

PIGEON RIVER COUNTRY MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT 57 ENTRY YEAR: 2014

Compartment Acreage: 1846 County: Otsego

Review Date:

August 22, 2012

Stand Examiner:

Greg Rekowski

Legal Description:

T32N - R02W Sections 19, 20, 21, 22 and 29

RMU (if applicable):

Not Applicable

Management Goals:

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

Soil and Topography:

In general the topography is flat or gently rolling. With a few minor exceptions, the only steep terrain is located on the east valley slopes of the Sturgeon River. Upland soils are dominated by Rubicon sands, Blue Lake loamy sands, Lindquist sands, and Leelanau loamy sands, respectively. Tawas-Lupton muck is the primary organic soil along the Sturgeon River watercourse.

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

No private in-holdings, however, the compartment does adjoin privately owned land along many of the exterior boundaries.

Unique, Natural Features (include only non-site specific and non-sensitive information):

None identified.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):

This entire compartment was purchased in 1980 from McClouth Steel.

Special Management Designations or Considerations:

The entire compartment is closed to all public motorized vehicle use, including snowmobiles. Areas lying within the Sturgeon River valley corridor have been designated as a Special Conservation Area (SCA).

Watershed and Fisheries Considerations:

The Sturgeon River flows through section 21. A small tributary of the Sturgeon River flows along the southern border of section 20. There are some signs of beaver activity along both of these streams.

Wildlife Habitat Considerations:

This compartment is primarily upland with blocks of northern hardwood, aspen, oak, mixed conifer and upland brush. The Sturgeon River runs through the compartment with a stand of mixed swamp conifer adjacent to it. The oak on the east side of the river is part of a long ridge of oak that will be maintained by management prescriptions. A relatively large (over 200 acres) area is prescribed to be burned to help promote oak regeneration, maintain the upland brush type and increase growth of some lower quality aspen that will be clearcut. Other stands of aspen will be clearcut to maintain the type and provide early successional habitat. Openings will be maintained using farming practices.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of coarse-textured glacial till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift is the Devonian Antrim Shale, quarried for clay/shale and cement products elsewhere in the State. The nearest gravel pit is one-half mile to the south, and potential is considered good on the upland areas. The Antrim Shale has been developed around this compartment and some of the State land is leased and in production. The Guelph (Niagaran) reef trend produces to the southeast and potential is minimal. There is oil and gas potential for known producing formations in this compartment.

Vehicle Access:

No public motorized vehicle use is permitted within the compartment.

Survey Needs:

None required.

Recreational Facilities and Opportunities:

Parking areas for the public are maintained off of Fontinalis Road and Sturgeon Valley Road. Cross-country ski enthusiasts use many of the closed trail roads in the winter.

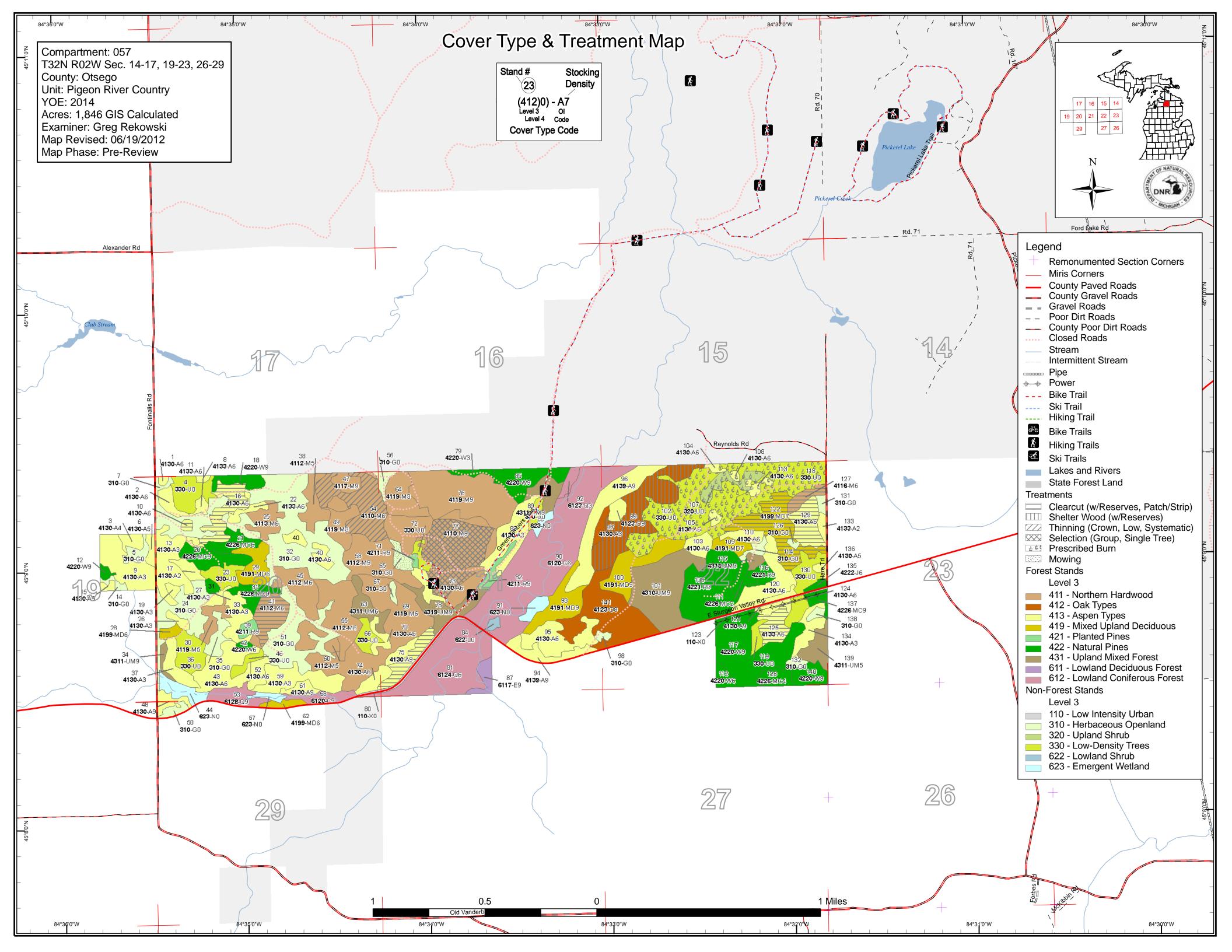
Fire Protection:

Fire potential in this compartment is low as current fuel types do not pose a severe wildfire threat. Gated service roads provide good access for fire suppression.

Additional Compartment Information:

Beech bark disease (BBD) has been found in stand #41 and isolated occurrences of beech scale were observed in stand #69. Ash is a rare tree species throughout this compartment; however, stand #78 has a small amount of black ash which has been killed by the emerald ash borer (EAB).

- **➤** The following 9 reports from the IFMAP Inventory System are attached:
 - **♦** Cover Type by Age Class
 - **♦** Cover Type by Harvest Method
 - **♦** Treatments with No Limiting Factor
 - **♦** Treatments with Limiting Factor
 - **♦ Out of YOE Treatments**
 - **♦** Forested Stands
 - **♦** Nonforested Stands
 - **♦ Proposed SCAs**
 - **♦ Dedicated SCAs**
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - ♦ Base feature information, stand numbers, cover types, road access system
 - **♦** Proposed treatments
 - **♦** Special ecological designations
 - **♦** Recreational facilities



Compartment 057 Year of Entry 2014

eon River Country Mgt. Unit Greg REKOWSKI : Examiner



Age Class

	Age Class															
		6.9	0.79	, R. J.	, S. /	LO. LO.	\$5.00 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$9.00	, or , or	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	, S. /	00,00	70,70	, 65 July 310 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RS /	N. N
Aspen	34	63	77	90	35	12	1	25	21	29	0	0	0	0	385	
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	118	0	118	
Herbaceous Openland	184	0	0	0	0	0	0	0	0	0	0	0	0	0	184	
Jack Pine	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
Low-Density Trees	167	0	0	0	0	0	0	0	0	0	0	0	0	0	167	
Lowland Conifers	0	0	4	0	0	0	0	0	0	0	0	0	70	0	74	
Lowland Deciduous	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	
Lowland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Marsh	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
Mixed Upland Deciduous	0	0	6	0	0	0	0	13	7	71	0	0	0	0	97	
Natural Mixed Pines	0	5	0	0	9	0	11	10	0	13	0	0	0	0	50	
Northern Hardwood	0	26	0	0	0	0	22	101	26	161	0	0	0	53	388	
Oak	0	0	0	0	0	0	0	0	0	93	0	0	0	0	93	
Red Pine	0	0	0	0	0	0	50	5	0	0	0	0	0	0	55	1
Upland Mixed Forest	0	0	21	0	0	0	49	17	10	0	0	0	0	0	97	1
Upland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
Urban	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1
White Pine	0	3	0	0	4	0	2	49	24	0	0	0	0	9	92	[
Total	424	97	107	90	50	12	135	220	88	374	0	0	188	62	1846	1



Table 2 - Proposed Treatment Summaries

eon River Country Mgt. Unit Year of Entry 2014

Compartment 057 Total Compartment Acres: 1846

Acres by Treatment Type

Commercial Harvest - 233 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 110 Other - 0

Habitat Cut - 0 Opening Maintenance - 5 Tree Seeding - 0 Pesticide - 0

Cover Type by Harvest Method

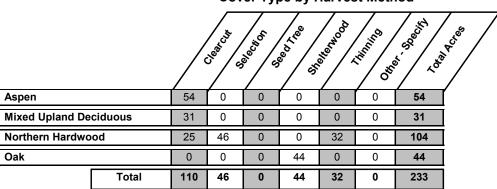


Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 057 Year of Entry 2014

/	OF NATURAL
RTME	4
DEPA	DNR
1	ArichigaN .

t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	53057010-Cut	1.5	4130 - Aspen	High Density Pole	53		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Aspen clearcut. Do not cuy any pine or fir.

No area retention needed due to the small size of the stand. Specs:

No known T & E species have been identified in this stand.

Other_ Comments:

Acceptable regeneration is aspen, pine, and fir. <u>Next</u>

Steps:

s

Proposed

10/01/2013 Start Date:

44 Harvest 16 53057016-Cut 16.3 4130 - Aspen High Clearcut with 4133 - Aspen, Cmpt. Review Density Reserves Mixed Pine Proposal Pole

Prescription -Clearcut all aspen and red maple.

-Mark to leave the larger white pine in the stand. Do not cut any other species that may be rare in the stand. Specs:

-Mark scattered (1-3/acre) poor quality aspen or red maple greater than 8" DBH to serve as cut and leave trees for CWD.

-Area retention will be in the SW finger of the stand and has already been excluded from the treatment boundary. Also, individual white pine trees

-This treatment will not affect any known T & E species.

Other | Comments:

<u>Next</u> -Acceptable regeneration will be a mix of aspen, pine, and red maple.

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

53057041-Cut 14.8 4112 - Maple, High 81-110 Harvest Clearcut with 4116 - Mixed N. Cmpt. Review Beech, Cherry Density Reserves Hardwood - Aspen Proposal Association Pole

Prescription -Clearcut harvest. Do not cut any pine or oak or any other species that are rare in the stand. Mark to leave scattered sugar maple and any beech

that appear to be healthy.

-Mark 1-3 trees per acre over 8" DBH as cut and leave trees to serve as drumming logs and CWD.

-No area retention needed because individual trees are being left.

Other Comments:

-Beech scale is present in this stand, heavy in some areas.

Specs:

-Acceptable regeneration will be a combination of aspen, hardwood species, and pine. A non-stocked stand will also be acceptable.

Steps: -Regen check after 2-3 years.

<u>Proposed</u>

<u>Next</u>

10/01/2013 Start Date:

53057054-Cut 32.2 4110 - Sugar Maple 78 111-140 Harvest Crown Thinning 4110 - Sugar Maple Cmpt. Review High Association Association Proposal Density Pole

Prescription - Crown/low thinning down to an average basal area per acre of 80-90 sq. ft. Focus on removing poor quality sugar maple, red maple, and basswood in the pole-timber size classes. Specs:

-Do not cut any hemlock, yellow birch, red oak, elm, cherry, aspen, or pine. Do not mark within 33 feet of any hemlock or yellow birch to prevent

-Mark trees of very poor form (cull) greater than 10" DBH as cut and leave trees to enhance large CWD.

-No regen gaps needed at this time.

-No known T & E species will be affected by this harvest.

-8 basal area swings were taken in the stand with an average of 135 sq. ft. per acre. Other_

Comments:

<u>Next</u> Steps:

<u>Proposed</u>

10/01/2013 Start Date:

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 057 Year of Entry 2014

1	OF NATURAL	
RIME	9	2
OEPA	DNR	7
2	ATICHIGAN .	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75	53057075_Cut	10.7	4130 - Aspen	High Density Log	73 9		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Specs:

s

Prescription -Clearcut harvest of all species except spruce, birch, hemlock, and red oak. Leave all sawlog sized pine. Mark to leave some scattered beech,

sugar maple, and white pine poles. Mark a few mature aspen as cut and leave trees to increase the large CWD component.

-Area-based retention will be placed along Sturgeon Valley Road to ease visual impacts from the harvest. Place the retention in areas where conifer cover is highest. Utilize up to 10% retention or more if necessary.

-There are no known T & E species that will be affected by this treatment.

Comments:

-The majority of the conifers are located along a narrow strip near Sturgeon Valley Road. -Acceptable regeneration will be any combination of aspen, hardwood, and conifer species.

<u>Next</u> Steps:

Other_

<u>Proposed</u>

10/01/2013 Start Date:

77 53057077-Cut 46.3 4110 - Sugar Maple High 111-140 Harvest Single Tree 4110 - Sugar Maple Cmpt. Review Association **Density Log** Selection Association Proposal Prescription -Thin to 80-90 sq ft of basal area per acre concentrating on releasing crop trees and removing poor quality maple and basswood from the small

sawlog size classes (10-12 inches). Do not remove more than 1/3rd of the stand in areas of heavier stocking. Specs: -Expand upon existing canopy gaps that were created by windfall, making them at least a chain in diameter (crown to crown).

-Do not cut any red oak, hemlock, yellow birch, aspen, pine, or black cherry. Do not mark within 33 feet of any hemlock or yellow birch to prevent

thinning shock.

-Practice Big Tree Silviculture by maintaining the larger trees which occur in scattered pockets throughout this stand.

-Mark any trees (>10" DBH) with very poor form or significant cull as cut and leave trees to contribute to large CWD.

-Retention is in the form of individual tree species that are not being cut, as described above.

-No T& E species are affected by this treatment.

Other_ -There are 3 or 4 somewhat open areas within the stand that have filled in with smaller white pine and hardwoods. Go around these areas when Comments: marking.

-The last thinning in the stand appeared to be heavier in the north end. The existing treatment boundary may be smaller if the BA's in the north

end are already at the desired level.

-Acceptable regeneration in canopy gaps will be any mix of hardwood and conifer species. Next

Steps:

<u>Proposed</u> Start Date: 10/01/2013

53057099_Cut 43.9 4123 - Red Oak 92 51-80 Harvest Shelter Wood 4123 - Red Oak Cmpt. Review 99 High **Density Log** with Reserves Proposal

Prescription -Shelterwood harvest leaving 20 ba/acre in oak and pine.

-Leave retention pockets equal to 3-10% of the stands area. Specs:

-Exclude any steep slopes that may be present along the western edge of the stand.

-Add spec to protect white pine regeneration.

Other Comments:

-Burn this stand after harvest along with the openings to the east. <u>Next</u> Steps:

-Acceptable regeneration will be a mix of pine and oak.

Proposed

10/01/2013 Start Date:

Medium 1-50 53057099_Cut 43.9 4123 - Red Oak 92 Shelter Wood 4123 - Red Oak Cmpt. Review 99 Harvest Density Log with Reserves Proposal

<u>Prescription</u> -Shelterwood harvest leaving 20 ba/acre in oak and pine. Specs:

-Leave retention pockets equal to 3-10% of the stands area.

-Exclude any steep slopes that may be present along the western edge of the stand.

-Add spec to protect white pine regeneration.

Other_ Comments:

Next -Burn this stand after harvest along with the openings to the east.

-Acceptable regeneration will be a mix of pine and oak. Steps:

<u>Proposed</u>

10/01/2013 Start Date:

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 057 Year of Entry 2014

. 3	OF NATURAL
THE	
EPAR	DNR
10	M/CHIGAN .

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
122	53057122- Cut1	31.5	4199 - Other Mixed Upland Deciduous	Low Density Log	92 I	1-50	Harvest	Clearcut with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal

Prescription -Clearcut all species except pine and any other species that may be rare. Mark to cut some of the oak that are present in pockets.

Specs:

s

 -No retention pockets necessary as individual trees are being left (oak and pine). -No known T&E species will be affected by this sale.

Pole

Other_ Comments:

-Burn after harvest in conjunction with the adjacent openings to the north. <u>Next</u>

Steps: -Acceptable regeneration will be a mix of aspen, hardwoods, and pine. If browsing eliminates regeneration, a non-forested stand will be

acceptable.

<u>Proposed</u>

10/01/2013 Start Date:

53057125_Cut 50 Harvest 125 10.5 4133 - Aspen, High Clearcut with 4133 - Aspen, Cmpt. Review Mixed Pine Density Reserves Mixed Pine Proposal

<u>Prescription</u> -Cut all aspen and maple. Thin the denser pine pockets.

-Create one retention pocket equal to 3-10% of the stands area. Specs:

-No known T&E species will be affected by this treatment.

<u>Other</u> Comments:

Next -Acceptable regeneration will be a mix of aspen and pine.

Steps:

Proposed Start Date: 10/01/2013

127 53057127-Cut 5.9 4116 - Mixed N. High 90 Harvest Clearcut with 4116 - Mixed N. Cmpt. Review Hardwood - Aspen Density Reserves Hardwood - Aspen Proposal

Pole

Prescription -Clearcut harvest. Do not cut any pine, oak, or birch. -Leave one retention pocket that totals 3-10% of the stand area.

<u>Other</u> Comments:

<u>Next</u> -Acceptable regeneration will be mix of aspen, red maple, and pine.

Steps:

Specs:

Proposed

Start Date: 10/01/2013

53057129-Cut 14.7 4130 - Aspen 37 Harvest Clearcut with 4130 - Aspen Cmpt. Review High Reserves Proposal Density

Prescription -Aspen clearcut. Leave all oak and pine. Mark scattered trees (1-3/acre) of poor form as cut and leave trees for grouse drumming logs.

Pole

-Create 1 acre of retention through one or mulitple pockets.

Specs: -No known T & E species will be affected by this treatment.

Other_ Comments:

<u>Next</u> -Acceptable regeneration will be any mix of aspen, red maple, oak, and pine.

Steps:

Proposed

10/01/2013 Start Date:

S t	Pigeon	ntry Mgt. Unit	Tab			nents Prescribe iting Factor	Compartment: 057 Year of Entry 2014	DRE MATURATURA DE MATURA D		
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
105	53057105_Bur n	1.9	4130 - Aspen	High Density Pole	31		Prescribed Burn	Unspecified	4130 - Aspen	Cmpt. Review Proposal
Preso Spec		conjunctio	n with the surrounding	openings.						
Other Com	<u>r</u> ments:									
Next Steps		conjunctio	n with the surrounding	openings.						
Propo Start [ied								
108	53057108_Bur n	1.0	4130 - Aspen	High Density Pole	65		Prescribed Burn	Unspecified	4130 - Aspen	Cmpt. Review Proposal
Preso Spec	cription s:									
Other Com	<u>r</u> ments:									
Next Steps		conjunctio	n with the surrounding	openings ir	n this cor	npartmen	t.			
Propo Start [ied								
113	53057113_Bur n	3.2	4130 - Aspen	High Density Pole	47		Prescribed Burn	Unspecified	4130 - Aspen	Cmpt. Review Proposal
Preso Spec	cription s:									
Other Com	<u>r</u> ments:									
Next Steps		conjunctio	n with the surrounding	openings.						

Proposed Start Date:

Other Comments: Next Steps: Proposed

Start Date:

Unspecified

Unspecified

58.8

3301 - Low Density

Deciduous Trees

Prescription Prescribed burn to help set back encroaching woody vegetation and encourage new growth of native shrubs and herbs.

102 NF_53057102

_Burn-Burn

Prescribed Burn

Unspecified

3205 - Mixed

Upland Shrub

Cmpt. Review

Proposal

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 057 Year of Entry 2014

s

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
107	NF_53057107 _Burn	8.6	3205 - Mixed Upland Shrub				Prescribed Burn	Unspecified	3205 - Mixed Upland Shrub	Cmpt. Review Proposal

Prescription -Prescribed burn to help set back encroaching black cherry and encourage a new flush of native shrubs and herbs.

Specs:

<u>Other</u> Comments:

<u>Next</u> Steps:

<u>Proposed</u>

Start Date: Unspecified

NF 53057118 36.2 3301 - Low Density Prescribed Burn Unspecified 3205 - Mixed Cmpt. Review **Deciduous Trees Upland Shrub** Proposal _Burn

Prescription -Prescribed burn with the goal of reducing black cherry encroachment and encouraging a new flush of shrub and herb development.

Specs:

Other_ Comments:

<u>Next</u> Steps:

<u>Proposed</u>

Start Date: Unspecified

65 NF 53057065-5.0 3105 - Mixed Non-Forest Mowing 3105 - Mixed Cmpt. Review Upland Herbaceous Management Proposal NonFor Upland Herbaceous

Prescription

Specs:

Other_ Comments:

<u>Next</u>

Steps:

Proposed Start Date: Unspecified

Total Treatment

386.9 Acreage Proposed:

Pigeon River Country Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 057 a Limiting Factor s Year of Entry 2014 t а n Treatment Acres CoverType Size Stand BA **Treatment Treatment Cover Type Approval** Name Age Method Objective Status Density Range Type d #Error **Prescription** Specs: <u>Other</u> Comment: <u>Next</u> Steps: **Proposed** Start Date: #Error

Total Treatment Acreage Proposed:

Limiting Factor and No Treatment Reason

0

Out of YOE -- Treatments **Prescribed with No Limiting Factor**

Year of Entry: 2014

OF NATURA	
(2) A	Š
1	١
DNR	
12 /8	1
ArichigaN	
Annroval	

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
53056_OutOfY OE-Burn	18.2					Prescribed Burn	Unspecified	3205 - Mixed Upland Shrub	Cmpt. Review Proposal
Prescription -Moderat	te intensity	burn to reduce encre	oaching woo	dy vegeta	ation, mai	nly black cherry.			

Specs:

<u>Other</u> Comments:

<u>Next</u> Steps:

Proposed Start Date:

Unspecified

Total Treatment

18.2 Acreage Proposed:

s t	Pigeon River Countr	y Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	1.0	28		
2	4130 - Aspen	High Density Pole	5.3	28		
3	4130 - Aspen	Low Density Pole	4.3	38		
6	4130 - Aspen	Medium Density Pole	3.4	74		A few scattered red pine present as well.
8	4133 - Aspen, Mixed Pine	High Density Pole	1.1	28		
9	4130 - Aspen	High Density Sapling	22.4	17		
10	4130 - Aspen	High Density Pole	1.5	53		
11	4133 - Aspen, Mixed Pine	High Density Pole	2.5	28		
12	42200 - Natural White Pine	High Density Log	1.9	78	81-110	
13	4130 - Aspen	High Density Sapling	21.9	5		-Cut in 2007. -A few scattered mature aspen and white pineOverall, regeneration is quite good with only a few areas that were impacted by browse.
15	4130 - Aspen	High Density Log	1.6	78		
16	4130 - Aspen	High Density Pole	18.1	44		Some very large, old white pine stumps.
17	4130 - Aspen	Medium Density	4.7	17		Patchy regeneration. Quaking aspen is not doing well, lots of hypoxylon canker. Small amount of bigtooth aspen, but it is growing well.
18	42200 - Natural White Pine	High Density Log	7.2	87	81-110	
19	4130 - Aspen	High Density Sapling	1.8	17		
20	42260 - Natural Pine, Mixed Deciduous	High Density Log	13.4	90	81-110	Two-aged stand. White pine poles and saplings underneath an overstory of primarily red maple and larger white pine. Stand has several small openings. Took seven basal area plots with an average basal area per acre of 93 sq ft. Allow the understory poles to grow a little more and thin in ten years. Thinning now might do more harm than good by destroying quality poles.

s t	Pigeon River Country	y Mgt. Unit		5 – Fo	orested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	42260 - Natural Pine, Mixed Deciduous	High Density Pole	9.3	44	51-80	
22	4133 - Aspen, Mixed Pine	High Density Pole	3.9	46		Small stand for acreage, in the process of becoming a white pine stand.
25	4113 - R.Maple, Conifer	High Density Pole	10.6	60	81-110	Degraded hardwood stand with a lot of poor quality stump sprouts. Some aspen along the perimeter of the stand. White pine pole-timber is of good quality. I would suggest promoting white pine in this stand. In the next entry period, consider removing poor quality red and sugar maple stump sprouts from stand. Leave all pine, beech, and oak as well as single stemmed red maple and sugar maple.
26	4130 - Aspen	High Density Sapling	2.5	17		
27	4130 - Aspen	High Density Sapling	2.8	17		
28	4199 - Other Mixed Upland Deciduous	High Density Pole	2.9	80	81-110	-Small acreage. Leave this stand permanently for aesthetics and vertical strucuture for the surrounding landscape.
29	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	12.9	70	51-80	Stand has scattered openings in the north end with a lower stocking of residual timber. Six basal area plots were taken with an average of 75 sq ft per acre. Poor quality maple stump sprouts should be removed in future to allow better growth for white pine.
30	4119 - Mixed Northern Hardwoods	Medium Density Pole	7.3	76	51-80	-Diverse mix of speciesPocket of large white pine at NE end of standStand becomes much more open to the south as it transitions between forested and non-forestedMost of the hardwoods are low-quality stump sprouts.
31	42260 - Natural Pine, Mixed Deciduous	High Density Log	10.4	72	51-80	Five basal area plots were taken with an average of 78 sq ft per acre. Nice white pine that are just growing into sawlog size.
33	4130 - Aspen	High Density Sapling	11.6	5		-Some areas of heavy browse damage but overall aspen regeneration will result in a medium to well-stocked stand.
34	4311 - Pine, Aspen Mix	High Density Log	2.4	75		-Leave stand for aesthetics and let natural succession take place.
37	4130 - Aspen	High Density Sapling	8.9	17		-Nice aspen regenerationLack of any tree species diversity.
38	4112 - Maple, Beech, Cherry Association	Medium Density Pole	11.1	60	51-80	Pretty low stocking through most of the stand. This stand is a transition between the opening to the west and the fully-stocked hardwood stand to the east. While it is a diverse stand, the hardwoods are of pretty low quality, with lots of crooked stump sprouts. The white pine poletimber is of good quality.

s t	Pigeon River Countr	y Mgt. Unit		5 – Fo	orested Sta	Ands Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	42110 - Planted Red Pine	High Density Log	3.3	63	51-80	-Thinned in 2005 as a separate payment unit when the adjacent aspen was clearcut.
40	4130 - Aspen	High Density Pole	7.6	42		The perimeters of both parts of this multi-poly stand have a lot of ironwood and black cherry saplings. The interior of the stands are primarily quaking aspen poletimber in the overstory.
41	4112 - Maple, Beech, Cherry Association	High Density Pole	16.1	76	81-110	-Majority of the red maple in the stand are poor quality stump sprouts. -Two pockets of aspen in the stand, one at the north end and the other at the south end. -Beech scale is present throughout the stand on about half of the beech. -Five basal area plots were taken with an average of 98 sq ft per acre.
42	42200 - Natural White Pine	High Density Pole	1.7	60	81-110	-Small acreage, let this stand grow.
43	4130 - Aspen	High Density Pole	22.6	28		-Variable aspen sizes throughout this stand. Some areas of 8"+ aspen whereas other areas are in the 4-5" DBH rangeRecommend letting this stand grow at least another ten years to allow the younger aspen to grow.
45	4112 - Maple, Beech, Cherry Association	High Density Pole	24.0	70	81-110	 -Variable stocking throughout the stand as most of it is in a transition with the surrounding herbaceous openings. -Six basal area plots were taken with an average of 80 sq ft per acre. - Majority of the maple is of stump sprout origin and poor quality. - Favor white pine and hardwood diverstiy if future treatments are considered
47	4117 - Mixed N. Hardwood - Pine	High Density Log	5.6	96	51-80	Consider merging with stand 56. Variable stocking levels with some open areas. This stand has been thinned in the past (at least 10 years ago), looks like they created a few canopy gaps.
48	4130 - Aspen	High Density Log	5.2	81		-Small stand with variable stocking. More open areas of stand are filling in with aspen saplingsLeave for aesthetics.
49	4119 - Mixed Northern Hardwoods	High Density Sapling	10.2	10	1-50	This is a highly variable stand in terms of stocking. The past harvest removed the majority of stems in some areas, but left a higher stocking of hardwoods and conifers in other areas. In general, the north end of the stand was cut much harder, essentially a hardwood clearcut with some scattered log-sized trees left. Parts of the south end appear to be more of a hardwood thinning. Severe browse pressure. The only species that regenerated were ironwood and black cherry. Beech is growing but it has been browsed very hard.
 52	4130 - Aspen	High Density Pole	5.7	32		-Lack of tree species diversityFuture treatments should look at expanding upon pine abundance.
53	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	10.8	127		-Transitions to an upland stand as you get closer to Sturgeon Valley Road. -At least a two-aged stand.

S t	Pigeon River Country	Pigeon River Country Mgt. Unit			orested Sta	Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4110 - Sugar Maple Association	High Density Pole	51.0	78	111-140	Site index= 59 for a Red maple - 75 years old, 80 feet tall. Stand lines to the east need to be adjusted when timber sale preparation takes place because stand to the east was thinned. Average residual basal area/acre based off of 8 prism swings was 135 sq. ft. - A couple of natural openings created from a blowdown event in the early '90's. These natural gaps have only filled in with ironwood and severly browsed beech.
55	4112 - Maple, Beech, Cherry Association	High Density Pole	25.9	81	51-80	-Eleven basal area plots were taken with an average of 97 sq ft per acre. Residual basal area as well as overall stand diameter seemed to be a little small and I would consider waiting until next entry period to thin. - A few mature aspen are scattered throughoutScattered hemlock pockets in the SE corner of the standA small slope is present in the NE corner of the stand, going up to adjacent stand 70Site index = 56 for a red maple 78 years old and 78 feet tall.
58	4112 - Maple, Beech, Cherry Association	High Density Log	27.2	96	51-80	-This northern hardwoods stand is on a wetter site. A small intermittent stream originates in this stand and flows through the center portion of it. -There is a high quality vernal pond near the north part of this stand. -There is much blowdown; a result of a windstorm in the early 1990's. As a result the residual basal area is quite variable. -Current pit and mound topography suggests a history of blowdown in this stand. -Recommend no treatment for this stand due to wet soils and the fact that this stand is starting to exhibit some old-growth characteristics.
59	4130 - Aspen	High Density Sapling	19.8	17		
60	4112 - Maple, Beech, Cherry Association	Medium Density Pole	2.3	76		-Low density hardwoods and white pineTransition zone between hardwoods and wildlife opening.
61	4130 - Aspen	High Density Log	4.4	77		-Stand lies on a very steep hill.
62	4199 - Other Mixed Upland Deciduous	High Density Pole	4.0	80	81-110	-Many of the hardwood stems are still quite smallLots of porcupine damage on the sugar maple.
63	4311 - Pine, Aspen Mix	High Density Pole	10.8	27	1-50	-Variable size ranges for white pine with some log-sized treesSeveral open areas where browsing must have impeded regeneration.
64	4119 - Mixed Northern Hardwoods	High Density Sapling	15.8	18	1-50	Previous harvest cut the majority of hardwoods while leaving white pine and hemlock. Scattered log size hardwoods such as red maple, sugar maple, and basswood. Clumps of hemlock left at the north end. Severe browse pressure has resulted in a lack of diversity in the regenerating stand with a poor representation of desirable species.
68	6120 - Lowland Cedar	High Density Log	8.0	127		-Alder is more common near the stream that passes through this stand.

s t	Pigeon River Countr	Pigeon River Country Mgt. Unit			rested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
69	4119 - Mixed Northern Hardwoods	High Density Pole	59.3	96	81-110	-Undulating terrain consisting of ridges and valleys throughout the stand. Some very steep slopes. Only a few parts in the stand that would be operable. -Several of the valleys have natural seepagesBeech is a heavy component of this stand. Beech scale was present on scattered treesIn addition to the species listed, there were scattered XL red oak and pole size yellow birch, although both were uncommonSugar maple site index = 60, for a 75 year old tree, 78 feet tallRed maple site index = 63, for a 86 year old tree, 89 feet tall18 basal area plots were taken with a stand average of 108 sq ft per acre.
70	4130 - Aspen	High Density Pole	4.3	34		
71	42110 - Planted Red Pine	High Density Log	1.1	64		-Acreage too small to thin or cut on its own.
73	4130 - Aspen	High Density Pole	5.4	35		New stand added.
74	4130 - Aspen	High Density Pole	6.1	27		
75	4130 - Aspen	High Density Log	15.1	73		-Could possibly be considered a three-aged standThere are a few areas where overtopped white pine poles are abundant.
76	4119 - Mixed Northern Hardwoods	High Density Log	52.9	Uneven Age	51-80	-Thinned in 1993-94 by a prison crew (marked to leave). Some blowdown took place after a wind event in 1998Thinning in '90's was heavy in some areas, resembling more of a shelterwood or heavy group selection. Regeneration of white pine has been excellent. Some sugar maple made it past the browse level but the majority of hardwood regeneration is ironwood and beechVery unique 3-aged stand. Supercanopy white pine are present followed by the overstory hardwoods and finally the regeneration growing in the gaps.
77	4110 - Sugar Maple Association	High Density Log	63.0	98	111-140	-Thinned in 1995 (marked to cut). -22 basal area plots taken with an average of 119 sq ft per acre. -Sugar maple site index values = 65 for a 98 year old tree, 92 feet tall; and 79 for a 94 year old tree that was 101 feet tall. -Other species that were present but rare included hemlock, yellow birch, white pine, black cherry, and bigtooth aspen. -The AOI will be smaller than the actual stand. The east side of the stand has significant slope and will be excluded from harvest. Portions of the north part appeared to have been thinned heavier or more recently and will also be excluded.
78	4319 - Mixed Upland Forest	High Density Log	14.9	77		-Recommend leaving this stand as a part of the Green Timber's Old Growth area. -The NW finger of this stand has a small intermittent stream which drains southeasterly into the stand. The upper part of this finger contains small balsam fir and black ash which has been killed by the Emerald Ash Borer. -There are two small pockets (each less than 1 acre) of planted red pine in this stand. -A day-use parking lot is a part of this stand and is located off of the sharp corner on Stugeon Valley Road.

s t	Pigeon River Country	y Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	42200 - Natural White Pine	High Density Sapling	3.3	17		-Very thick white pine regenerationSome super canopy white pine.
81	6124 - Lowland Spruce- Fir	High Density Pole	59.4	127		-Unable to access all of the stand due to water, but from the imagery the central part of the stand appears to have a higher cedar component.
82	42110 - Planted Red Pine	High Density Log	4.7	62		-Could thin when the adjacent aspen becomes merchantable.
83	4130 - Aspen	High Density Sapling	20.2	27		-Stand part of OI Green Timbers Old Growth AreaYoung aspen is not old growth, remove coding.
85	42200 - Natural White Pine	High Density Log	17.2	87	51-80	-Stand was thinned in 1995. Canopy gaps created by thinning have filled in with white pine regeneration Seven basal area plots were taken with an average of 67 sq ft per acre.
87	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	5.9	97		-High quality and very diverse lowland hardwoodsA stream enters this stand from the private property to the southeast.
89	4311 - Pine, Aspen Mix	High Density Log	9.7	87	111-140	-Recommend leaving this stand as a part of the Green Timbers Old Growth area.
90	6120 - Lowland Cedar	High Density Pole	110.0	127	81-110	-High quality swamp conifer complexSpruce becomes more prevalent as you get closer to the upland transitionCedar mortality in a few localized areas, probably due to flooding.
92	6123 - Lowland Fir	High Density Sapling	3.7	27		-Cut cedar stumps are evidence of a past harvest in this stand. However, no cedar has grown back.
93	4191 - Mixed Upland Deciduous with Conifer	High Density Log	18.2	92	81-110	-Recommend leaving stand as a part of the Green Timbers Old Growth Area.
94	4139 - Aspen, Mixed Deciduous	High Density Log	11.0	84		-Leave stand for aesthetics and let revert to pine/hardwoods.
95	4130 - Aspen	High Density Pole	20.5	31		-Nice pole stand which will be ready for harvest at the next entry periodA few scattered white pine, red oak, and red maple.
96	4139 - Aspen, Mixed Deciduous	High Density Log	29.5	90		-Stand lies on a ridge that grades down to the west. Some steep slopes are present along this ridgeRecommend leaving this stand as a part of the Green Timbers Old Growth Area.
97	4130 - Aspen	High Density Sapling	4.1	31		

s t	Pigeon River Country	y Mgt. Unit		5 – F	orested Sta	Ands Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
141	4123 - Red Oak	Medium Density Log	45.2	92	1-50	-Portions of this stand appeared to have been treated in the past while other parts of the stand were not (highly variable). The past treatment likely removed all aspen and red maple based on the amount of pole/sapling sized regeneration of these two species. -Let the aspen and red maple mature a little more and consider a harvest during the next entry period.
99	4123 - Red Oak	High Density Log	47.6	92	51-80	-Portions of this stand appeared to have been treated in the past while other parts of the stand were not (highly variable). The past treatment likely removed all aspen and red maple based on the amount of pole/sapling sized regeneration of these two species. -15 basal area plots were taken with an average residual basal area of 76 sq. ft. per acre.
100	4191 - Mixed Upland Deciduous with Conifer	High Density Log	21.6	92	81-110	-Previous harvest removed all aspen and red maple. Regeneration of these two species have filled in all of the gaps from the previous harvest. This regeneration is just approaching merchantability. -Let this regeneration grow more and consider harvesting at next entry period.
101	4310 - Pine, Oak Mix	High Density Log	46.4	63	81-110	-Nice mixed natural pine stand.
103	4130 - Aspen	High Density Pole	6.4	29		
104	4130 - Aspen	High Density Pole	1.5	37		
105	4130 - Aspen	High Density Pole	1.9	31		
106	42210 - Natural Red Pine	High Density Log	41.2	64	81-110	-Several different age classes of red pine in this stand. Cored three different trees with the following ages; 64, 83, and 119This stand was thinned roughly 10 years ago, removing most of the hardwood component.
108	4130 - Aspen	High Density Pole	1.0	65		
109	4191 - Mixed Upland Deciduous with Conifer	Low Density Log	6.1	29	1-50	-Two small openings in the stand that may be a result of failed regenerationA shelterwood treatment was prescribed in this stand in the past.
110	4130 - Aspen	High Density Pole	5.6	38		-Scattered log-size red oak and white pine.
111	42260 - Natural Pine, Mixed Deciduous	Medium Density	5.2	16	1-50	-The majority of the overstory was removed in order to allow advanced regeneration to grow. However, there are only a few pockets of well stocked regeneration. The remainder is sparsley stocked with poor quality aspen, red maple, and white pine regeneration.
112	42200 - Natural White Pine	High Density Pole	4.3	42	1-50	

S t	Pigeon River Countr	y Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
113	4130 - Aspen	High Density Pole	3.2	47		-Small acreage and aspen is starting to break up.
115	4310 - Pine, Oak Mix	High Density Log	2.7	63		
116	42210 - Natural Red Pine	High Density Log	5.0	77	111-140	-Thinned roughly ten years ago.
117	42200 - Natural White Pine	High Density Log	47.0	70	81-110	-Thinned in 1993 (partial salvage from blowdown event). Some areas appeared to have been thinned heavier than othersRed pine becomes more common in the north half of the standA few scattered red maple and aspen20 basal area plots were taken throughout the stand with an average of 89 sq. ft. per acre.
120	4130 - Aspen	High Density Pole	17.8	34		
121	4130 - Aspen	High Density Log	4.4	88		-This stand was left as a visual buffer when the aspen stand to the north was cut.
122	4199 - Other Mixed Upland Deciduous	Low Density Log	31.5	92	1-50	-Highly variable stocking with some areas resembling more of a non-forested conditionTimber quality is low (with the exception of red oak) with many poor red maple stump sproutsWhere red maple regeneration is present, it has been severely browsed.
124	4130 - Aspen	High Density Pole	3.8	32		-Aspen is just reaching merchantable size.
125	4133 - Aspen, Mixed Pine	High Density Pole	10.5	50		
127	4116 - Mixed N. Hardwood - Aspen	High Density Pole	5.9	90		-Most of the red maple is of stump sprout origin and very poor quality.
128	42260 - Natural Pine, Mixed Deciduous	Low Density Pole	7.0	60		-Variable sizes of white pine throughoutPrevious harvest in 1986 must have left the majority of the advanced white pine regeneration at that time. Aspen regeneration is sub-par with many of the browsed areas converted to non-forested inclusions.
129	4130 - Aspen	High Density Pole	14.7	37		-Elk have been stripping the bark off of red maple saplings all throughout this stand.
133	4133 - Aspen, Mixed Pine	Medium Density	2.8	26		
134	4130 - Aspen	High Density Sapling	8.7	26		-Aspen in the pole size-class more prevalent in the north end of the stand.
135	42220 - Natural Jack Pine	High Density Pole	2.1	42		-Leave for species diversity and aesthetics.

s t	Pigeon River Country	y Mgt. Unit		5 – Fo	rested Stan	Compartment: 057 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
136	4130 - Aspen	Medium Density Pole	1.9	47		-Heavy browse on red maple regeneration.
137	42260 - Natural Pine, Mixed Deciduous	High Density Log	4.2	63	81-110	-Small acreage stand. Leave for aesthetics along Sturgeon Valley Road.
139	4311 - Pine, Aspen Mix	Medium Density Pole	10.1	28	1-50	-Highly variable stocking. North end of stand has small pocket of mature red oak from previous shelterwood. Rest of stand is a mix of forested/non-forested areas. Non-forested areas a result of elk browse on aspen regeneration.
140	42200 - Natural White Pine	High Density Log	8.8	Uneven Age	81-110	-Heavy browse damage to red maple regenerationMulitple size classes of pine present throughout this stand5 basal area plots were recorded with an average of 106 sq. ft. per acre.

6 - Nonforested Stands

Compartment: 057 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	3303 - Mixed Low Density Trees	14.1	No	Unspecified	
5	3105 - Mixed Upland Herbaceous	4.5	No	Unspecified	Some volunteer red pine and aspen seeding in along the edges.
7	3105 - Mixed Upland Herbaceous	18.5	No	Unspecified	Scattered small pine annd cherry. Some spotted knapweed.
14	3105 - Mixed Upland Herbaceous	2.0	No	Unspecified	
23	3303 - Mixed Low Density Trees	8.3	No	Unspecified	Could almost be considered a forested stand. White pine saplings are abundant in some places.
24	3105 - Mixed Upland Herbaceous	24.8	No	Unspecified	This stand includes the powerline R.O.W. that runs parallel to Fontinalis Road.
32	3105 - Mixed Upland Herbaceous	67.7	No	Unspecified	Some very large white pine stumps indicate what this stand used to be like.
35	3105 - Mixed Upland Herbaceous	7.1	No	Unspecified	
36	3303 - Mixed Low Density Trees	12.8	No	Unspecified	-This stand is filling in with white pine, cherry, and aspenThere is a good mixture of openings and forested clumps for cover.
44	6239 - Mixed Emergent Wetland	8.6	No	Unspecified	A creek passes through this stand and widens out in several places. It is likely that this area floods each spring.
46	3301 - Low Density Deciduous Tree	4.1	No	Unspecified	-Aspen and black cherry are starting to take over this stand.
50	3105 - Mixed Upland Herbaceous	3.6	No	Unspecified	
51	3105 - Mixed Upland Herbaceous	33.4	N\A	Unspecified	
56	3105 - Mixed Upland Herbaceous	3.4	No	Unspecified	
57	6239 - Mixed Emergent Wetland	2.7	No	Unspecified	Formerly a beaver pond but the dam that held back the stream has been breached. Sedge like vegetation dominates the areas around the stream that used to be flooded. Only low amounts of alder at this point.
65	3105 - Mixed Upland Herbaceous	5.0	Yes	Unspecified	

6 - Nonforested Stands

Compartment: 057 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
66	3303 - Mixed Low Density Trees	6.3	No	Unspecified	Severe browse damage, even on beech and ironwood.
67	3105 - Mixed Upland Herbaceous	1.5	No	Unspecified	
72	3303 - Mixed Low Density Trees	3.2	No	Unspecified	
80	11 - Low Intensity Urban	7.0	No	Unspecified	Sturgeon Valley Road
84	6220 - Alder/willow	1.7	No	Unspecified	
86	3302 - Low Density Conifer Trees	3.5	No	Unspecified	White pine starting to take over the site.
88	6230 - Cattail	2.4	No	Unspecified	-At one time this may have been a beaver pond, now only a small stream channel flows through it, connecting with the Sturgeon River. Lots of standing dead cedar in this stand.
91	6239 - Mixed Emergent Wetland	4.9	No	Unspecified	-A stream passes through this stand. It appears as if this stand was flooded at one time, lots of dead standing cedar.
98	3105 - Mixed Upland Herbaceous	1.6	No	Unspecified	
102	3301 - Low Density Deciduous Tree	58.8	No	Unspecified	-If the goal is to maintain this as an opening then this would be a good site to burn to help set back woody vegetation.
107	3205 - Mixed Upland Shrub	8.6	No	Unspecified	-Potentially a managed site? Couldn't tell with the snow on the groundThe SW portion of the stand has an area where autumn olive was planted in rows.
114	3105 - Mixed Upland Herbaceous	3.2	No	Unspecified	
118	3301 - Low Density Deciduous Tree	36.2	No	Unspecified	-This stand could be burned along with stand 99 to help set back woody vegetation as well as promoting a new flush of native shrub and tree species that would be beneficial for wildlife.
119	3301 - Low Density Deciduous Tree	3.8	No	Unspecified	-Small pocket of quaking aspen saplings in the NW corner of stand.
123	11 - Low Intensity Urban	3.1	No	Unspecified	Sturgeon Valley Road
126	3105 - Mixed Upland Herbaceous	1.1	No	Unspecified	

6 - Nonforested Stands

Compartment: 057 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
130	3301 - Low Density Deciduous Tree	16.0	No	Unspecified	
131	3105 - Mixed Upland Herbaceous	2.1	No	Unspecified	
132	3105 - Mixed Upland Herbaceous	2.4	No	Unspecified	
138	3105 - Mixed Upland Herbaceous	2.0	No	Unspecified	

Compartment: 057 Year of Entry: 2014



7 - 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.

Stand	SCA Type	SCA Name	Acres	Comments
75	SCA Removal	53057075_SCAremove	10.7	I recommend removing this stand from its former designation as a Potential Old Growth Area. This stand does not represent old growth characteristics or any other unique ecological characteristics that would add to the value of the proposed SCA. The proposed treatment would include several retention buffers along Sturgeon Valley Road that should offset any visual concerns.
95	SCA Removal	53057095	14.8	I recommend removing this stand from its former designation as a Potential Old Growth SCA. This stand was clearcut in the past and is now a young aspen stand. This stand does not contribute any unique features to the existing SCA. In addition, the topography in this stand is relativley gradual as compared to the remainder of the upland stands that are being protected in the SCA.
97	SCA Removal	53057097	4.1	I recommend removing this stand from its former designation as a part of a Potential Old Growth area. This is a young aspen stand that has been managed in the past and does not have any unique characteristics that would contribute to the existing SCA.
multiple - see	Unique Site - SCA	Green Timbers SCA	333.4	



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservation Area	Туре	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
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.	
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.	

