



Compartment Review Presentation

Pigeon River Country Forest Management Unit

Compartment 53053

Entry Year 2020

Acreage: 1,264

County Otsego

Management Area: Pigeon River Country

Revision Date: 2018-08-13

Stand Examiner: Greg Rekowski

Legal Description:

T31N - R01W
Sections 28, 29, and 30

Identified Planning Goals:

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

Soil and topography:

The eastern 2/3rds of this compartment is primarily flat and dominated by Tawas-Lupton mucks associated with lowland conifer types. Uplands are found on rolling terrain with Kalkaska sands and Mancelona loamy sands being the prevalent soil types.

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

A complex mix of State and private ownerships occurs both within and around the compartment.

Unique Natural Features:

Rare natural communities have been documented by MNFI in this compartment.

Archeological, Historical, and Cultural Features:

No archeological, historical, or cultural features have been documented in this compartment.

Special Management Designations or Considerations:

No stands within the compartment have been designated as special management areas. However, rare natural communities identified by MNFI will be excluded from any commercial forestry considerations.

Watershed and Fisheries Considerations:

Numerous small tributaries originate in this compartment, flowing north to the Black River which travels just outside the northeast boundary of the compartment.

Wildlife Habitat Considerations:

A wildlife representative will be available for comment at the Open House and will participate in the formal Compartment Review.

Mineral Resource and Development Concerns and/or Restrictions

Active sand & gravel pits are not located in the area, but there appears to be good sand & gravel potential within the compartment on the upland areas. The compartment is within the Antrim Shale gas play as well as the Niagaran reef trend, and nearly all of the state-owned mineral rights are currently leased and held by production. There may be potential for additional wells within the compartment. There is no known metallic mineral potential in this part of the state. However, the entire compartment is in the Annexed Area and, as provided on page 33 of the Concept of Management, no new development leases will be issued in this Area.

Vehicle Access:

Access is good throughout most upland areas. Lowland areas are generally impassible except for a few old roads that are used primarily by hunters.

Survey Needs:

A survey is needed in the vicinity of stands 52 and 55 in order to accomplish management prescriptions. Several other corners in the compartment were not located but do not need to be established at this time.

Recreational Facilities and Opportunities:

There are no recreational facilities within the compartment.

Fire Protection:

Fire risk is very low throughout the majority of the compartment. Access is good in the upland areas if suppression is needed.

Additional Compartment Information:

The following reports from the Inventory are attached:

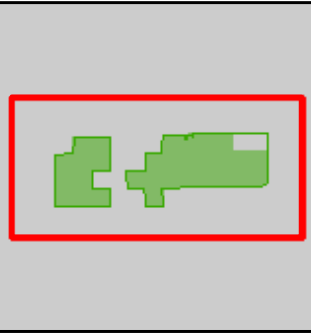
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

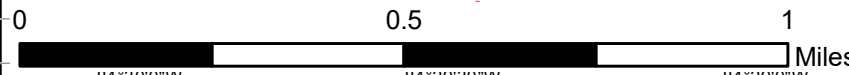
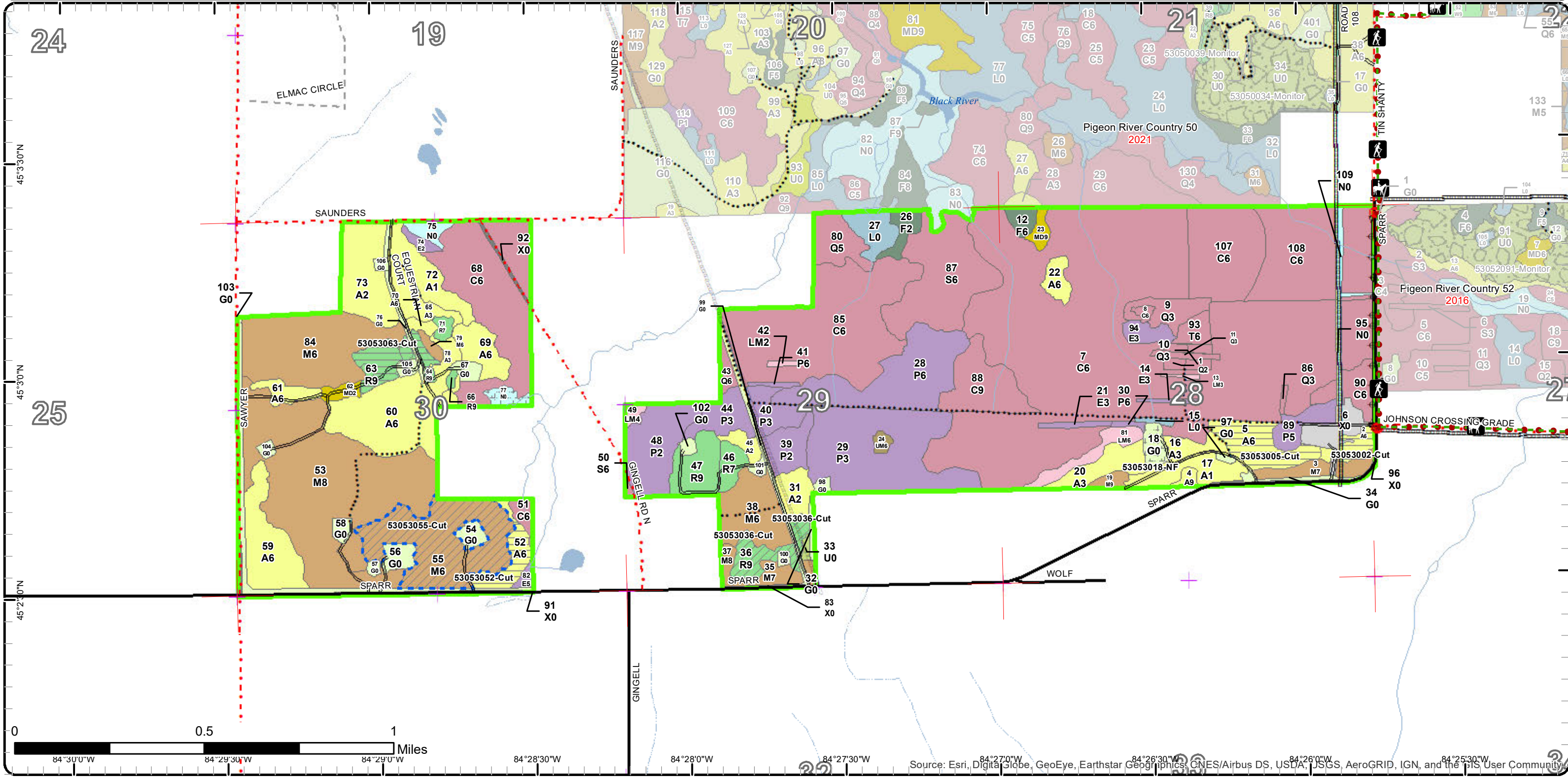
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 53
 T31N, R01W, Sec: 28, 29, 30
 County: Otsego
 Unit: Pigeon River Country
 Mgmt Area: Pigeon River Country
 YOE: 2020
 Acres: 1,264 GIS Calculated
 Examiner: Greg Rekowski
 Map Revised: 10/3/2018
 Map Phase: Post-Review

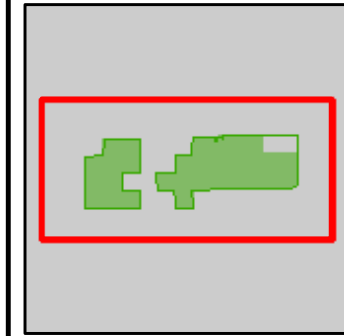


- Miris Corners
- + Remonumented Section Corners
- Counties
- == DNR - Secondary Forest Road
- == Federal / State / County - Paved Road
- .- County - Gravel Road
- - - County - Dirt Road (Seasonal)
- - - Private - Dirt / Gravel Road
- 🚶 Hiking Trails
- 🐎 Horse Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- 🛑 Sign
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- ⚡ Powerline
- 🟩 Compartment Boundary
- 🟦 Treatments with Site Conditions
- 🟨 Other Treatment - See Comments
- 🟩 Clearcut (w/Reserves)
- 🟨 Thinning (Crown, Low, Systematic)
- 🟩 411 - Northern Hardwood
- 🟨 413 - Aspen
- 🟩 419 - Mixed Upland Deciduous
- 🟩 421 - Planted Pines
- 🟩 423 - Other Upland Conifers
- 🟩 430 - Upland Mixed Forest
- 🟩 611 - Lowland Deciduous Forest
- 🟩 612 - Lowland Coniferous Forest
- 🟩 613 - Lowland Mixed Forest
- 🟩 110 - Low Intensity Urban
- 🟩 122 - Roads/Parking Lot
- 🟩 310 - Herbaceous Openland
- 🟩 320 - Upland Shrub
- 🟩 622 - Lowland Shrub
- 🟩 623 - Emergent Wetland
- 🟩 Lakes

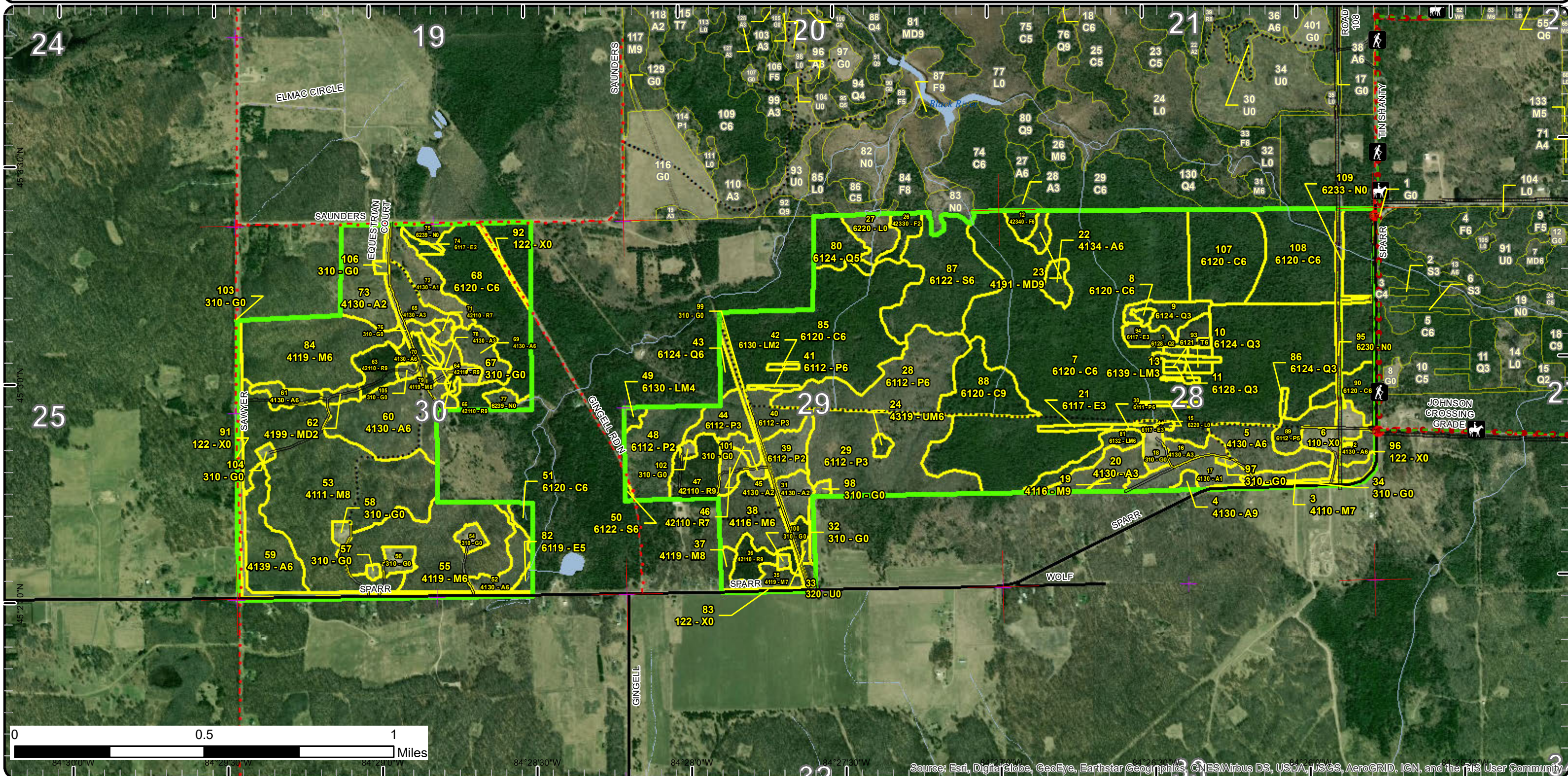


Stand Boundary Map

Compartment: 53
 T31N, R01W, Sec: 28, 29, 30
 County: Otsego
 Unit: Pigeon River Country
 Mgmt Area: Pigeon River Country
 YOE: 2020
 Acres: 1,264 GIS Calculated
 Examiner: Greg Rekowski
 Map Revised: 10/3/2018
 Map Phase: Post-Review

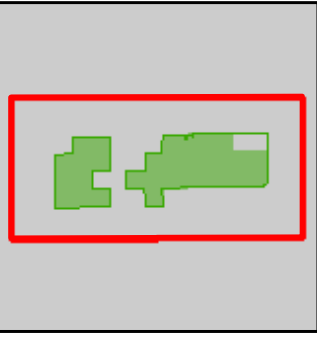


- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Hiking Trails
- Horse Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Sign
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Stand Boundaries
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 110 - Low Intensity Urban
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest

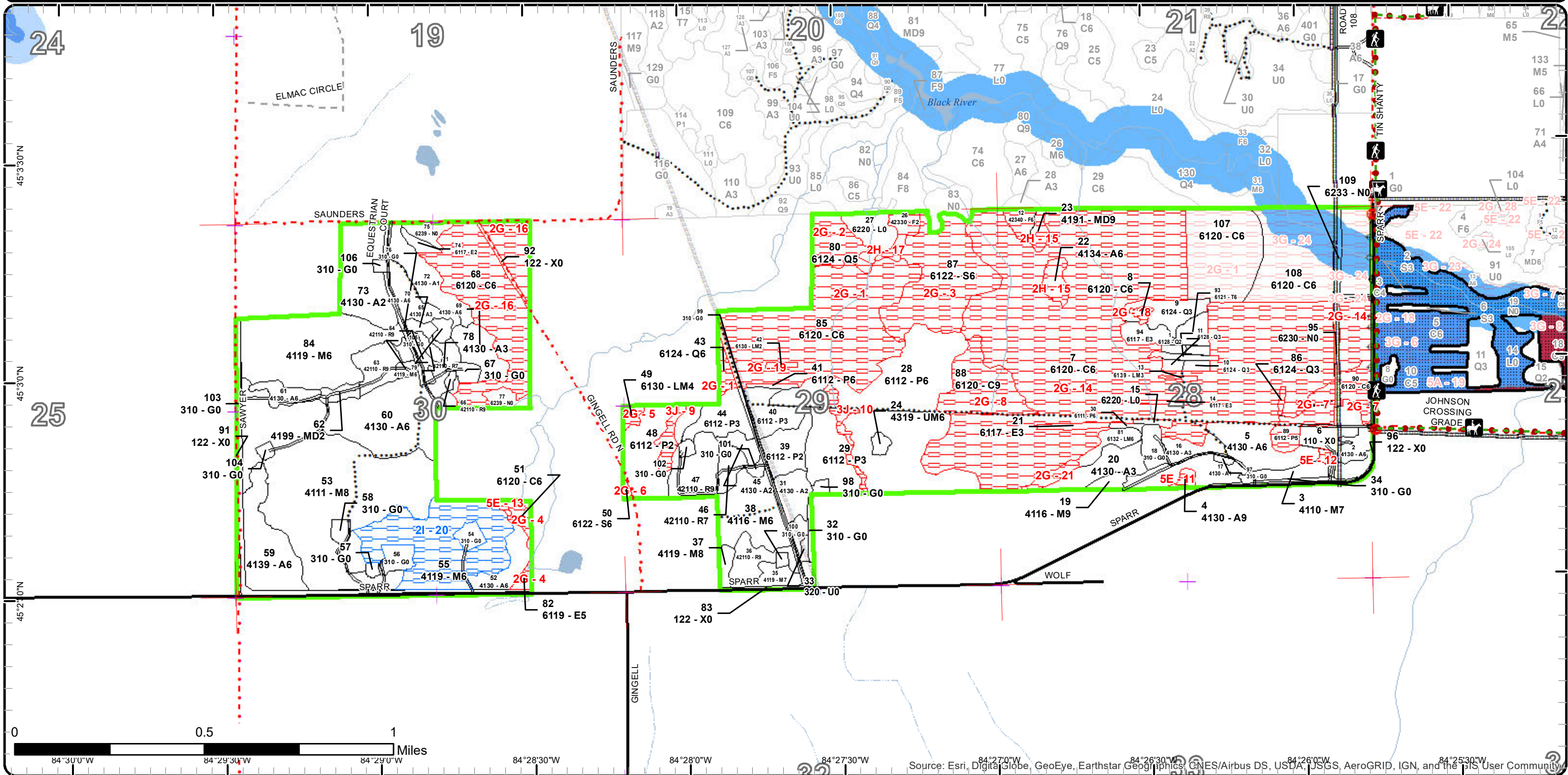


Special Conservation Areas & Site Conditions Map

Compartment: 53
 T31N, R01W, Sec: 28, 29, 30
 County: Otsego
 Unit: Pigeon River Country
 Mgmt Area: Pigeon River Country
 YOE: 2020
 Acres: 1,264 GIS Calculated
 Examiner: Greg Rekowski
 Map Revised: 10/3/2018
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Hiking Trails
- Horse Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Sign
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- SCA
- Ecological Reference Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Riparian Area



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	51	27	20	58	19	0	0	0	2	0	0	0	0	0	0	0	0	177
Cedar	0	0	0	0	0	0	0	0	0	0	0	290	18	200	0	0	0	0	508
Herbaceous Openland	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Lowland Aspen/Balsam Poplar	0	9	8	70	44	9	0	0	0	0	0	0	0	0	0	0	0	0	140
Lowland Conifers	0	0	0	4	8	3	0	0	0	13	0	0	0	0	0	0	0	0	28
Lowland Deciduous	0	0	0	2	4	3	0	0	2	0	0	0	0	0	0	0	0	0	11
Lowland Mixed Forest	0	0	0	0	1	1	0	0	9	0	0	0	0	0	0	0	0	0	11
Lowland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	38
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Mixed Upland Deciduous	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	5
Northern Hardwood	0	0	0	0	0	0	0	0	63	149	0	0	0	0	0	0	0	0	211
Red Pine	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	38
Tamarack	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Upland Mixed Forest	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Upland Spruce/Fir	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Urban	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Total	86	60	35	96	130	37	38	0	112	164	0	293	18	200	0	0	0	0	1266



Report 2 – Treatment Summary

Acres of Harvest

Commercial Harvest - 44
Harvests with Site Condition - 40
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	25	0	0	0	0	0	0	0	0	25
Northern Hardwood	7	0	0	0	0	40	0	0	0	47
Red Pine	3	0	0	0	0	9	0	0	0	12
Total	35	0	0	0	0	49	0	0	0	84

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	84	0	0	0	0	0	3	4		91
Next Step	0	0	0	0	0	0	35	0		35
Total	84	0	0	0	0	0	35	3	4	126



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
2 53053002-Cut	4.0	4130 - Aspen	Poletimber Well	48	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Clearcut with no area retention due to the small size of the stand. Leave any incidental oak, basswood, or white pine. Oil/gas structure on northwest side may need to be protected with a small buffer around it.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Fully-stocked stand of aspen with any additional mix of species being acceptable.
Regen:

Other Add brush pile and drumming log specs.
Comment:

Proposed Start Date: 10/1 /2019

5 53053005-Cut	14.0	4130 - Aspen	Poletimber Well	48	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
----------------	------	--------------	-----------------	----	-------	---------	-------------------------	-------------	-----------	----------------------

Habitat Cut: No

Site Condition:

Prescription Clearcut. Exclude the far eastern end near the gas well road, which is essentially a U/M1 type and can serve as retention for the stand. Do not cut any of the following rare species which may be present in the stand; cedar, yellow birch, elm, hemlock, white pine, oak, and basswood. Winter or dry summer cut due to wet soils in the northern 1/3rd of the stand.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Fully-stocked stand dominated by aspen with any additional mix of species being acceptable.
Regen:

Other Add brush pile and drumming log specs.
Comment:

Ensure the closed road that follows the northwest boundary is bermed following harvest.

Proposed Start Date: 10/1 /2019

18 53053018-NF	4.1	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary
----------------	-----	---------------------------	------------	--	--------------	--------------	-----------------	---------------------------	--	----------------------

Habitat Cut: No

Site Condition:

Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

36 53053036-Cut	8.9	42110 - Planted Red Pine	Sawtimber Well	55	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
-----------------	-----	--------------------------	----------------	----	---------	---------	----------------	-------------------------	-----------	----------------------

Habitat Cut: No

Site Condition:

Prescription Crown thin to 110 square feet. Focus on removing suppressed stems from the smallest size classes. Retain all hardwoods except for any ash or ironwood.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019



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
52 53053052-Cut	7.4	4130 - Aspen	Poletimber Well	36	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Cut all species, except leave any yellow birch, cedar, or elm which may be present along the far east edge. Exclude the thin portion of the stand
Specs: at the north end as retention.

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

Acceptable Fully-stocked stand dominated by aspen with any additional mix of species acceptable.
Regen:

Other Due to wet ground may want to add seasonal operating specs for winter or dry summer only.

Comment: Add drumming log and brush pile specs.

Proposed Start Date: 10/1 /2019

55 53053055-Cut	40.3	4119 - Mixed Northern Hardwoods	Poletimber Well	79	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
-----------------	------	---------------------------------	-----------------	----	---------	---------	----------------	-------------------------	-------------	----------------------

Habitat Cut: No

Site Condition: Survey Needed

Prescription Crown thinning down to 80 square feet. Remove all beech except leave any large diameter wildlife trees if present. For the remainder, focus on
Specs: removing poor-quality trees from the poletimber size classes. Go around small aspen clones.

Next Step
Treatments:

Acceptable
Regen:

Other No new roads. Put landings in the well pads. Expect the treatment boundary to change, maybe more than 25%. Exclude steep slopes (far east side) and areas with poor stocking (south end near Sparr Road).

Proposed Start Date: 10/1 /2019

84 53053063-Cut	6.6	4119 - Mixed Northern Hardwoods	Poletimber Well	87	81-110	Harvest	Clearcut with Retention	411 - Northern Hardwood	Even-Aged	Field Boundary
-----------------	-----	---------------------------------	-----------------	----	--------	---------	-------------------------	-------------------------	-----------	----------------

Habitat Cut: No

Site Condition:

Prescription Cut all trees over 2 inches in diameter. Get the producer to knock down as many of the understory stems as possible to maximize sprouting
Specs: potential. Ensure residual slash is scattered evenly. Protect a few of the more advanced pockets of hardwood regeneration with small retention areas or exclude them along the edge.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable A fully-stocked stand meeting northern hardwood stocking guidelines.
Regen:

Other Put the landing in the well pad.

Comment:

Proposed Start Date: 10/1 /2017

64 53053064-Cut	2.8	42110 - Planted Red Pine	Sawtimber Well	55	141-170	Harvest	Clearcut with Retention	411 - Northern Hardwood	Even-Aged	Field Boundary
-----------------	-----	--------------------------	----------------	----	---------	---------	-------------------------	-------------------------	-----------	----------------

Habitat Cut: No

Site Condition:

Prescription Cut all trees over 2 inches in diameter. Get the producer to knock down as many of the understory stems as possible to maximize sprouting
Specs: potential. Ensure residual slash is scattered evenly. Protect a few of the more advanced pockets of hardwood regeneration with small retention areas or exclude them along the edge.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable A fully-stocked stand meeting northern hardwood regeneration guidelines.
Regen:

Other

Comment:

Proposed Start Date: 10/1 /2017



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
77 53053077-Other	3.0	6239 - Mixed Emergent Wetland	Nonstocked	0	Unspecified	Other	Other	6239 - Mixed Emergent Wetland		Field Boundary

Habitat Cut: No

Site Condition:

Prescription Spray all non-native phragmites within this stand. This treatment will stay open until the phragmites is eradicated. It is associated with FTP #
Specs: W53-459 and is being done in conjunction with Huron Pines.

Next Step
Treatments:

Acceptable
Regen:

Other A new occurrence and has not been sprayed at this time.

Comment:

Proposed Start Date: 4 /4 /2018

**Total Treatment
Acreage Proposed: 91.1**

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 53
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions						
		With Condition	Not Available		2I	2G	2H	3G	3J	5E	
176	169	0	7	Aspen		0	4				3
507	0	0	507	Cedar		462		45			
45	45	0	0	Herbaceous Openland							
140	28	0	112	Lowland Aspen/Balsam Poplar		7			105		
27	6	0	21	Lowland Conifers		21					
10	5	0	6	Lowland Deciduous		6					
10	5	0	5	Lowland Mixed Forest		5					
9	9	0	0	Lowland Shrub							
38	0	0	38	Lowland Spruce/Fir		38					
12	12	0	0	Marsh							
5	2	0	3	Mixed Upland Deciduous			3				
213	173	40	0	Northern Hardwood	40						0
38	38	0	0	Red Pine							
4	0	0	4	Tamarack		4					
1	0	0	1	Upland Mixed Forest					1		
1	1	0	0	Upland Shrub							
8	0	0	8	Upland Spruce/Fir			8				
19	19	0	0	Urban							
1,264	511	40	713	Total Forested Acres	40	543	14	45	107		3
	40%	3%	56%	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	2G: Too wet (sensitive soils, does not include access issues)	74	5A: Not able to obtain desirable regeneration	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 53

Greg Rekowski : Examiner

Year of Entry: 2020

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Stream flows through stand 51. Stand 82 is very wet and may be the headwaters of Saunders Creek.							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 53
Year of Entry: 2020

7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	18	3J: Water quality / BMPs (stream, river, or lake)	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified
Comments: Stream bisects the stand, flowing south to north. Other areas of the stand are wet. Previous strip cuts have shown an inability to regenerate cedar.							
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Wet drainage.							
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Lowland drainage/intermittent stream network that wasn't protected when stands 28 and 29 were harvested. Protect this from damage in the future.							
11	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 53
Year of Entry: 2020

13	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	281	3J: Water quality / BMPs (stream, river, or lake)	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified
Comments: Wet soils. Numerous streams pass through the stand, feeding into the Black River. Decades of past strip cuts in the area have shown that cedar regeneration is not possible at these high deer densities.							
15	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Commercial management not feasible. Can be managed non-commercially as they have in the past.							
16	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	50	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
17	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 53

Greg Rekowski : Examiner

Year of Entry: 2020

19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Small stream cuts through the middle.							
20	Available	2I: Survey needed	40	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Survey request has been submitted.							
21	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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.



Stand	Pigeon River Country Mgt. Unit		Report 7 – Forested Stands			Compartment: 53 Year of Entry: 2020
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Medium	1.9	24	Immature	Stand cut by James Burkhart in 1994 as part of Black River West Cedar. Cedar made up the majority of volume that was harvested, none has grown back, deer use heavy in the stand. Quite a bit of diversity in this strip cut but stocking is not nearly as good as the others in the area. More white pine in the north unit of the stand. Some cedar left lying in spots throughout the unit, maybe to deter deer? If that was the case it didn't work.
2	4130 - Aspen	Poletimber Well	4.0	48	81-110	Relatively low quality aspen. Some areas of lower stocking along the west edge. Trace of white spruce. Average ba/acre from 5 plots = 88 square feet. There is an oil/gas structural component in the small finger of stand 6 that protrudes into this stand. It should probably be protected if a harvest is prescribed here.
3	4110 - Sugar Maple Association	Sawtimber Poor	6.9	83	51-80	Open-grown, degraded hardwood stand. Very heavy browse pressure has resulted in grass encroachment and gives this stand a savannah-like feel. Heavy browse has kept a lot of the ironwood and ash from recruiting into the overstory. Average ba/acre from 6 plots = 63 square feet.
4	4130 - Aspen	Sawtimber Well	1.5	83	111-140	Stand of large diameter aspen that is the retention area for the surrounding aspen stand that was cut as part of Blue Plate Mix (#53-007-10-01). The retention was left after the adjacent landowner Titus objected to the clearcut as it is essentially in his backyard. Average ba/acre from 3 plots = 137 square feet.
5	4130 - Aspen	Poletimber Well	14.7	48	51-80	Mediocre aspen stand. Some of the quaking appears in decline. However, the bigtooth is showing good growth and is healthy. Diameters tend to be a little larger in the west half. Northern 1/3rd of the stand, that borders the old grade, has some wet ground. Quite a bit of old balsam blowdown in this area. Most of the cedar is directly adjacent to the grade. Far eastern end near the oil/gas facility is sparsely stocked and is more of a U type. Trace of yellow birch and white spruce. A few of the larger ash are hanging on. Average ba/acre from 13 plots = 55 square feet. An old road borders the western edge of the stand.
7	6120 - Lowland Cedar	Poletimber Well	280.9	104	201+	Large stand of nearly pure cedar. Some pockets of exceptional quality. Quality declines in wetter areas. Majority of the cedar appears healthy, mortality and stagnation only noticed in a few areas. Numerous streams flow north through the stand, by my count at least 4. Very heavy deer use and as a result there is a barren understory throughout most of the stand. Several old roads crisscross throughout. Quite a bit of hunter activity noticed; blinds, bait buckets, etc. Average ba/acre from 25 plots = 231 square feet. Do not ever manage due to this stand's importance as a source of tributaries to the Black River, wet soils, and high deer population in the area which makes cedar regeneration impossible.
8	6120 - Lowland Cedar	Poletimber Well	1.1	125	141-170	Wet, poor quality cedar stand that wasn't cut when the surrounding stands were. Appears to be the origination of a wet drainage that continues W/SW out of the stand, draining into the stream that borders the western boundary of stands 9 and 94. Average ba/acre from 3 plots = 150 square feet. An old road travels north through the stand, continuing on into stand 7.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
9	6124 - Lowland Spruce-Fir	Sapling Well	7.6	33	Immature	This stand, along with stands 93 and 94 to the south, were broken up into small blocks and cut throughout the years of 1980-85 by several different producers. Cedar was the dominant harvested volume. Cedar has not regenerated other than a few heavily browsed seedlings, heavy deer use throughout. Stand has scattered wet areas with low stocking, otherwise the remainder of the stand looks pretty good. Far west end of the stand has a wet drainage which comes out of stand 8 and flows W/SW into the stream in stand 7.
10	6124 - Lowland Spruce-Fir	Sapling Well	2.3	28	Immature	Stand cut by C&C Logging in 1990 as part of Black River 89-90. Cedar made up the majority of volume that was harvested. No cedar has regenerated. Heavy deer use.
11	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Well	1.9	40	1-50	Stand cut by Wildlife Division. Some variability in species mix. The west end is primarily birch, maple, and BAM. Fir becomes prevalent in the middle part of the stand and then the eastern 1/2 transitions to more of a spruce/tamarack mix.
12	42340 - Upland Spruce/Fir	Poletimber Well	3.2	38	51-80	Stand manually cut in 1980 by Wildlife Division. Stand has regenerated well to spruce and fir with the exception of some scattered open areas. Aspen is mostly in the northeast side of the stand. Old fire-charred white pine stumps are scattered throughout. Average ba/acre from 5 plots = 56 square feet. A hunter has cut several trees and created a small opening in the center of the stand.
13	6139 - Mixed Lowland Forest	Sapling Well	0.7	40	1-50	Cut by Wildlife Division. No cedar regeneration. Black spruce/fir more dominant in east half. Birch/maple more in west half.
14	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Well	1.2	41	1-50	Stand cut by Wildlife Division. Cedar was the primary volume cut but none has grown back. Current stand has a nice mix of deciduous species regeneration, especially paper birch, which becomes more common in the east half of the stand. Very heavy deer use and browse, especially on the balsam understory, a browse line is evident. A small stream flows north through the western end. Trace of willow and tamarack.
16	4130 - Aspen	Sapling Well	4.9	15	Immature	Stand cut in 2003 as part of the Blind Aspen Blocks sale, #53-016-00-01, bought by AJD. Aspen regenerated well. Some of the cherry may become merchantable based on it's form. A little bit of wetter ground mixed in. Trace of beech, balsam fir, white spruce, sugar maple, and red maple.
17	4130 - Aspen	Sapling Poor	10.5	2	Immature	Stand cut in winter of 2015-16 as part of Blue Plate Mix (#53-007-10-01). Bought and cut by Tulgetska, roundwood job. Pretty ugly looking regeneration up to this point, largely due to deer browse. Aspen has sprouted back well in areas but is being hit hard by browse. Those that have made it past are over 5 feet tall, the remainder is under 3 feet. Quite a bit of hardwoods (sugar maple and basswood) were cut out of here but I don't see any evidence of stump sprouts. Only hardwoods regenerating are white ash and ironwood. Heavy mullein and thistle component, especially in the eastern half. Still too early to call this a regen failure but it's looking like it will be. Evaluate at next inventory cycle.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	2.3	83	81-110	Moderate quality hardwoods with a component of large aspen. Large stick nest in a paper birch in the center of the stand. Average ba/acre from 4 plots = 95 square feet.
20	4130 - Aspen	Sapling Well	9.6	15	Immature	Cut in 2003 as part of the Blind Aspen Blocks sale, #53-016-00-01, bought by AJD. Stand has regenerated well to aspen. Small cattail marsh at the east end. A little bit of wet ground along the northern edge. Lots of ash in the understory, possibly more than one species. Trace of tamarack and black spruce.
21	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Well	1.7	40	51-80	Old strip cut. Stand is just approaching merchantability. Nice representation of paper birch. Browse line on the balsam is very apparent, heavy deer use.
22	4134 - Aspen, Spruce/Fir	Poletimber Well	4.2	38	51-80	Stand manually cut in 1980. A few scattered cedar, spruce, and birch were left uncut. High balsam component. A lot of small aspen stems. Old fire-charred white pine stumps are scattered throughout. Average ba/acre from 4 plots = 80 square feet.
23	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	2.7	104	81-110	Small upland island stand that was not cut when the adjacent stand to the west was. Aspen and BAM mostly at the north end. Some large diameter trees mixed in. Natural succession to balsam is occurring. Average ba/acre from 4 plots = 83 square feet.
24	4319 - Mixed Upland Forest	Poletimber Well	1.5	40	81-110	Small stand that was not cut when the surrounding aspen stand was harvested. May have been too small at the time. Old OI notes indicate many of the residual hardwoods were cut out of this stand for firewood at about the same time the adjacent aspen stand was clearcut. Stand is mostly dry. Average ba/acre from 4 plots = 83 square feet.
26	42330 - Upland Fir	Sapling Medium	4.5	38	1-50	Stand cut by Wildlife in 1980. Apparently there used to be a component of aspen regeneration but the beavers have now eliminated all of that. The remaining spruce and fir have somewhat sporadic stocking as there are some open areas with no regen. Variation in diameters as well as there are a few larger trees mixed in here and there, and more so at the far southern end. Average ba/acre from 5 plots = 42 square feet. Trace of red maple and white pine. A small trail has been cut through a long portion of the stand. There are a few spots where shooting lanes have been cleared as well.
28	6112 - Lowland Aspen	Poletimber Well	35.2	31	51-80	Stand cut by Gary Haskill in 1987. Almost all of the stand came back well to aspen, however there is very little overstory diversity in the canopy. Diameters tend to vary quite a bit and overall the stand is just reaching merchantability. Heavy ash understory in many areas, appears to be a mix of black and green? Upland island in the northeastern part of the stand. There is a large flooded area with cattails towards the western end, it looks like a stream runs north-south through the area and it doesn't appear to have been protected when the harvest took place. Heavy deer use. Average ba/acre from 9 plots = 54 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	6112 - Lowland Aspen	Sapling Well	49.0	25	Immature	Stand cut in 1993 by Ralph Walker in the sale B.C.G. & A, #53-005-90-01. Harvested volumes were as follows: 138 cords cedar, 297 cords mixed hardwood, 96 cords quaking aspen, 13 cords black spruce, 119 cords paper birch, 2 cords mixed pine, 89 mbf quaking aspen, 28 mbf cedar. Stand has regenerated well, with the exception of cedar which is now absent from the stand. Some excellent patches of paper birch regeneration, especially in the east half and in the wetter areas. A lot of ash regen as well, I think it's a mix between green and black? Many of the larger black ash stems are being killed by EAB. Overall the stand is about a 50/50 mix of upland and lowland. There is a wet drainage that flows north through the western half. It doesn't appear to have been protected during harvest operations. Other than the old landings, this drainage is the only area with lower stocking as there are some spots that appear to be flooded.
30	6111 - Lowland Balsam Poplar	Poletimber Well	0.9	40	81-110	Small strip cut that came back mostly to poplar species. Average ba/acre from 3 plots = 87 square feet.
31	4130 - Aspen	Sapling Medium	6.3	2	Immature	Stand cut in winter of 2015-16 as part of Blue Plate Mix sale (#53-007-10-01). Roundwood job by Tulgetska. Aspen regeneration has come back moderately well. Prior to being cut, this stand also had a significant component of hardwoods in the overstory, similar to stand 38 adjacent to the west. However, there were upwards of 100 deer browsing on the downed tops while the sale was ongoing so I expect most hardwood species regeneration to be wiped out of this stand due to the high deer population in the area. Up to this point I haven't seen any hardwood regeneration other than ash. There is a clump of 4 poletimber-size bur oak on the north side of the road that bisects the stand. Not sure how these got here?
35	4119 - Mixed Northern Hardwoods	Sawtimber Poor	5.6	84	1-50	Poor quality stand that must have been heavily cut over at some point. Overstory trees tend to be spaced in clumps and are poor quality. Stand resembles a U type in some areas due to the amount of cherry and low overstory stocking. Far east side next to the house has most of the BAM. Average ba/acre from 7 plots = 47 square feet.
36	42110 - Planted Red Pine	Sawtimber Well	8.9	55	141-170	Decent quality red pine stand with a few hardwoods scattered throughout. A couple areas with sugar maple regeneration but it is being heavily browsed. Average ba/acre from 7 plots = 159 square feet.
37	4119 - Mixed Northern Hardwoods	Sawtimber Medium	2.2	84	51-80	Moderate quality hardwood stand that looks like it was heavily cut-over in the past. Stocking is clumpy and not uniform. Trace of American elm, black cherry, and red oak. Average ba/acre from 3 plots = 80 square feet.
38	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	18.2	70	51-80	Moderate quality hardwoods with a component of aspen mixed in. The quaking aspen is scattered throughout however the bigtooth is confined to a clone at the southern end. Trace of elm and red oak. Average ba/acre from 8 plots = 94 square feet. An old road cuts east-west through the middle of the stand, leading to an opening on the adjacent private property.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	6112 - Lowland Aspen	Sapling Medium	8.7	2	Immature	Stand cut in winter of 2015-16 as part of Blue Plate Mix (#53-007-10-01). Roundwood job by Tulgetska. Crew did a good job of freezing in the site and limiting soil disturbance. Only a few small areas of rutting along the northern edge. Upwards of 100 deer browsing on the downed tops while the sale was ongoing. Due to this heavy deer population, a few cedar, paper birch, and yellow birch were excluded from the harvest. Aspen has regenerated moderately well up to this point. Wet areas and/or areas where a lot of hardwoods were cut are not showing much regeneration up to this point. Stand is about a 50/50 split between upland and lowland. West half is mostly wet while the east half transitions to upland.
40	6112 - Lowland Aspen	Sapling Well	8.2	15	Immature	Stand cut in 2002 by Gary Haskill in the sale Aspen Shingles Block, #53-005-00-01. Harvested volumes are as follows: red maple 25 cords, paper birch 10 cords, quaking aspen 97 cords, fir 18 cords, cedar 89 cords, mixed hardwood 19 cords. Stand has regenerated well with the exception of cedar which is now absent from the stand. There is a heavy component of black ash, most of it appears healthy and free of EAB, at least for the time being. A willow species is present and it's growth suggest it will be merchantable, not sure which exact species it is. Heavy browse in some areas. Trace of balsam fir, tamarack, black spruce, basswood, and red oak.
41	6112 - Lowland Aspen	Poletimber Well	1.0	41	51-80	Small strip that was cut in 1987, a few larger trees left along the SE edge. Stand kind of blends in with the adjacent aspen stand to the east (#28). Trace of elm, cedar, and spruce. No cedar regen present. Some ash is still hanging on, looks like green ash to me? Ground does not appear to be overly wet. Average ba/acre from 4 plots = 63 square feet.
42	6130 - Fir, Aspen, Maple	Sapling Medium	0.8	39	1-50	Stand cut by Wildlife in 1979. Central part did not regenerate well and is mostly cattails. A small stream cuts through this portion, running north. Heavy deer use, a browse line is evident on the balsam.
43	6124 - Lowland Spruce-Fir	Poletimber Well	2.7	81	81-110	Moderate quality Q stand on wet soils. Most spruce and fir is in the north half, while cedar becomes dominant in the south half. Quite a bit of blowdown at the south end. Deer browse on the balsam understory. Average ba/acre from 6 plots = 98 square feet.
44	6112 - Lowland Aspen	Sapling Well	8.8	30	Immature	Stand cut by Gary Haskill in 1989. Regeneration came back very well and the aspen is just reaching merchantability. Some nice patches of paper birch are present and even a couple yellow birch are mixed in. Heavy black ash understory. This stand is wet, but not as wet as the adjacent stand to the west.
45	4130 - Aspen	Sapling Medium	3.0	2	Immature	Stand cut in winter of 2015-16 as part of Blue Plate Mix sale (#53-007-10-01). Roundwood job by Tulgetska. Some very wet ground in the NE part of the stand near the pipeline. One small area was too wet so they left it uncut. Aspen regeneration has come back well so far with the exception of wet areas along the edges.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	42110 - Planted Red Pine	Sawtimber Poor	4.6	55	1-50	Stand cut in winter of 2015-16 as part of Blue Plate Mix sale (#53-007-10-01). Roundwood job by Tulgetska. Stand has not regenerated well up to this point and is pretty much black cherry, raspberry, and a host of invasives such as mullein, thistle, St. John's Wort, and grass. No scarification took place in this stand so I wouldn't expect to see red pine seed in. Deer browse pressure is very high. Average ba/acre from 5 plots = 24 square feet.
47	42110 - Planted Red Pine	Sawtimber Well	11.5	55	111-140	Third row thin as part of Blue Plate Mix sale (#53-007-10-01). Cut in winter of 2015-16 by Tulgetska. A few small areas with a bit of damage due to tight rows. Overall looks good though. Stick nest found in the middle. Small strip of scotch pine at the far southern end. Average ba/acre from 6 plots = 132 square feet. Should be ready for a second thinning next entry. Strange vine in the SW corner of the stand, seems to be spreading rapidly. Need to ID and treat if invasive.
48	6112 - Lowland Aspen	Sapling Medium	21.2	29	Immature	Stand cut by Gary Haskill in 1989. Regeneration came back well but the aspen is showing signs of decline and dieback in many places. There are also areas where the aspen is still very small (1-2" DBH) despite it being much larger in other areas. This may be due to the wetness of the site? It's likely that the water table raised significantly after harvest and may have led to stagnation in the stand? There is also a very wet drainage which runs north through the stand (see 98DOQ imagery). Heavy deer browse pressure, definite browse line on the balsam and all of the red osier dogwood has been limited to about 1 foot in height.
49	6130 - Fir, Aspen, Maple	Poletimber Poor	1.7	77	51-80	Poorly-stocked, low quality stand. Very wet. Corner is in. Average ba/acre from 4 plots = 60 square feet.
50	6122 - Black Spruce	Poletimber Well	0.6	77	51-80	Small, wet stand on the far side of Gingell Road. Corner is in. Average ba/acre from 3 plots = 60 square feet.
51	6120 - Lowland Cedar	Poletimber Well	2.8	125	201+	Dense stand of cedar with some other species mixed in, mostly along the edges. Quite a bit of blowdown. A small stream travels through the middle of the stand. Along the west stand boundary is a small seep/wetland that is mostly nonforested and drains into the stream. Most of the hardwoods are located along the edge of this, including a small amount of yellow birch regeneration. Average ba/acre from 6 plots = 205 square feet.
52	4130 - Aspen	Poletimber Well	8.1	36	81-110	Good looking stand of young aspen. Diameters tend to vary, there are a few areas of large aspen stems mixed in, they must have been left the first time around. Other areas are in the 6-7" DBH range. The eastern edge of the stand becomes wet and is where most of the quaking aspen is located. The remainder of the stand is on a slight side slope. Average ba/acre from 7 plots = 106 square feet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	4111 - S.Maple, Hard Mast Association	Sawtimber Medium	92.2	87	51-80	<p>All aspen cut out of this stand by Jim Payne in 1983, which was quite a heavy partial harvest as the BA's are still quite low to this day. Gaps where a lot of volume was removed have filled in primarily with ironwood and beech but there are a few with some younger aspen in them. A few clones of larger aspen remain and must have been missed during the harvest. Rolling terrain with some steep slopes and relatively large hills for the area. Some of the coves and valleys have some pockets of higher quality stems. Most of the beech has BBD. Majority of ash are dead from EAB although a few appear to be hanging on. Trace of yellow birch and elm. Average ba/acre from 18 plots = 68 square feet. Won't be able to work in this stand for some time, at least until the second age class of ironwood (yay) matures.</p> <p>A new pipeline ROW was cut through this stand in 2016 (leads to stand 58).</p>
55	4119 - Mixed Northern Hardwoods	Poletimber Well	43.7	79	111-140	<p>Moderate quality hardwood stand on rolling terrain. Quality and stocking is lowest on ridge tops and south facing slopes. The remainder of the stand has a few nice pockets of high quality stems. Portions of this stand may have had a species removal harvest at one time (aspen/birch) which may explain the irregular stocking. Aspen in both small clones and scattered single trees. A few slopes are very steep, mostly on the far eastern end. BBD widespread on the beech. All ash is dead from EAB. Average ba/acre from 15 plots = 111 square feet.</p>
59	4139 - Aspen, Mixed Deciduous	Poletimber Well	19.7	27	Immature	<p>Stand cut by Gary Haskill in the Sawyer Road Aspen sale, #53-006-90-01. Stand regenerated well and is just approaching merchantability. There is quite a bit of variation in diameters and species mix. North half of the stand is on a mid and upper slope and has a much heavier hardwood component mixed in with the aspen, mostly beech, ironwood, and ash. Diameters are also quite a bit smaller here, mostly in the 2-4" range. The south half is on the lower slope and dominated by aspen in the canopy, with mostly maple and ash in the understory. Diameters here are running 4-6" DBH. A few scattered larger hardwoods mixed in throughout. Ash seems to be hanging on in many places. A small seep/wetland is at the southwest corner and has some young basswood and yellow birch growing near it.</p>
60	4130 - Aspen	Poletimber Well	30.8	36	51-80	<p>Stand cut in 1985 by Champion as part of Oil Well Aspen, #53-016-81-01. Aspen regenerated very well along with a decent component of hardwoods, although most of this is suppressed by the overtopping aspen. Beech and ash are both showing signs of mortality from BBD and EAB respectively. Rolling terrain with some large hills and relatively steep slopes. Average ba/acre from 10 plots = 75 square feet. If desired, stand will be ready for a final harvest next entry. Protect some of the better hardwood pockets.</p>
61	4130 - Aspen	Poletimber Well	4.6	37	51-80	<p>Mediocre aspen, some scattered residual hardwoods and a few larger aspen are mixed in. Average ba/acre from 5 plots = 60 square feet. Still a lot of small diameters at this point.</p>
62	4199 - Other Mixed Upland Deciduous	Sapling Medium	2.5	37	1-50	<p>Poor quality stand dominated by ironwood. Some open areas mixed in throughout. Not sure if the cherry will be merchantable or not, looks pretty scrubby. Most of the white ash appears to have EAB.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
63	42110 - Planted Red Pine	Sawtimber Well	7.4	55	141-170	Planted in 1963. Stand is currently set up for a salvage sale (Pudding Pine Salvage) because of an ongoing root rot and bark beetle infestation which is causing pocket mortality throughout. There is an excellent understory of sugar maple in many places. Decision was made to salvage the red pine and let the hardwood understory take over.
64	42110 - Planted Red Pine	Sawtimber Well	3.6	55	141-170	Planted in 1963. Stand is currently set up for a salvage sale (Pudding Pine Salvage) because of an ongoing root rot and bark beetle infestation which is causing pocket mortality throughout. This stand doesn't have as much of a hardwood understory as stand 63 to the west, with the exception of the portion west of Equestrian Court which has a decent amount of sugar maple. Decision was made to salvage the red pine and let the hardwood understory take over.
65	4130 - Aspen	Sapling Well	7.7	16	Immature	Stand cut in 2002 as part of Wheelborrow Block, #53-015-00-01, bought by Lamberson LLC. Two small red pine retention pockets were left. Aspen regenerated well and some areas have a decent hardwood component.
66	42110 - Planted Red Pine	Sawtimber Well	0.7	55	201+	Dense, large diameters for it's age, healthy. Average ba/acre from 3 plots = 213 square feet.
68	6120 - Lowland Cedar	Poletimber Well	50.1	125	141-170	Cedar stand of marginal quality and wet soils. Blowdown common throughout but heaviest along the west edge. Some wet areas where cedar decline was noticed, these tend to be more in the north half of the stand. Small interspersed pockets of E type species, these tend to be located along the western edge of the stand and in the southern half. Some of these areas have nice E type regen as well, and are usually where blowdown was greatest. Trace of balsam poplar, basswood, and yellow birch in the overstory. Average ba/acre from 14 plots = 161 square feet. Heavy deer use.
69	4130 - Aspen	Poletimber Well	8.7	36	81-110	Stand cut in 1985 by Champion as part of Oil Well Aspen, #53-016-81-01. All species harvested, predominant volumes were aspen and mixed hardwood with smaller amounts of cedar, spruce, and fir. Stand regenerated well to aspen. Some wet ground along the east half but the remainder is mostly dry. Average ba/acre from 7 plots = 90 square feet. Stand will be ready for a final harvest next entry.
70	4130 - Aspen	Poletimber Well	1.7	36	51-80	Stand cut in 1985 by Champion as part of Oil Well Aspen, #53-016-81-01. Regenerated well. Trace of balsam fir in the overstory. Average ba/acre from 3 plots = 80 square feet.
71	42110 - Planted Red Pine	Sawtimber Poor	1.8	55	1-50	Stand cut as part of Blue Paint Special, #53-025-10-01, A.J.D. Not much regeneration at all up to this point due to heavy browse pressure. Grass and sedge are taking over as a result of this. Average ba/acre from 3 plots = 30 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
72	4130 - Aspen	Sapling Poor	11.7	5	Immature	Stand cut in the summer of 2013 as part of Blue Paint Special, #53-025-10-01, cut by AJD, roundwood job. Stand is about 60/40 upland/lowland, the eastern part being the 40% lowland. Despite the wet ground there were no rutting impacts from the harvest. Regeneration has been spotty at best up to this point. The upland areas are regenerating well to aspen, however the lowland areas are not and most of it has converted to marsh grass/sedge. Heavy deer use and evidence of browse impacts, but not elk sign. I would call this a regeneration failure at this point but maybe the lowland areas need more time to fill in?
73	4130 - Aspen	Sapling Medium	20.1	5	Immature	Clearcut in summer of 2013 as part of Blue Paint Special, #53-025-10-01, roundwood job cut by AJD. Stand was formerly hardwoods with a component of aspen, about 60 cords of basswood and 100 cords of sugar maple were cut out of here. Regeneration up to this point is very patchy with several non-forested areas, particularly in the south half. Aspen has come back well in a few spots but is not uniform throughout. Basswood and sugar maple regen is nonexistent and it looks like all stump sprouts have been browsed to death. The only hardwood regeneration showing up is beech, ironwood, and white ash, many of which are showing signs of browse damage. No sign of elk in here at this time so the browse damage is strictly deer. There is a large patch of autumn olive along the western edge that must have been stimulated when it was cut. I would call this a borderline regen failure.
74	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Medium	1.8	26	Immature	Stand cut by Jaroche Brothes in 1992 in the North Tip Swamp Cut sale, #53-034-89-01. Cedar was the predominant volume harvested. Current regen has a wide mix of species. Not sure whether or not the willow component will become merchantable. A few larger trees that weren't harvested are present in the north end. Recent beaver activity was noticed and it looks like there has been some flooding in the northern half of the stand, likely due to the beavers.
78	4130 - Aspen	Sapling Well	4.8	16	Immature	Stand cut in 2002 as part of Wheelborrow Block, #53-015-00-01, bought by Lamberson LLC. Aspen regenerated well, the bigtooth is mostly on the south side of the gas/oil road. A lot of black cherry is present, not sure how much of it will be merchantable. Areas of heavy browse has suppressed some sugar maple and ash regeneration.
79	4119 - Mixed Northern Hardwoods	Poletimber Well	1.5	79	81-110	Small diameter, poor-quality hardwoods with the exception of the basswood. Trace of white spruce and balsam fir. Average ba/acre from 4 plots = 95 square feet. Leave as is.
80	6124 - Lowland Spruce-Fir	Poletimber Medium	10.3	81	51-80	Stand seems to be a nearly even split between upland and lowland. The upland ridges seem to be more common in the east half. Species composition is quite variable as well. Most of the cedar is at the south end. Pockets of poor quality spruce and fir are common. Not really sure what to make of this stand, but management is not possible. Trace of white ash and black cherry in the overstory. Average ba/acre from 7 plots = 76 square feet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
81	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	7.2	77	111-140	Transitional stand of low quality and sporadic stocking. Southwest half becomes very wet and is where a large part of the cedar is located, a lot of it is in decline here. Northeast half has most of the aspen and maple. Some areas of blowdown. Stand is heavily used by deer, with a lot of browse evident on the black ash understory. Average ba/acre from 7 plots = 114 square feet but this is skewed higher due to dense clumps of cedar. The remainder of the stand is closer to 70-80 square feet.
82	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	1.5	74	Unspecified	Wet stand that was not harvested when the adjacent stand to the west was cut. Used to be a lot of black ash in this stand but it is now all dead and mostly on the ground. Average ba/acre from 4 plots = 50 square feet. Do not manage due to the sensitive soils.
84	4119 - Mixed Northern Hardwoods	Poletimber Well	40.3	87	81-110	This stand had an aspen removal harvest, cut by Jim Payne in 1981. As a result stocking is quite variable. Some residual aspen were left here and there. Aspen came back in several of the gaps that were created but ironwood did as well and is dominant in many areas. Hardwood quality is quite good but there just isn't much to work with at this point. The eastern third of the stand has good stocking and could be thinned but that's about it. Beech is heavy in some areas, particularly along some ridges in the north/northwest parts, BBD is present on most of them. Old white pine stumps are scattered throughout. Trace of paper birch. Average ba/acre from 14 plots = 89 square feet. Corner is in.
85	6120 - Lowland Cedar	Poletimber Well	71.0	125	201+	High density cedar stand. Very high quality in the eastern half, declines somewhat in the western half. Areas with spruce/fir are mostly in the far northwestern corner, the remainder of the stand is almost pure cedar. Moderate size stream (3-5' wide) flows north through the central part of the stand and exits at the L type to the north (stand 27). Where the stream enters the stand at the south there is a large pocket of blowdown. An old road runs north-south at the far eastern end. Heavy deer use and barren understory throughout most areas. Trace of tamarack and balsam poplar. Average ba/acre from 13 plots = 233 square feet.
86	6124 - Lowland Spruce-Fir	Sapling Well	0.7	40	1-50	Strip cut by Wildlife Division in 1978. No cedar regenerated. Heavy to fir and spruce, deciduous species mostly at the south end. There appears to be a stream in this stand, flowing north. Very wet overall.
87	6122 - Black Spruce	Poletimber Well	37.0	77	81-110	Black spruce dominated stand, although there are a few scattered pockets heavier to cedar. Quality tends to vary but overall it is quite low, there are many areas that appear stagnant. A few small upland hummocks are present. There may be a few small feeder streams that flow through the stand as there is evidence of flowing water, although difficult to tell with the snow on the ground. Average ba/acre from 7 plots = 91 square feet.
88	6120 - Lowland Cedar	Sawtimber Well	18.2	111	171-200	Could not find the records but several small strip cuts took place in this stand. Primarily fir, maple, and birch have regenerated. Some cedar and white pine were left in the strips giving them a shelterwood-like look. The remainder of the stand is dense, high-quality cedar with a component of very large white pine. Impressive stand. A 3-4' wide stream runs north-south through the center. Average ba/acre from 7 plots = 187 square feet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
89	6112 - Lowland Aspen	Poletimber Medium	7.0	48	51-80	Poor quality stand of aspen that is very small for it's age and appears in decline. Site may have been flooded at one point and is now stagnant? 98DOQ imagery shows a lot of water in the stand. Even now the stand is quite wet, especially south of the grade where there are pockets of cattails. Black ash is abundant but EAB is killing most trees over 3" DBH. Trace of cedar. Average ba/acre from 7 plots = 57 square feet. No management due to the wet soils.
90	6120 - Lowland Cedar	Poletimber Well	8.6	107	111-140	Pretty nice cedar stand although there are a few areas of decline. Nice component of supercanopy white pine. Areas of blowdown scattered throughout. Far south end is more upland and more of an aspen/spruce/fir mix. Looks like there used to be some high quality black ash in this stand but it is now all dead from EAB and mostly on the ground. Average ba/acre from 8 plots = 140 square feet.
93	6121 - Tamarack	Poletimber Well	4.0	33	Immature	This stand, along with stands 9 and 94, were broken up into small blocks and cut throughout the years of 1980-85 by several different producers. Cedar was the dominant harvested volume. No cedar has regenerated but tamarack has seeded in very well here. Southeast portion has some blowdown and quite a bit of tamarack mortality.
94	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Well	4.3	33	Immature	This stand, along with stands 9 and 93 to the east, were broken up into small blocks and cut throughout the years of 1980-85 by several different producers. Cedar was the dominant harvested volume. No cedar has regenerated. Heavy deer use. Good representation of paper birch. Most of the quaking aspen is at the east end and doesn't look too healthy. Site does not appear to be too wet. A large stream, flowing north, is just outside the western boundary of the stand.
107	6120 - Lowland Cedar	Poletimber Well	29.7	125	201+	-Better quality in the south 1/2 of stand with a good representation of super canopy white pine.-A moderately sized stream (3-4 ft in width) meanders throughout the stand.-Some cedar decline in the wetter areas.-Trace of tamarack and paper birch.
108	6120 - Lowland Cedar	Poletimber Well	45.0	125	141-170	-The Black River flows through this stand.-Overall, quite a wet stand with low timber quality. Some cedar decline in the very wet areas.



Stand	Cover Type	Acres	Managed Site	General Comments:
6	110 - Low Intensity Urban	8.5	No	Johnson's Crossing oil production facility, several structures present.
15	6220 - Alder/willow	1.0	No	This may have been an old strip cut that instead filled in with primarily lowland shrubs. Very wet stand.
18	310 - Herbaceous Openland	4.1	No	Formerly a combined antrim gas well and oil well site but it is now in the process of being closed. Berms have already been placed for the northern pad. A small patch of trees is present in the middle. Knapweed is very heavy, especially in the south half.
27	6220 - Alder/willow	7.7	No	Only looked at the edge of this stand. Looks to be mostly alder with a few clumps of spruce and fir along the edges. A decent size stream (3-5' wide) enters this stand at the southern end, flowing north.
32	310 - Herbaceous Openland	1.3	No	Looks like this stand used to be maintained agriculture land by the adjacent private landowners. However the landowners fence is now in the correct position and this piece of land is no longer in trespass.
33	320 - Upland Shrub	0.8		Stand cut in winter of 2015-16 as part of Blue Plate Mix sale (#53-007-10-01). Roundwood job by Tulgetska. Stand has not regenerated well except for a pocket of aspen in the northern 1/3rd. The remainder of stand was previously hardwoods but is now a mix of grass and invasives such as mullein, St. John's wort, and thistle.
34	310 - Herbaceous Openland	1.9	No	Mostly the grassy ROW along Sparr Road. Quite a bit of knapweed.
54	310 - Herbaceous Openland	2.7	No	A combined antrim gas well and oil well site.
56	310 - Herbaceous Openland	3.6	No	An oil and gas production site, State Charlton C 2-30. Core Energy.
57	310 - Herbaceous Openland	0.8	No	Antrim gas well site, State Charlton D2-30. Ward Lake Energy.
58	310 - Herbaceous Openland	1.8	No	Well pad.
67	310 - Herbaceous Openland	2.2	No	A combined antrim gas well and oil well site. State Charlton 1-30, Core Energy.
75	6239 - Mixed Emergent Wetland	3.3	No	Flooded stand with dead/dying cedar and stunted fir, mostly along the perimeter. Standing water is present and there are a lot of cattails. Beaver activity noticed in the adjacent stand to the west and it looks like there may be a lodge in the middle of this stand.
76	310 - Herbaceous Openland	2.9	No	Pipeline ROW



Stand	Cover Type	Acres	Managed Site	General Comments:
77	6239 - Mixed Emergent Wetland	3.0	No	Two small streams converge in this stand and have been dammed by beavers. This has resulted in flooding throughout the stand that has killed most cedar and other trees. Phragmites has become established in several pockets. The flooding has also killed trees south onto private property and phragmites is there as well. Quite a bit of blowdown.
83	122 - Road/Parking Lot	1.4	No	Sparr Road
91	122 - Road/Parking Lot	4.8	No	Sparr and Sawyer Roads.
92	122 - Road/Parking Lot	1.3	No	Gingell Road.
95	6230 - Cattail	2.4	No	Gas and oil pipeline corridor, the majority of which is wet and has a lot of cattails.
96	122 - Road/Parking Lot	2.6	No	Sparr Road
97	310 - Herbaceous Openland	0.6	No	Antrim gas well site. Small structure is present.
98	310 - Herbaceous Openland	1.1	No	Active gas well. State-Charlton 10-29. Breitburn. A lot of knapweed here.
99	310 - Herbaceous Openland	4.8	No	Pipeline ROW, becomes very wet the further north you travel with some pockets of standing water and cattails.
100	310 - Herbaceous Openland	0.8	No	Antrim gas well site, State-Charlton 14-29. Breitburn.
101	310 - Herbaceous Openland	1.1	No	Antrim gas well site. Small pond on the far western edge.
102	310 - Herbaceous Openland	1.1	No	Well site. Lots of knapweed.
103	310 - Herbaceous Openland	10.9	No	Cleared ROW's for Sparr and Sawyer Roads. There is some illegal use along the Sawyer Road ROW as there is essentially a small two-track running the entire length. Oil and gas activity along these ROW's as well.
104	310 - Herbaceous Openland	1.0	No	Antrim gas well site, State Charlton C1-30, Ward Lake Energy.
105	310 - Herbaceous Openland	1.3	No	Antrim gas well site but doesn't appear to be in use. State Charlton B2-30, Ward Lake Energy.
106	310 - Herbaceous Openland	0.8	No	Antrim gas well site, State Charlton A2-30, Ward Lake Energy. A lot of knapweed here.



Stand	Cover Type	Acres	Managed Site	General Comments:
109	6233 - Wet Meadow	3.4	No	Pipeline cutting through the swamp.