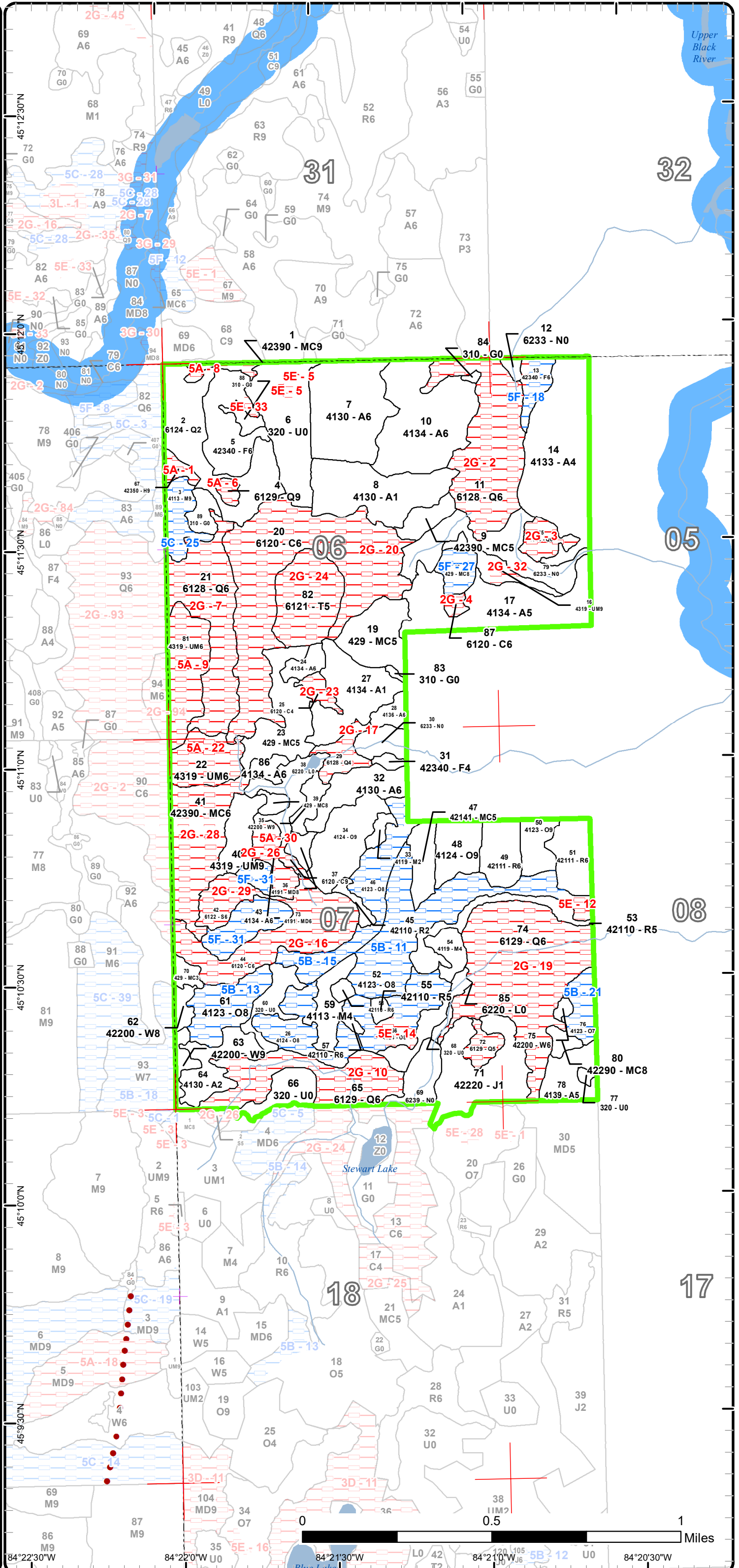
84°22'30"W 84°22'0"W 84°21'30"W 84°21'0"W 84°20'30"W

Special Conservation Areas & Site Conditions Map

Compartment: 51
 T32N, R01E, Sec. 06, 07
 County: Montmorency
 Unit: Pigeon River Country
 Mgmt Area: Pigeon River Country
 YOE: 2019
 Acres: 1249.9 GIS Calculated
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- Miris Corners
- + Remonumented Section Corners
- Counties
- Designated Equestrian Trails
- Streams
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 5A: Not able to obtain desirable regeneration
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer



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	14	51	4	187	0	16	0	0	0	0	0	0	0	0	0	0	0	272
Cedar	0	0	0	0	0	0	0	0	0	0	0	38	0	0	84	0	0	0	122
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Jack Pine	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Lowland Conifers	0	0	0	32	0	7	0	0	0	52	102	0	0	0	0	0	2	38	233
Lowland Shrub	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
Marsh	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Northern Hardwood	0	0	0	9	3	0	0	6	0	10	0	0	0	0	0	0	0	0	27
Oak	0	0	0	0	0	0	0	0	0	0	47	119	0	0	0	0	0	0	166
Planted Mixed Pines	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Red Pine	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Tamarack	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	24
Upland Conifers	0	0	0	3	21	23	0	0	0	0	9	3	0	0	0	0	0	31	89
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	25	0	7	0	0	0	0	0	21	53
Upland Shrub	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
Upland Spruce/Fir	0	0	0	0	2	20	0	0	7	0	0	0	0	0	0	0	0	0	29
White Pine	0	0	0	0	0	1	0	0	0	0	12	0	0	0	0	0	0	0	13
Total	117	43	51	48	265	51	16	6	40	101	170	129	38	0	0	84	5	90	1250



Report 2 – Treatment Summary

Acres of Harvest

Commercial Harvest - 94
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	37	0	0	0	0	0	0	0	0	37
Oak	39	0	0	0	0	0	0	0	0	39
Upland Spruce/Fir	19	0	0	0	0	0	0	0	0	19
Total	94	0	0	0	0	0	0	0	0	94

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	94	0	0	0	0	33	0	12		140
Next Step	0	0	0	0	0	99	0	0		99
Total	94	0	0	0	0	132	0	12		238



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
5	53051005-Cut	18.5	42340 - Upland Spruce/Fir	Poletimber Well	43	81-110	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Cut all species except for white pine, cedar, hemlock, and any oak if present. Leave one clump of spruce and fir (3-5 trees) per acre. Area retention will be the thin finger of the stand. Do not extend the treatment boundary any further north in to the cedar stand or small clump of hardwoods. There may also be a few small inclusions of wet cedar pockets along the SE edge that can be excluded.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: A fully-stocked stand with any mix of species being acceptable. Expect fir, spruce, red maple, aspen, and white pine to be the dominant regeneration.

Other Comment: Move up to 2018 POW because of SBW risk.

The G type (stand 88) will need to be utilized as a landing. Winter only harvest to avoid excessive damage.

Potential green-up issues with the adjacent stand to the east as elk browse is eliminating most aspen regeneration in that stand (#6). Leaving all the white pine may alleviate this as the residual white pine BA will average about 10 square feet.

Proposed Start Date: 10/01/2017

6	53051006-Monitor	25.1	320 - Upland Shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Stand was clearcut in Five Point Aspen timber sale.

Specs:Next StepTreatments:

Acceptable Regen: Aspen MO that meets stocking guidelines.

OtherComment:

Proposed Start Date: 10/01/2017

8	53051007-NF	4.5	4130 - Aspen	Sapling Poor	16	Immature	NonForestMgt	Other - Specify	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Mow, plant, herbicide, and planting of soft and hard mast for hunter walking trail.

Specs:

Next Step Monitoring, Other - Specify

Treatments:AcceptableRegen:OtherComment:

Proposed Start Date: 10/01/2008

10	53051010-Cut	37.2	4134 - Aspen, Spruce/Fir	Poletimber Well	37	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all species except for any incidental birch, cedar, or hemlock. Leave all white pine over 10 inches DBH. Focus retention around any wet spots that may be present, mostly along the swamp edge. To prevent windthrow to the swamp to the east, do not drop the treatment boundary down into the swamp, stay on the high ground.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: At least a medium-stocked stand with a mix of aspen, maple, and conifers being acceptable. If browsing results in a less than medium-stocked stand, plant conifer and oak species to reach acceptable stocking.

Other Comment: Move up to 2018 POW and group this stand into a sale with the fir stand to the west that is proposed for a treatment (#5).

Recommend a dormant season harvest (fall/winter) to try and alleviate browsing concerns.

Proposed Start Date: 10/01/2017



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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
34 53051034-Cut	19.3	4124 - Red with White Oak	Sawtimber Well	104	51-80	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Clearcut all oak and maple. Mark to leave a few scattered clumps of oak. Leave all pine in the hopes that it will help shelter new oak regeneration. No area retention except in areas of dense white pine along the west edge. Roundwood job along with a winter-only cut to maximize sprouting potential.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Regeneration that meets the acceptable stocking levels for oak. Leave the option open for planting after harvest if browsing results in failed regeneration. Consult the TMS and WLD Biologist.

Other Comment: If still visible, follow the existing red line from the previous harvest as closely as possible.

Landing will be at the far east end where the road is bermed. No new roads.

Proposed Start Date: 10/01/2018

48 53051048-Cut	11.4	4124 - Red with White Oak	Sawtimber Well	93	51-80	Harvest	Clearcut	4122 - Oak, Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Clearcut all species except for any red or white pine. Protect all pine regeneration. Mark to leave 1 large-crowned, healthy oak per acre.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: A fully-stocked stand meeting red oak regeneration stocking guidelines. Leave the option open for planting after harvest if browsing results in failed regeneration. Consult the TMS and WLD Biologist.

Other Comment: Utilize the existing road at the south end. Put the landing in the open area that is adjacent to the southeast side of the stand.

Add oak wilt spec.

Proposed Start Date: 10/01/2018

50 53051050-Cut	7.9	4123 - Red Oak	Sawtimber Well	101	81-110	Harvest	Clearcut	4122 - Oak, Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Clearcut all species except for any red or white pine. Protect all pine regeneration. Mark to leave 1 large-crowned, healthy oak per acre (mark a mix of red and white oak). Roundwood job with a winter-only cut to maximize sprouting potential.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: A fully-stocked stand meeting oak regeneration stocking guidelines. Leave the option open for planting after harvest if browsing results in failed regeneration. Consult the TMS and WLD Biologist.

Other Comment: Utilize existing roads.

Add oak wilt spec.

Proposed Start Date: 10/01/2018

66 53051066-Monitor	1.9	320 - Upland Shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	42498 - Red Pine (OI)	Two-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Regen survey at TCR + 4 years.

Next Step Treatments:

Acceptable Regen: A MIXTURE OF SPECIES WILL BE ACCEPTABLE FOR REPRODUCING THE STAND, SUCH AS OAK, RED MAPLE, ASPEN.

Other Comment: Percent to Treat = 100%

Proposed Start Date: 01/04/2016



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
66	53051067-Monitor	6.3	320 - Upland Shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	41299 - Oak (OI)	Two-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Regen survey at TCR + 4 years.

Specs:

Next Step

Treatments:

Acceptable Regen: A MIXTURE OF SPECIES WILL BE ACCEPTABLE FOR REPRODUCING THE STAND, SUCH AS OAK, RED MAPLE, ASPEN, AND RED WHITE AND JACK PINE.

Other Comment: Percent to Treat = 100%

Proposed Start Date: 01/04/2016

88	53051088-NF	2.7	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Mow, plant, brush, and/or herbicide to maintain opening. Planting of hard and soft mast.

Specs:

Next Step

Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date:

10/01/2018

89	53051089-NF	4.8	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Mow, plant, brush, and/or herbicide to maintain opening. Planting of hard and soft mast.

Specs:

Next Step

Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date:

10/01/2018

Total Treatment Acreage Proposed: 139.6

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 51

Greg Rekowski : Examiner

Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available		Dominant Site Conditions							
		With Condition				5B	5C	5F	2G	5A	5E		
272	256	16	0		Aspen			16					
122	0	0	122		Cedar				122				
3	0	0	3		Hemlock						3		
9	9	0	0		Herbaceous Openland								
29	29	0	0		Jack Pine								
234	32	0	201		Lowland Conifers				199		2		
14	14	0	0		Lowland Shrub								
9	0	0	9		Lowland Spruce/Fir				9				
41	41	0	0		Marsh								
12	3	0	8		Mixed Upland Deciduous				2		7		
3	3	0	0		Natural Mixed Pines								
27	18	10	0		Northern Hardwood		10						
166	39	121	7		Oak	121							7
8	8	0	0		Planted Mixed Pines								
42	42	0	0		Red Pine								
24	0	0	24		Tamarack				24				
90	49	6	34		Upland Conifers			6	31		3		
52	15	0	37		Upland Mixed Forest				2		36		
53	52	0	1		Upland Shrub		0						1
28	20	6	2		Upland Spruce/Fir			6	1				1
14	14	0	0		White Pine								
1,250	642	159	449		Total Forested Acres	121	10	28	390		51		9
	51%	13%	36%		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	5A: Not able to obtain desirable regeneration	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 51

Greg Rekowski : Examiner

Year of Entry: 2019

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	46	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5A: Not able to obtain desirable regeneration	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	38	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 51
Year of Entry: 2019

8	Unavailable	5A: Not able to obtain desirable regeneration	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	5A: Not able to obtain desirable regeneration	21	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	31	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
11	Available	5B: Maintain for regeneration purposes	72	Unspecified	Unspecified	Unspecified	Unspecified
Comments: These stands were thinned last entry as part of the Whip-poor-will oak timber sale, #53-009-09-01.							
12	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This area in stand 52 was designated as retention for the Whip-poor-will Oak timber sale.							
13	Available	5B: Maintain for regeneration purposes	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments: A second, younger age class of aspen, maple, and pine is present. Manage when that age class matures.							
14	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This area was excluded for retention purposes in the Whip-poor-will Oak timber sale, #53-009-09-01.							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 51
Year of Entry: 2019

15	Available	5B: Maintain for regeneration purposes	24	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
16	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	36	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: A stream goes through all of stand 37 and a portion of stand 44.							
17	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Available	5F: Evaluated for Forest Health Considerations	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	71	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
20	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	80	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 51
Year of Entry: 2019

21	Available	5B: Maintain for regeneration purposes	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
22	Unavailable	5A: Not able to obtain desirable regeneration	15	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Large hemlock component, heavy deer and elk use in the area. Many of areas of the stand are wet.							
23	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
24	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	24	5D: Unproductive Forest Land	Unspecified	Unspecified	Unspecified
Comments:							
25	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
26	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Wet area, slight drainage.							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 51
Year of Entry: 2019

27	Available	5F: Evaluated for Forest Health Considerations	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
28	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	31	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified	Unspecified
Comments:							
29	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
30	Unavailable	5A: Not able to obtain desirable regeneration	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Very doubtful that this stand would be able to regenerate based on current deer and elk numbers as well as the amount of browse damage sustained in nearby stands.							
31	Available	5F: Evaluated for Forest Health Considerations	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
32	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Greg Rekowski : Examiner

Compartment: 51

Year of Entry: 2019

33	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

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				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42390 - Mixed Non-Pine Upland Conifers	Sawtimber Well	3.2	109	111-140	<p>Very diverse stand with a lot of large diameters. Vein of dense cedar running east-west through the middle with a wide mix of other species on the edges. Some hardwoods and aspen in the small area at the east end which runs down to the south. Stand appears dry, didn't see any of the springs which were referenced in the OI notes below. It's likely that this stand is seasonally wet in the spring however. Average ba/acre from 5 plots = 198 square feet. Trace of paper birch, black spruce, and white spruce.</p> <p>OPIC - FMD: 2007 THERE ARE SEVERAL SPRINGS ORIGINATING IN THIS STAND AND FLOWING TOWARD LITTLE MCMASTER CREEK.</p>
2	6124 - Lowland Spruce-Fir	Sapling Medium	32.0	25	Immature	<p>This stand is about 50/50 upland and lowland. The west half is generally wetter and has most of the aspen and balsam poplar. The east half has larger diameters, especially on the fir. Trace of yellow birch saplings found in the west half. Regeneration is spotty overall, with several areas of low stocking. Stand was cut as part of the County Corners Complex sale, #53-021-89-01, bought and cut by Alan Lamberson. 160 cords of cedar were cut in the sale with additional volumes composed of a mix of birch, red maple, aspen, spruce, and white pine. All hemlock were left. No cedar has regenerated. Heavy deer and elk use in the east finger.</p> <p>OPIC - FMD: 1997 STAND HAS SCATTERED RESIDUAL HEMLOCK THROUGHOUT. 2007 Much of the aspen is gone from the stand. Some severe browsing has occurred. Scattered residual.</p>
3	4113 - R.Maple, Conifer	Sawtimber Well	9.5	86	111-140	<p>Nice red maple stand with quite a bit of diversity. Spruce/fir is mostly along the edges near the opening, most dominant in the small finger on the south side of the opening. Birch becomes heavy at the far southern end. A few areas of low ground but for the most part it is high and dry. Old notes indicate this stand was lightly thinned in 1980. Trace of elm and ironwood. A couple of the beech have BBD. Average ba/acre from 6 plots = 125 square feet. Use uneven-aged management guidelines. Due to the severe deer and elk browse in the area this stand would not have a chance if using even-aged management techniques.</p>
4	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	2.3	153	111-140	<p>Strip of lowland running north-south through the stands. The remaining edges are upland. Stocking is lower in the lowland area, especially the south end which is relatively open.</p>
5	42340 - Upland Spruce/Fir	Poletimber Well	19.5	43	81-110	<p>Pretty nice fir stand although the diameters tend to be quite small, especially in the southern half of the stand. The stand was salvaged in the mid-1970's but notes indicate they left about 30 BA of residual fir, looks like they also cut aspen and red maple at that time but left most everything else. A little bit of wet ground around the southern edges and that is where most of the cedar is located. Aspen tends to be concentrated mostly around the interior wildlife opening. A couple of very large white pine scattered throughout. Overall the white pine component is heavier in the north half. Average ba/acre from 9 plots = 89 square feet.</p> <p>OPIC - FMD: 1997 STAND HAS NEARLY 30 SQ. FT. OF RESIDUAL FIR AND HEMLOCK. 2007 Poorer soil than stands to the east. Aspen quality is poor. Spruce and fir salvaged in 74-75.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
7	4130 - Aspen	Poletimber Well	33.0	37	81-110	Nice looking young pole stand. Southern 1/3 of stand is mostly fir and quaking aspen and the diameters tend to be much smaller here. The hardwood influence picks up in the northern 2/3rds of the stand, most prevalent along the northern and eastern edges. A few scattered areas of lowland, largest of which is a long linear area that follows the west edge of the road. A diverse mix of species are present but rare in overstory coverage and they include; beech, paper birch, hemlock, cedar, basswood, elm, white pine, and white spruce. At this point most of the white ash appears healthy and not affected by EAB. Average ba/acre from 9 plots = 104 square feet.
8	4130 - Aspen	Sapling Poor	29.1	16	Immature	Stand harvested as part of Lookout Tree Block. All species clearcut including 126 cords of red maple, 108 cords of paper birch, 230 cords of aspen, 13 cords of cedar, and 30 cords of white pine. Deer and elk browse has had a significant impact in this stand and has wiped out any birch, maple, or cedar regeneration. Aspen regeneration has also been severely browsed resulting in scattered clones here and there. Future economic opportunities will be very limited here until all the open areas have filled in with merchantable pine and fir.
9	42390 - Mixed Non-Pine Upland Conifers	Poletimber Medium	6.0	46	51-80	Stand had all aspen, birch, red maple removed as part of the Lookout Tree Block sale in 2000. Aspen regeneration is quite limited as the residual fir is quite heavy. Old notes indicate it was cut like this to discourage beaver activity in the adjacent marsh. A few pockets of wet ground towards the northeast. More white pine at the southwest end. Trace of jack pine and BAM. Average ba/acre from 4 plots = 78 square feet.
10	4134 - Aspen, Spruce/Fir	Poletimber Well	38.7	37	81-110	In general a pretty poor-quality stand with scattered open areas throughout. The quaking aspen appears unhealthy in many areas. Stocking and quality is best at the northern end. There are also a few pockets of wet ground in this area. Diameters tend to vary with some areas just over merchantability. Trace of jack pine and paper birch. Average ba/acre from 9 plots = 88 square feet.
11	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	45.3	86	81-110	This stand tends to vary in composition and quality. In general the stand is very wet and low quality, and primarily has spruce/fir/cedar. The west half has some pockets of nice cedar, more so at the north end near the maintained opening. There are also a few small areas of upland, mostly at the south and southwest ends. Trace of white pine. Average ba/acre from 9 plots = 110 square feet.
13	42340 - Upland Spruce/Fir	Poletimber Well	6.7	78	111-140	Primarily an upland spruce/fir stand but there is some low ground in the NW portion of the stand with a mix of cedar and red maple. Spruce is generally nice quality although small in spots. It looks like the aspen was removed from the NE portion of the stand, likely when the adjacent stand was cut. Average ba/acre from 5 plots = 138 square feet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4133 - Aspen, Mixed Pine	Poletimber Poor	46.8	32	1-50	Poor quality aspen stand that has been hit hard by elk browse. Some of the clones display good growth but they are few and far between. The remainder of the stand is sparse aspen mixed with fir and weevil-damaged white pine. A few larger maple, fir, spruce, and pine were left from the previous harvest. A strip of red pine is present along the western edge and was planted in 1988. A few small wet pockets at the far southeastern end. Ground cover is primarily wintergreen, bracken fern, reindeer moss, and sweetfern. Not great site quality, ideally this stand should be managed for pine. Trace of paper birch and white oak. Average ba/acre = 42 square feet. Due to the low stocking, economic opportunities will not exist in this stand for a long time.
15	6124 - Lowland Spruce- Fir	Poletimber Well	6.6	86	51-80	Mixed bag of everything in this stand. The east half is a lowland and bog-like, dominated by black spruce and cedar with a lot of Michigan holly in the understory. The west half tends to be more upland with fir/spruce/cedar/maple/aspen. Could probably split this into two stands. Trace of white pine, yellow birch, and hemlock. Average ba/acre from 5 plots = 72 square feet.
16	4319 - Mixed Upland Forest	Sawtimber Well	6.9	105	81-110	Most of this stand lies on a transition to the adjacent marsh and is a mix of upland and lowland. The central portion of the stand is much wetter and has most of the cedar. Some large red maple here and there. Trace of hemlock. Average ba/acre from 5 plots = 98 square feet. No management due to the proximity to the marsh.
17	4134 - Aspen, Spruce/Fir	Poletimber Medium	36.9	32	51-80	Very poor quality aspen stand that has been hit hard by elk browse and has resulted in low stocking. The quaking aspen appears close to death in many spots. Past notes indicate the stand was partially harvested in 1986. As a result there is a scattered residual of larger white pine, maple, spruce and aspen. The spruce and fir component is heavier in the west half. Average ba/acre from 8 plots = 65 square feet. Dominant understory species are wintergreen, bracken fern, and reindeer moss. This stand won't present many commercial harvesting opportunities until the fir and white pine have filled in the poorly stocked areas.
18	429 - Mixed Upland Conifers	Sawtimber Medium	6.5	92	81-110	Two-aged stand that appears to have been harvested at some point, leaving most of the white pine in the overstory. Old, large charred white pine stumps are scattered throughout. Average ba/acre from 4 plots = 98 square feet. Continue to let the second age class grow before managing.
19	429 - Mixed Upland Conifers	Poletimber Medium	16.8	48	51-80	Old OI notes indicate this stand had a partial harvest at some point while under private ownership. Scattered large residuals of white pine, fir, spruce, aspen, and maple are present throughout. The second age class is still developing and is quite small in places. Stand becomes much more open to the west. Some small bog-like pockets in the interior. Trace of cedar. Average ba/acre from 6 plots = 68 square feet. Do not manage until the second age class matures.
20	6120 - Lowland Cedar	Poletimber Well	80.2	140	111-140	Overall this is a wet, poor-quality swamp conifer stand. There is some variability in composition. The east half tends to be dominated more by spruce and tamarack with some areas of decent quality. There is also a small upland sliver with an old road on it that extends into the stand at the far east end. The west half of the stand is dominated by cedar, the majority of which is very low-quality. A few upland hummocks with hemlock are present at the far southernmost end. Average ba/acre from 14 plots = 119 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	37.7	158	111-140	Highly variable terrain throughout this stand with a complex mosaic of upland and lowland soils. Stand seems like a 50/50 mix of upland and lowland. Lowland areas are more prevalent in the south of the stand as well as along the eastern edges. These areas are quite wet and low quality. Black ash used to be a big component but is all dead now. The upland areas tend to be pretty low quality as well except for the northern parts where quality increases. Pit and mound topography and old stumps are prevalent in these upland portions. The hemlock is old but healthy, and several age classes appear to be present. Average ba/acre from 13 plots = 132 square feet. No management due to the wet soils and hemlock and cedar component.
22	4319 - Mixed Upland Forest	Poletimber Well	14.9	86	111-140	Apparently portions of this stand had a partial harvest as part of Farr Branch Maples (#53-017-89-01), bought and cut by the Jaroché Brothers. Red maple and white pine were the primary species removed. There isn't much evidence of any cutting taking place here as opportunities are very limited due to wet ground and hemlock groves. The central portion of the stand seems a little drier and is dominated more by red maple and paper birch. The perimeter of the stand is mostly groves of nice, healthy hemlock with some pockets of cedar as well. The terrain is highly variable throughout, with wet areas mixed in everywhere and what appears to be a few north-south running drainages. The remnants of an old road are present through the stand however it is flooded in many areas. Average ba/acre from 6 plots = 130 square feet. Leave this stand unmanaged due to the sensitive soils and amount of hemlock.
23	429 - Mixed Upland Conifers	Poletimber Medium	20.5	36	51-80	Stand was clearcut as part of the Blue Lakes Remote Block timber sale, #53-035-81-01, bought and cut by Gary Haskill. Residual cedar and hemlock were left, as well as a couple of larger white pine. The stand has regenerated well for the most part although there are some lower-stocked areas mixed in. Most of the stand is dry ground except for a few lowland pockets that were not harvested (easily visible on the 98DOQ imagery). Average ba/acre from 6 plots = 73 square feet.
24	4134 - Aspen, Spruce/Fir	Poletimber Well	4.2	36	81-110	Stand was clearcut as part of the Blue Lakes Remote Block timber sale, #53-035-81-01, bought and cut by Gary Haskill. Aspen regenerated well and is generally good-quality. A little wet ground mixed in but not much overall. Average ba/acre from 4 plots = 108 square feet.
25	6120 - Lowland Cedar	Poletimber Poor	3.6	146	51-80	Poor-quality, wet stand. Black ash used to be a large component of the south 1/2 of the stand but is all dead now. The cedar is mostly along the edges of the north half. Average ba/acre from 4 plots = 64 square feet.
26	4124 - Red with White Oak	Sawtimber Medium	17.3	103	81-110	This stand was thinned as part of Whip-poor-will Oak, #53-009-09-01, bought by Watson Forest Products. There is a slight slope along the southern edge of the stand and it doesn't look like any thinning took place in areas along the slope. The red maple understory picks up in the north half. There is a small pocket of aspen poletimber at the far western end. A second age class of older, larger oak is scattered infrequently throughout. Medium to low quality oak. Average ba/acre from 8 plots = 81 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4134 - Aspen, Spruce/Fir	Sapling Poor	22.3	18	Immature	Stand was clearcut in the Vulture's Roost Block timber sale, #53-013-99-01, bought and cut by Gary Haskill. Primary volume harvested was aspen, red maple, and fir but there was also a considerable amount of large white pine and cedar cut out. No cedar has regenerated. Overall, aspen regeneration is poor-quality and patchy in the drier parts of the stand (north 1/2 and SW corner) with a lot of cherry brush present. The wetter ground, mostly near the swamp edges, has better stocking and higher quality aspen. As noted in past OI notes, elk browse was a major factor in limiting regeneration success. Some of the open areas are starting to fill in with white pine, spruce, and fir. This stand probably won't be economically available until these open areas have sufficiently filled in the overall stocking. Pocket of 5 or so large red oak near the southwest corner.
28	4136 - Aspen, Mixed Conifer	Poletimber Well	4.0	29	51-80	Past harvest left a scattered residual of primarily cedar but there are also some larger spruce, maple, pine, birch, and aspen mixed in. Aspen regen is best in the east half. Several areas where small red maple is dominant. Patches of wet ground mixed in. Average ba/acre from 4 plots = 80 square feet.
29	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Poor	7.3	42	1-50	Poor quality lowland stand which at one point had a lot of black ash but all of that is now dead. The cedar tends to be more dominant along the banks of the stream that flows through the center of the stand. Many areas of sparse stocking along the eastern edge, BAM is starting to regenerate in a few spots in this area. Most of the aspen is along the southern edge. Trace of red oak along the southern perimeter. Average ba/acre from 6 plots = 50 square feet.
31	42340 - Upland Spruce/Fir	Poletimber Poor	1.7	36	1-50	This stand was cut at the same time as the adjacent aspen stand to the south but beavers removed the majority of the aspen from it. Filling in slowly with fir and pine predominantly. The white pine has heavy weevil damage and is poor-quality. Average ba/acre from 3 plots = 53 square feet.
32	4130 - Aspen	Poletimber Well	13.0	36	51-80	Stand lies on a slight slope which runs downhill from south to north. Most of the bigtooth aspen is on the upper slopes while the quaking is on the lower slopes. The southwest finger of the stand is heavy to white pine poletimber. Diameters are still small on the quaking aspen with some areas barely merchantable. A few small pockets of wet ground mixed in. An old railroad grade runs east-west through the northern tier of the stand. Average ba/acre from 8 plots = 64 square feet. Stand will be ready to harvest in ten years.
33	4119 - Mixed Northern Hardwoods	Sapling Medium	2.5	36	1-50	Stand was cut in 1982 and the resulting regeneration is mainly poor-quality red maple stump sprouts. A couple of white oak made it past the browse but they are rare. The far east end of the stand is an open, non-forested area adjacent to a road.
34	4124 - Red with White Oak	Sawtimber Well	19.3	104	51-80	Stand was thinned last entry as part of the Whip-poor-will Oak timber sale, bought and cut by Watson Forest Products (#53-009-09-01). Evidence of heavy browse on the stump sprout regeneration. Oak quality is moderate to low, the diameters are considerably smaller than the adjacent oak stand to the east. The western edge of the stand sits on a slight side slope, some of these areas were excluded from the previous thinning. This is also where most of the large pine is located. Trace of red pine. The red pine in the understory appears to have been planted, although it is rare. Average ba/acre from 7 plots = 74 square feet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	42200 - Natural White Pine	Sawtimber Well	4.8	98	141-170	Nice stand of natural pine. Very high densities in a few spots (BA>200). An old grade runs lengthwise through most of the stand. Trace of paper birch. Average ba/acre from 4 plots = 165 square feet.
36	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	3.2	88	51-80	This stand had all the aspen and red maple removed in 1982. The oak residual was pretty high so regeneration of the second age class is patchy, seems to be more prevalent in the north 1/2 of the stand. The oak is moderate to low quality. Many of the larger pine, red pine in particular, have old fire scars. Larger trees are more common along the west edge that borders the lowland. Average ba/acre from 4 plots = 90 square feet.
37	6120 - Lowland Cedar	Sawtimber Well	1.8	115	111-140	Nice stand of cedar and hemlock sitting in a slight ravine between adjacent upland stands. Quite a bit of blowdown in a few locations. A small stream runs through the middle. Red maple and red oak are mostly on the upper side slopes. Nice representation of healthy yellow birch. Average ba/acre from 4 plots = 113 square feet.
39	429 - Mixed Upland Conifers	Sawtimber Medium	2.4	98	81-110	Nice stand of large diameter natural pine and red maple. Stand appears to have been partially cut at some time, likely the same time as the adjacent stand to the west, as the residual overstory is scattered and clumpy. Open areas have regenerated heavy to fir, white pine, and red maple. Some very large white pine (30"+) in the stand. Trace of elm. Average ba/acre from 4 plots = 83 square feet.
40	4319 - Mixed Upland Forest	Sawtimber Well	9.9	86	111-140	Stand apparently had a partial harvest in 1992 as part of Farr Branch Maples (#53-017-89-01), bought and cut by the Jaroche Brothers. All aspen, paper birch, ironwood, basswood, and balsam fir were removed as well as some orange-marked red maple and white pine. Based on the present conditions however, it doesn't look like they were able to cut much out of this stand. There is a lot of irregular terrain with several lowland depressions mixed in throughout, which likely limited harvesting opportunities. A north-south running drainage is on the west stand line. The north end is heavier to red maple and seems to be a little drier. Trace of elm, yellow birch, and quaking aspen. Average ba/acre from 6 plots = 116 square feet.
41	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	31.1	125	141-170	Highly variable terrain throughout this stand with a complex mosaic of upland and lowland soils. Long south to north running drainages are present in areas. The far north end has a small stream running from west to east. An old road cuts east-west through the southern 1/3rd. Quality and diameters seem to decrease south of the road. Areas of large, high quality red maple, cedar and hemlock north of the road, measured a few cedar at 25"+ DBH. Trace of basswood and elm. Average ba/acre from 11 plots = 152 square feet. No management due to the hemlock and cedar component as well as the abundance of sensitive soils.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	6122 - Black Spruce	Poletimber Well	9.3	79	81-110	Stand tends to be wet along the west and north edges, with the northern edge having a small drainage which connects with stand 44 to the east. Remainder of stand is mostly lowland with a few small pockets of upland in the southern half. Nice spruce along the southeastern edge but quality starts to decline as you move into the interior of the stand. White pine is a little heavier along the edges but is also scattered throughout the interior with some poletimber mixed in. The majority of hemlock and red maple are in the northeast corner near the drainage. Most of the cedar is here as well although there is also some along the southwestern edge. Trace of yellow birch. Average ba/acre from 7 plots = 101 square feet.
43	4134 - Aspen, Spruce/Fir	Poletimber Well	16.2	52	51-80	This stand is split into two sections by a wet cedar/hemlock drainage. The north segment of the stand is pretty nice aspen and is where most of the bigtooth is located. Diameters decrease sharply as you head southwest in the southern segment of the stand. Balsam fir is thick in this southern segment and is likely a reason for the widespread small diameters due to competition for resources. Many areas have a sparse overstory stocking of aspen. Although rare, there are a few scattered large spruce, fir, and red maple throughout, most of the larger red maple are near the swamp edges. Cedar and hemlock are mostly found around the edges as well. A couple very large white pine. Trace of cedar, red pine, and yellow birch. Average ba/acre from 9 plots = 73 square feet.
44	6120 - Lowland Cedar	Poletimber Well	34.5	115	141-170	Generally a wet and low-quality swamp conifer stand with a lot of blowdown. The thin western half of the stand used to have a large component of black ash, but that is all dead now. Black spruce tends to be most common along the east and southern edges of the stand. The aspen as well is mostly along the southern edges. A few groves of nice hemlock, cedar, and red maple are on the north edge adjacent to the aspen stand along the upland/lowland transition. Quality and stocking declines sharply in the eastern "bubble" of the stand and the trees become somewhat stunted, this is also where the black spruce, tamarack, and Holly understory is most common. Heavy elk use. No management possible or recommended. Average ba/acre from 8 plots = 146 square feet.
45	42110 - Planted Red Pine	Sapling Medium	2.7	30	Immature	Overall not a very well-stocked stand. Diameters tend to vary quite a bit, being the largest at the north end. A few small clumps of black spruce along the swamp edge.
46	4123 - Red Oak	Sawtimber Medium	23.8	103	51-80	This stand was thinned last entry as part of the Whip-poor-will Oak timber sale (#53-009-09-01), bought and cut by Watson Forest Products. In many spots this stand resembles a shelterwood as the BA is quite low. Oak quality is moderate to low. Oak seedlings are abundant in the wider, northern 1/2 of the stand but have been browsed heavily. The thinner, southern 1/2 of the stand lies on a slight side slope and has most of the red pine and fir component. Mixed in throughout are some scattered clumps of red pine in the understory which were planted at one time. The far southwestern end had a fire at one point as the charring and old fireline are both still visible. The far northern end of the stand is a popular camping spot during hunting season. Average ba/acre from 10 plots = 65 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Medium	8.5	33	51-80	This stand doesn't have nearly as much red pine as the two similar stands (#'s 49 and 51) to the east. There is a larger influence of white pine here and also the diameters on the red maple tend to be quite bigger than stands 49 and 51. There is some decent white oak regeneration that has escaped the browse line but most of it is overtopped. Trace of black spruce and balsam fir. Stocking decreases as you head south. Average ba/acre from 5 plots = 56 square feet.
48	4124 - Red with White Oak	Sawtimber Well	11.6	93	51-80	Moderate quality oak stand with a nice representation of white oak. Diameters tend to be a little smaller than the similar stand 50 to the east. Stocking declines in the southwest corner with some small patches of planted pine being present in the understory. The white pine understory appears natural in the rest of the stand. Average ba/acre from 7 plots = 70 square feet.
49	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	11.4	33	51-80	Decent looking red pine with a large component of red maple that has recruited into the overstory. This stand was cut at the same time as stand 51 to the east but there is hardly any oak regeneration in this stand as compared to that one. Average ba/acre from 6 plots = 62 square feet but expect this number to increase as the red pine matures.
50	4123 - Red Oak	Sawtimber Well	8.0	101	81-110	Moderate quality oak stand with a nice understory of white pine. In a few small areas it looks like the white pine may have been planted. Average ba/acre from 5 plots = 90 square feet.
51	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	12.2	33	51-80	Stand looks pretty good and has a nice mix species, including a good representation of red oak that successfully regenerated. Trace amount of red oak residual in the overstory. Trace of white pine and white oak as well. Average ba/acre from 5 plots = 70 square feet.
52	4123 - Red Oak	Sawtimber Medium	43.0	100	51-80	Stand was thinned in 2010 as part of Whippoorwill Oak, #53-009-09-01, bought and cut by Watson Forest Products. Residual basal area tends to vary quite a bit, some areas resemble a shelterwood while others are more like an O9. Diameters increase as you move east or south away from the road. The east finger of the stand lies on a slight side slope. There are a few patches of planted red and white pine in the understory, the remainder of the white pine understory is natural and well-stocked in many places. Some oak seedlings are present but along with the red maple, they are being heavily browsed. Red oak quality is moderate to low. Average residual ba/acre from 11 plots = 53 square feet. The objective of the previous prescription was to use the pine understory as cover for oak regeneration. Continue to allow this to happen and evaluate oak regeneration during the next cycle.
53	42110 - Planted Red Pine	Poletimber Medium	10.9	33	51-80	The circular portion of the stand at the far west end used to be an old well pad, stocking is best in this part of the stand. Stocking declines in the portion of the stand that borders the swamp edge. There is also a small U/G type near the eastern end. Most of the stand lies on a slight side slope. Average ba/acre from 7 plots = 69 square feet.
54	4119 - Mixed Northern Hardwoods	Poletimber Poor	5.8	60	1-50	Poor-quality, low-stocked stand. Old fire charred stumps are present throughout. Some large oak and red pine mixed in. Average ba/acre from 4 plots = 20 square feet. An old road is present along the east edge of the stand.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	42110 - Planted Red Pine	Poletimber Medium	1.9	30	81-110	This is an old well pad that was replanted to red pine. Looks pretty good except there is a large portion of that stand that is non-forested in the middle. Average ba/acre from 3 plots = 83 square feet.
56	4124 - Red with White Oak	Sawtimber Medium	18.7	92	51-80	This stand was thinned as part of Whip-poor-will Oak, #53-009-09-01, bought by Watson Forest Products. The residual BA tends to vary quite a bit, being lowest in the NE 1/3 of the stand and highest in the finger that extends NW in between the small red pine stands. The central part of the stand (due south of stand 55) was a retention pocket and was not thinned, this area also lies on a slight southern slope with a few mature pine mixed in. There seems to be a larger, older age class of oak mixed in, although it is not dominant. Oak quality is moderate to low. Nice representation of white oak. Browse is heavy on the oak and red maple stump sprouts that are trying to regenerate. Some oak seedlings were noticed but these too are being heavily browsed. Average ba/acre from 7 plots = 53 square feet.
57	42110 - Planted Red Pine	Poletimber Well	1.1	30	111-140	Average ba/acre from 3 plots = 120 square feet.
58	42110 - Planted Red Pine	Poletimber Well	1.8	30	111-140	Average ba/acre from 3 plots = 113 square feet. Small area of blowdown at the northwest corner.
59	4113 - R.Maple, Conifer	Poletimber Poor	9.3	28	1-50	Old notes indicate this stand was high-graded in the past, removing all oak and leaving red maple regeneration behind. This is pretty much a junk, poor-quality stand now with many open areas. A few patches of white oak regeneration are present, some have made it past the browse level, heavy browse on those that did not. The white pine poletimber is decent quality in a few spots but open grown in most others. Average ba/acre from 5 plots = 40 square feet.
61	4123 - Red Oak	Sawtimber Medium	16.3	92	51-80	Moderate to low-quality oak stand that had the aspen and red maple removed at one point. Couldn't find the sale records so the second age is a guess. The oak stocking levels vary, being highest in the northeast 1/3 of the stand. The remainder is lower stocked. The aspen component is primarily along the west edge where there is a thin strip of it, maybe 1-2 acres in size. A few nice patches of white pine poletimber. There appears to be a second, older age class of oak in the stand although it is not too common. Slight ridge along the north line. Average ba/acre from 12 plots = 95 square feet.
62	42200 - Natural White Pine	Sawtimber Medium	3.4	97	51-80	This stand had all aspen, maple, birch, and fir removed as part of the County Line Aspen sale, #53-037-89-01, bought and cut by K&R Logging. The understory has regenerated well and is quite thick in spots. The residual white pine is high quality and is a variety of diameters. Aspen mostly along the southeastern edge. Average ba/acre from 4 plots = 68 square feet.
63	42200 - Natural White Pine	Sawtimber Well	4.2	97	141-170	Very nice natural pine stand which had all aspen and maple removed in 1971. The pine residual is so high though that there wasn't much room for any aspen to come back. Some very large white pine in the stand. Most of the red pine is at the south end. Trace of sugar maple, balsam poplar, and white oak in the overstory. Average ba/acre from 5 plots = 142 square feet. The irregular nature of this stand would make management difficult. It serves well as a visual buffer.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	4130 - Aspen	Sapling Medium	13.8	4	Immature	Stand cut in 2014, part of Five Point Aspen, #53-026-10-01, bought by Precision. Some areas of heavy browse, other areas look ok. A little bit of wet ground along the southern edges.
65	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	31.4	98	111-140	The spruce tends to be more dominant at the far east and west ends. Some nice patches of cedar on the east side of stand 66. The thin central part of the stand is very wet and low quality. A 2-3 feet stream meanders throughout eventually heading south into Stewart Lake. An old crosses the thin central part of the stand, connecting stands 26 and 66. Average ba/acre from 9 plots = 124 square feet.
67	42350 - Upland Hemlock	Sawtimber Well	3.1	153	171-200	Healthy and old hemlock stand. Variety of diameters. Mostly upland. Yellow birch and red maple more common along the edges. Trace of white pine. Average ba/acre from 3 plots = 183 square feet.
70	429 - Mixed Upland Conifers	Sapling Well	3.1	27	Immature	This stand had all aspen, maple, birch, and fir removed as part of the County Line Aspen sale, #53-037-89-01, bought and cut by K&R Logging. Stand has regenerated well to a nice mix of species. Regeneration is thick in many spots. Mix of upland and lowland. Most red maple and birch is in the southeast corner. Trace of red oak saps. Small amount of XL-sized residual white pine.
71	42220 - Natural Jack Pine	Sapling Poor	28.6	7	Immature	This stand was cut as part of the Red-headed Mix timber sale, #53-010-10-01, bought and cut by Northern Timberlands. Harvest was a whole-tree job in the summer. Primary volume removed was aspen, red maple, and jack pine. The resulting regeneration is very poor and this stand is a toss-up between forested or a U type. The east finger is very poorly-stocked and has a lot of black cherry, some of which is being browsed. Jack pine regeneration is best in the west half with some areas of good stocking, but it is quite patchy in nature. Surprisingly, elk are browsing the jack pine, with some areas looking like they will wipe it out. The majority of the aspen and red maple regeneration has been killed by browse, there may be a few live stems but I highly doubt any of it will survive. The oak residual is mostly along the southern edges of the stand (oak quality is high). Regen survey results from 9 1/100th acre plots - Jack pine 433 TPA (3'), quaking aspen 22 TPA (3'), bigtooth aspen 22 TPA (3.5'), white pine 11 TPA (6'). This stand does not meet the minimum standard for a mixed stand (600 TPA) and is a regen failure. In OI this stand was broken into 3 separate stands, 70, 71, and 73.
72	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	4.8	95	81-110	This stand sits in a slight depression between the surrounding upland stand. The thin finger to the north is a drainage that connects to the larger swamp stand. Some large diameter, high quality cedar in the stand, mostly in the north half. Spruce, maple, and birch are mostly along the edges of the stand. The interior is wet and has lower stocking. Quite a bit of blowdown throughout. Trace of black cherry. Average ba/acre from 5 plots = 102 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
73	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	8.4	88	111-140	Pretty nice mixed species stand that doesn't appear to have been harvested before. Variable diameters with some large, healthy hemlock. Very irregular terrain with lowland pockets mixed in throughout, resembling pit and mound topography. Wet drainage along the west edge in the northern half of the stand, this drainage extends to the northern edge along the lowland shrub stand. Eastern edge of the stand is on a small ridge sitting above the adjacent lowland stands, this is where most of the oak is located. Heavy deer and elk use. Trace of yellow birch, sugar maple, balsam poplar, and quaking aspen. Average ba/acre from 4 plots = 135 square feet.
74	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	66.0	98	81-110	Mixed swamp conifer stand of varying quality. Stewart Creek flows from west to east through the stand. In general, north of the creek is high-quality with some areas of real nice spruce. Quality declines as you move south of the creek with many areas of lower stocking, smaller diameters, and much wetter soils. Sphagnum moss is dominant at the ground level. Average ba/acre from 9 plots = 161 square feet.
75	42200 - Natural White Pine	Poletimber Well	1.3	48	81-110	Moderate-quality stand of well-stocked white pine poletimber. Trace of bigtooth aspen. Average ba/acre from 3 plots = 103 square feet.
76	4123 - Red Oak	Sawtimber Poor	8.2	102	1-50	This stand was cut as part of the Red-headed Mix timber sale, #53-010-10-01, bought and cut by Northern Timberlands. Harvest was a whole-tree job in the summer. Resulting stand is a mixed bag of everything. The oak residual is mostly in the south half of the stand. This is also where most of the aspen regeneration is located, the majority of which has been hammered by elk browse. The north half becomes much more open and has most of the jack pine regeneration, this too is being browsed by elk which is very surprising. There are also some scattered residual white pine poletimber as well as a small pocket of planted red pine along Blue Lakes Road. Regen Survey results - Mixed stand was acceptable in notes (minimum 600 TPA) so this stand passes. Bigtooth aspen 460 TPA (4'), jack pine 240 TPA (2'), balsam fir 80 TPA (1'), white spruce 20 TPA (1'), white pine 20 TPA (2'). Don't expect much, if any, of the aspen to survive.
78	4139 - Aspen, Mixed Deciduous	Poletimber Medium	10.9	36	51-80	Borderline aspen stand with only scattered clones here and there, old OI notes indicate the aspen was hit hard by browse. The red maple is very poor quality. Some large diameters on the residual oak. White oak regen becomes abundant in the understory as you get closer to Blue Lakes Road. Average ba/acre from 6 plots = 63 square feet.
80	42290 - Natural Mixed Pine	Sawtimber Medium	2.9	83	81-110	This stand has some areas of planted red pine but there are also some pockets of large natural red pine mixed in, most prevalent along the north edge. Northwest corner of stand becomes more open. An old road cuts north-south through the stand. Stand may have had a partial harvest when the adjacent aspen stand to the south was cut. Trace of jack pine, black spruce, paper birch, and white oak. Average ba/acre from 4 plots = 88 square feet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
81	4319 - Mixed Upland Forest	Poletimber Well	20.6	86	141-170	Highly variable terrain throughout this stand with a complex mosaic of upland and lowland soils. However it has more upland than the adjacent stand to the east. The red maple is generally quite small and not that great of quality. The hemlock and cedar is variable in size and old, the 156 is verified from a tree core. Pit and mound topography throughout with a lot of old stumps. No management recommended due to sensitive soils and the hemlock and cedar component. Average ba/acre from 5 plots = 144 square feet.
82	6121 - Tamarack	Poletimber Medium	24.0	73	51-80	This is a poor-quality, borderline non-productive swamp conifer stand. Sphagnum dominates at the ground level. Stocking and quality seem to increase as you move north. Dwarf mistletoe has killed a large percentage of the overstory and understory black spruce in the south half of the stand. Average ba/acre from 5 plots = 68 square feet.
86	4134 - Aspen, Spruce/Fir	Poletimber Well	3.2	36	81-110	This stand was cut as part of Blue Lakes Remote Block, #53-035-81-01, bought and cut by Gary Haskill. Everything was cut except for about a 1/2 chain wide strip that was left along the swamp edge. Stand regenerated well to aspen and fir, the best aspen being in the west half. One large red oak on the northern edge. Average ba/acre from 4 plots = 90 square feet.
87	6120 - Lowland Cedar	Poletimber Well	1.9	110	141-170	Small bog-like stand. Low quality timber.



Stand	Cover Type	Acres	Managed Site	General Comments:
6	320 - Upland Shrub	28.1		2016 Stand is being heavily browsed by deer and elk. Sedges, marsh grass, mullein, invasive thistle are the most common herbaceous species. Regeneration seems best along the west line but that's about it. This is likely another stand the elk will destroy. Primarily upland but there are scattered areas of lowland mixed in. 01/23/2015 - Stand cut in winter of 2014 as part of Five Point Aspen, #53-026-10-01, bought by Precision. Currently in process of regeneration. Elk browse may be an issue.
12	6233 - Wet Meadow	1.6	No	Old beaver flooding which is not flooded any longer. Standing dead cedar throughout.
30	6233 - Wet Meadow	6.4	No	Old beaver flooding that killed all the timber, no longer active. An old road runs north-south on the east edge of the stand, straddling the private/state boundary. The old beaver dam was along this road. A 2-3 foot stream runs through the middle of the stand.
38	6220 - Alder/willow	10.9	No	Two small streams come from each finger of the stand and join in the middle, flowing northeast into stand 29.
60	320 - Upland Shrub	8.2	No	White pine saplings are most abundant in the far southeastern finger. Grass and sweetfern appear to dominate at the ground level. Trace of Siberian crabapple, listed as American Crab in the species table above.
66	320 - Upland Shrub	9.1		Stand cut as part of Blue Lakes Buffet, #53-021-14-01.
68	320 - Upland Shrub	6.4	No	A few old roads travel through this semi-open stand. The southwestern portion of the stand has a small amount of planted red pine as well as a higher density of white pine, this part could almost be coded as a forested stand. The remainder is sparsely vegetated, mostly black cherry. The red maple component is at the far north end. Old notes indicate an old tree planter is located near the intersection of the roads, which looks to be at about the middle of the stand.
69	6239 - Mixed Emergent Wetland	9.1	No	OLD BEAVER FLOODING. TIMBER HAS ALL BEEN KILLED. LOOKS LIKE A LOT OF REED CANARY GRASS IN THE STAND. NICE PATCH OF TAMARACK AND BLACK SPRUCE REGENERATION ALONG THE WEST EDGE. STEWART CREEK FLOWS THROUGH THE ENTIRE STAND.
77	320 - Upland Shrub	1.1	No	Old OI notes indicate this was a failed oil well pad.
79	6233 - Wet Meadow	23.5	No	Stand is a mix of several old beaver flooding's which are now dry and meadow-like. A few areas of low-stocked swamp conifers are mixed in as well. Black ash appeared to be common in these areas but is now all dead. A stream travels throughout the entirety of the stand.
83	310 - Herbaceous Openland	0.6	No	
84	310 - Herbaceous Openland	0.6	No	Maintained opening.



Stand	Cover Type	Acres	Managed Site	General Comments:
85	6220 - Alder/willow	2.9	No	Stewart Creek runs through this stand. There are some old, dead trees scattered throughout. Larger trees are still alive on the perimeter of the stand. Tamarack and spruce are filling in the northern portion quite well.
88	310 - Herbaceous Openland	2.7	Yes	Maintained opening with scattered clumps of spruce/fir mixed in.
89	310 - Herbaceous Openland	4.8	Yes	Maintained opening. A few island/peninsulas of cherry that have been worked around.