

ATLANTA FOREST MANAGEMENT UNIT

COMPARTMENT REVIEW PRESENTATION

COMPARTMENT 156 ENTRY YEAR: 2014

Compartment Acreage: 1686 County: Presque Isle

Revision Date: July 3, 2012

Stand Examiner: Darrick Coy

Legal Description: T36N R2E Sections 16, 17, and 18

Management Area: Hammond Bay Lake Plain

Management Goals: To provide for the protection, integrated management and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan. Timber harvests prescribed will increase vigor in red pine through thinning, break-up dominant 80 year old age class of pine and aspen through regeneration harvests, and be designed to minimize impacts on Black Mountain recreation.

Soil and Topography: Soils are mostly well drained to excessively drained sands. Dominating soil types are Kalkaska, roselawn, graycalm, grayling, moncalm, and rubicon-roselawn sands, as well as rifle, Carbondale, and tawas organics. Red pine, red oak, and aspen are the dominant covertype species. Overall, the topography is rolling to hilly. The compartment forest habitat types are mostly PArVHa, PArVHa/PArVVb, and unclassified lowland.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State land ownership is solid except for small parcel in section 18 and lake sixteen areas within section 16. State land borders all sides of the compartment with small parcels of private ownership. Land use within the compartment is primarily recreation due to the compartment being part of the Black Mountain Recreation Area.

Unique, Natural Features: Englemann's spike rush and hills thistle. Some other undocumented or potential features may exist (see MNFI records/layer).

Archeological, Historical, and Cultural Features: High potential for occurrences exist along the Lake Sixteen. Old building foundation within section 16 (see OFS) and Dave and Ida Green grave sites (see OFS).

Special Management Designations or Considerations: Black Mountain Recreation Area.

Watershed and Fisheries Considerations: Lake Sixteen.

Wildlife Habitat Considerations: Compartment 156 consists of a mixture of red pine, aspen, oak, balsam poplar and mixed swamp conifers. Featured wildlife species present in the compartment include white-tailed deer, black bear, ruffed grouse, and American woodcock. Several other species including bobcat, coyote, songbirds, mink, and fox occupy the compartment. Historically this compartment was dominated by red pine. The management history of the area has contributed to the more diverse mix of forest types.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel and coarse-textured glacial till. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Devonian Detroit River Group, quarried for dolomite/stone. The nearest gravel pit is located one and one-half miles to the south. There may be some gravel potential in the Compartment. This area has had no drilling for oil and gas. Oil and gas producing Guelph (Niagaran) Reefs are located ten miles to the south. Most of the State land is leased for oil and gas development of the Collingwood Formation.

Vehicle Access: Access to the compartment is good. Some access two-tracks will need to be reshaped as logging activities begin and progress. With the high amount of recreational use and timber cutting this YOE, illegal trails created will need to be identified and blocked off as it occurs. No trash was found within the compartment.

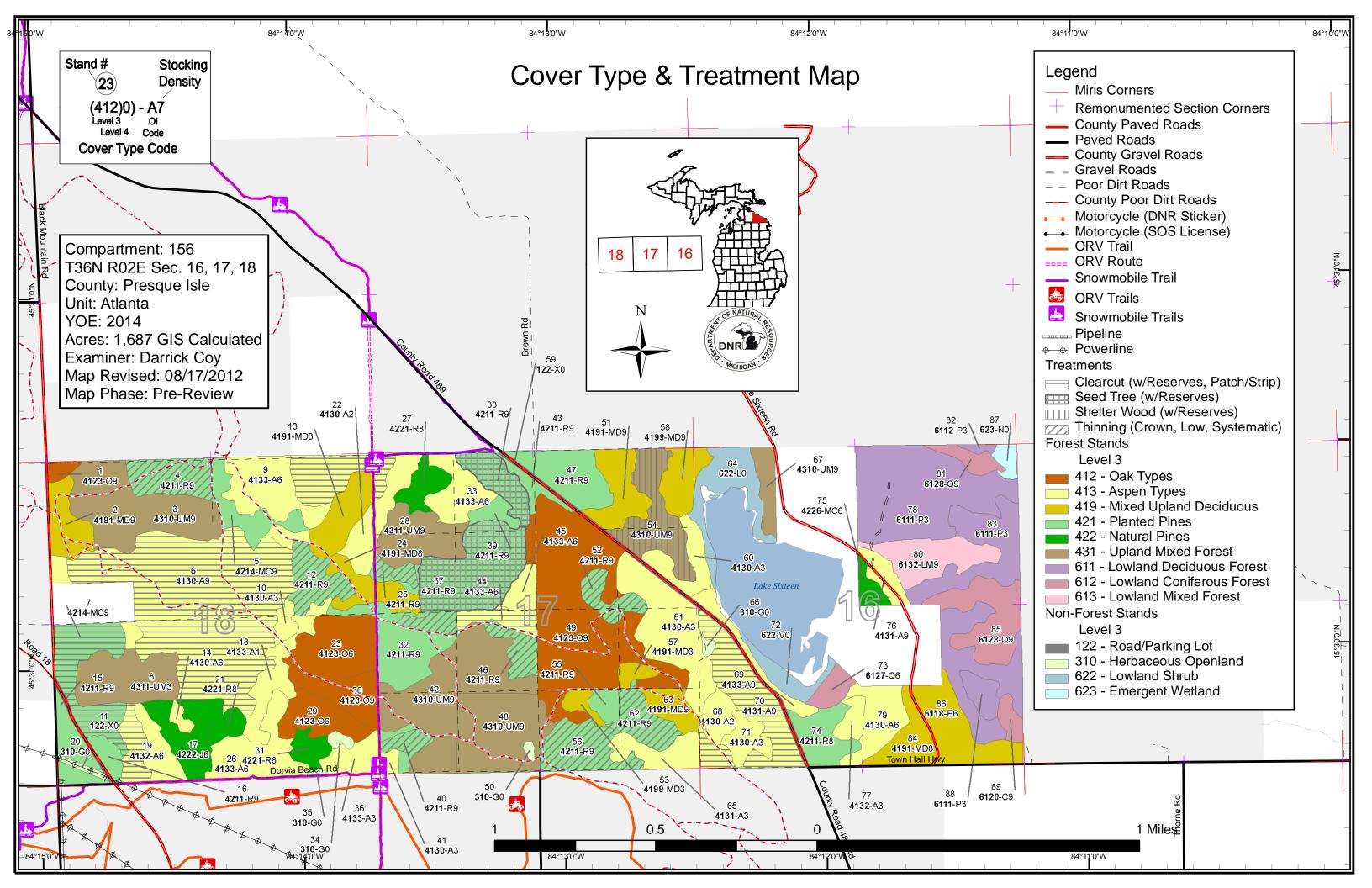
Survey Needs: Private lot located within S1/2, SWNW, Section 18.

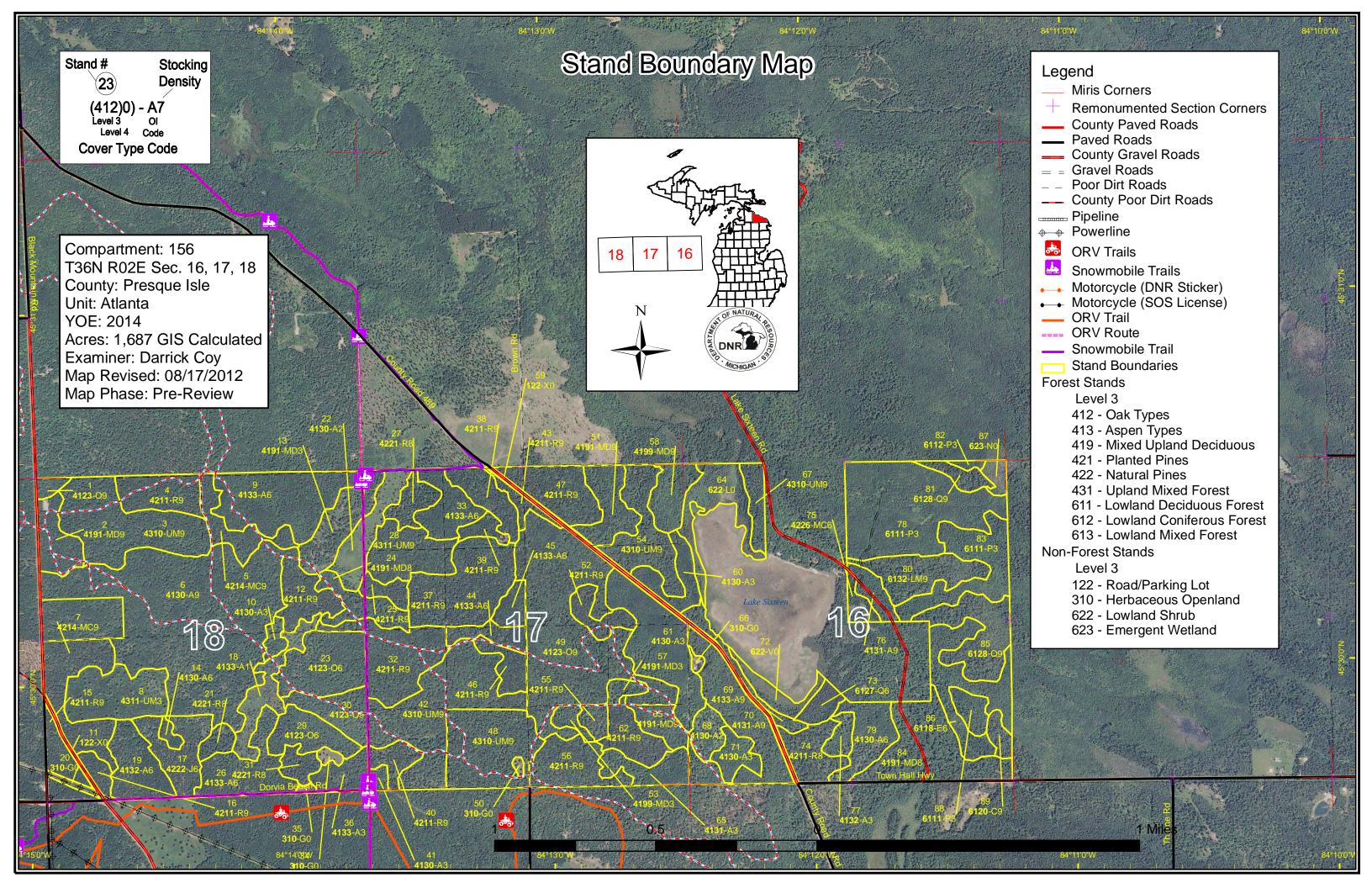
Recreational Facilities and Opportunities: Non-motorized pathways (hiking/X country skiing) and snowmobiling. See Black Mountain Recreation Area management plan.

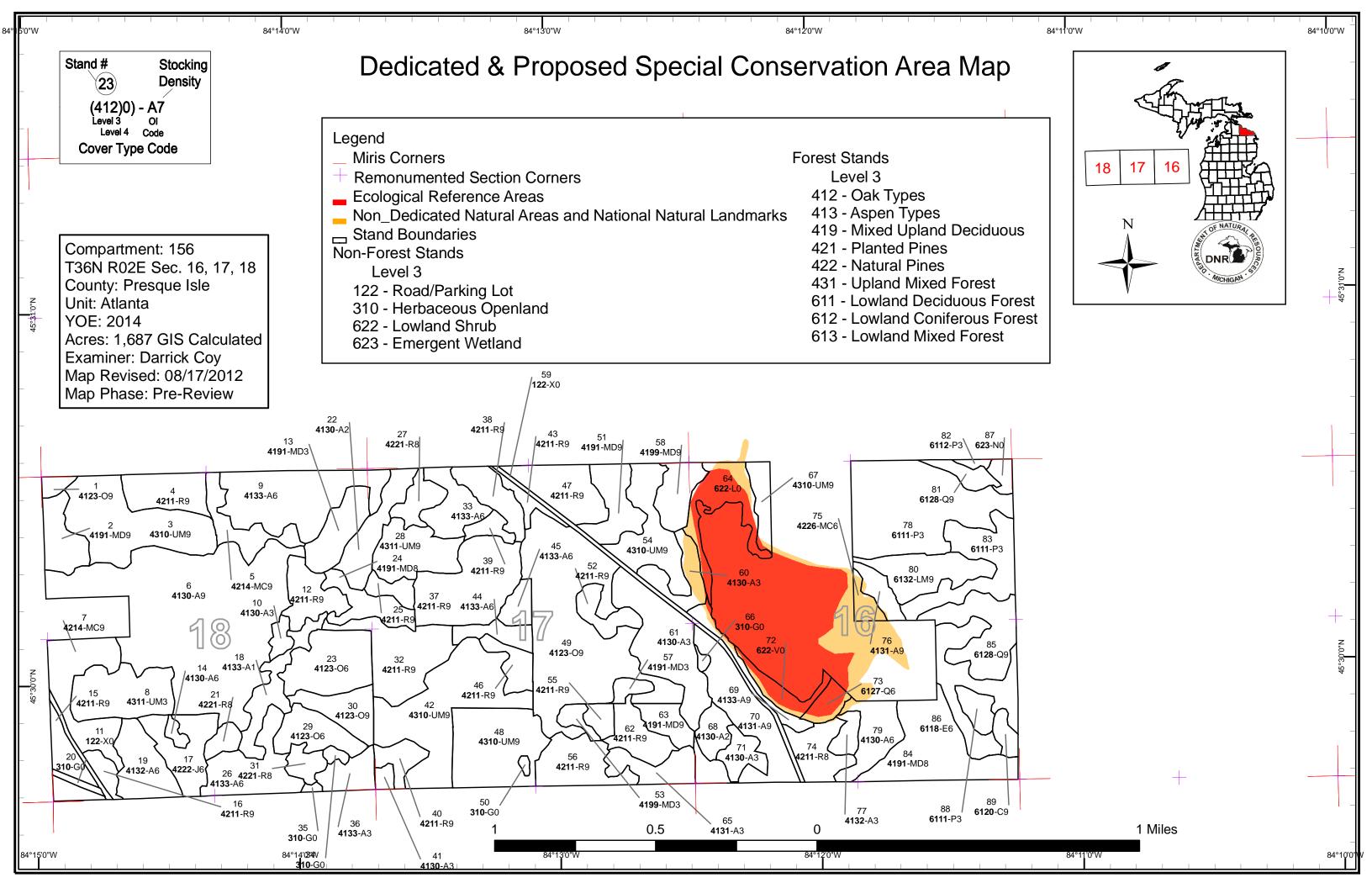
Fire Protection: Atlanta DNR office

Additional Compartment Information:

- ➤ The following 5 reports from the Operations Inventory System (OIPC) are attached:
 - **♦** Cover Type by Age Class
 - **♦** Cover Type by Management Objective
 - **♦** Compartment Volume Summary
 - **♦** Proposed Treatments No Limiting Factors
 - **♦** Proposed Treatments With Limiting Factors
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - ♦ Base feature information, stand numbers, cover types
 - **♦** Proposed treatments
 - ♦ Proposed road access system
 - ♦ Suggested potential old growth







Compartment 156 Year of Entry 2014

Atlanta Mgt. Unit

Derek Coy: Examiner



Age Class

						Age	Siass									
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Aspen	36	31	67	79	3	21	0	0	259	8	0	0	0	0	504	ſ
Bog	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	ĺ
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	ĺ
Jack Pine	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21	
Lowland Aspen/Balsam Poplar	0	0	108	0	0	0	0	0	0	0	0	0	0	0	108	
Lowland Conifers	0	7	0	0	0	0	0	0	0	6	0	0	28	0	42	
Lowland Deciduous	0	0	0	0	0	31	0	0	0	0	0	0	0	0	31	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	24	0	24	
Lowland Shrub	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
Marsh	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Mixed Upland Deciduous	18	9	0	0	0	0	0	14	24	34	43	0	0	0	142	
Natural Mixed Pines	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	
Oak	0	0	0	17	30	0	0	0	101	19	0	0	0	0	167	
Planted Mixed Pines	0	0	0	0	0	0	0	30	15	0	0	0	0	0	45	1
Red Pine	0	0	0	0	0	0	0	29	258	0	0	0	7	0	293	
Upland Mixed Forest	0	30	0	0	0	0	0	91	52	60	9	0	0	0	243	
Urban	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1
Total	111	82	175	96	33	52	21	164	709	127	53	0	64	0	1687]



Table 2 – Proposed Treatment Summaries

Atlanta Mgt. Unit

Compartment 156 Year of Entry 2014 **Total Compartment Acres: 1687**

Acres by Treatment Type

Commercial Harvest - 447 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

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

Cover Type by Harvest Method

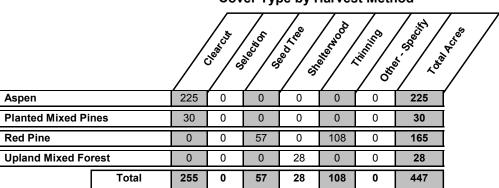


Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 156 Year of Entry 2014

6	OF NATURAL
1	
PAR	DNR
121	1.9
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App	roval

Status

Cmpt. Review

Proposal

s t а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment Cover Type** n Density Method Name Objective Age Range Type d 54156004-Cut 18.7 42110 - Planted 111-140 Crown Thinning 42110 - Planted High 83 Harvest Red Pine Density Log Red Pine

Prescription -thin RP to 80-90 BA overall

-thin high density pockets left as buffer along trail, most around 180-200+ BA for this area (leave 100-110 BA)

-about half of the stand area will be unmarked/lightly marked due to lower density

-leave all WP and oak -no retention pockets needed -mark less vigorous pine to cut -protect ski/hiking trail in specs

-require operations restriction July 15th - Dec. 1st to avoid ski trail, oak wilt, & bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

Other_ Comments:

Specs:

-would like to create more of a park-like stand over time and let large RP develop for visual values near trailhead

<u>Next</u> Steps:

Proposed

Start Date: 10/01/2013

54156006-Cut 4133 - Aspen, Cmpt. Review 145 4 4130 - Aspen High 81 Harvest Clearcut with Density Log Reserves Mixed Pine Proposal

Prescription -clearcut

-leave 7-10% retention in pockets and linear strips blending in with topography to minimize visual concerns Specs:

-concentrate retention around areas heavier only to aspen, along and between trails (leave pockets along trail at least 120ft away), and steep

slopes

-leave all RP, WP, and beech

-mark 1-3 oak/acre to leave for mast, den trees, and aesthetics (use diversity)

-protect ski/hiking trail and subcanopy pine in specs and consider winter harvest for area south of ski trails for better aspen sprouting

-paint trees along trail for trail grooming navigation (suggest using saps at a max spacing of 100ft)

-need to have PVT lot surveyed, couldn't find corners Other

Comments:

-aspen, rm, pine and oak regeneration of medium to well stocking is expected

Next Steps:

Proposed

10/01/2013 Start Date:

42111 - Planted 54156007-Cut 29.8 42141 - Planted High 72 81-110 Harvest Clearcut with Cmpt. Review Mixed Pine, Mixed Red Pine, Mixed Density Log Reserves Proposal

Deciduous

Deciduous

<u>Prescription</u> -clearcut

-retention pocket(s) 3-7% (concentrate leaving strip (>10 BA) along Black Mnt Rd to bring treatment into compliance with green-up guidelines for Specs:

seed-tree cut to the adjacent west)

-require chipping of tops

Other_ Comments:

<u>Next</u> -herbicide, trench, and plant to rp Steps:

-regen survey -rp, aspen, and oak regeneration of medium to well stocking is expected

Proposed

10/01/2013 Start Date:

s t		Atla	anta Mgt. Unit	Tab			ents Prescril ting Factor	bed	Compartment: 156 Year of Entry 2014	ONATURAL OF NATURAL OF NATURA OF NATURAL OF NATURA OF NATURA OF NATURA OF NATURA OF NATU
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9	54156009-Cut	22.0	4133 - Aspen, Mixed Pine	High Density Pole	83		Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal
Pres Spec	-leave 2 -leave 3 -protect	-3 oak and/ -7% retention trees over	of stand (partial stand for pine per acre on in areas heavier in 26 inches, use speci e but do not requires	n sapling pine al protection	e and alc	,				
Othe Com	er -almost nments:	all pine ove	er 26in are clustered	in west half w	ith steep	oer terrain				
Next Step		oak, and pi	ine regeneration of m	edium to wel	l stockin	g is expec	ted			
Propo Start	osed Date: 10/01/20	13								
12	54156012-Cut	16.7	42110 - Planted Red Pine	High Density Log	83	171-200	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription -thin stand to 110-120 BA leaving roughly 2/3rds residual BA

-maintain at least 10' spacing within rows for equipment and maximize retention of logs to achieve utility log size

-leave trees with most live crown and greater potential to increase/respond in bole size post-harvest

-shortwood only in sale specs

-require operations restriction July 15th - Dec. 1st to avoid ski trail, oak wilt, & bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

Other -on hillside and along trail

Comments: -access sale using E-W two-track to the adjacent south

<u>Next</u> Steps:

Specs:

<u>Proposed</u>

Start Date: 10/01/2013

19	54156019-Cut	10.1	4132 - Aspen, Jack	High	51	Harvest	Clearcut with	42121 - Planted	Cmpt. Review
			Pine	Density			Reserves	Jack Pine, Mixed	Proposal
				Pole				Deciduous	

Prescription -clearcut west half only (partial stand harvest- see treatment layer)

Specs: -leave 1 oak/acre

-use retention pockets (3-10%) along southern boundary for visual

Other Comments:

Next -trench and plant jp with aspen

Steps: -regen survey

-jp, oak, and aspen regeneration of medium to well stocking is expected

<u>Proposed</u>

Start Date: 10/01/2013

25	54156025-Cut	4.3	42110 - Planted	High	82	111-140	Harvest	Crown Thinning	42110 - Planted	Cmpt. Review
			Red Pine	Density Log					Red Pine	Proposal

Prescription -thin stand to 110-120 BA leaving roughly 2/3rds residual BA

Specs: -maintain at least 10' spacing within rows for equipment and maximize retention of logs to achieve utility log size

-leave trees with most live crown and greater potential to increase/respond in bole size post-harvest

-protect snowmobile trail and shortwood only in sale specs

-require operations restriction July 15th - Dec. 1st to avoid trail, oak wilt and/or bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

Other Comments:

<u>Next</u> Steps:

Proposed

Start Date: 10/01/2013

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 156 Year of Entry 2014

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t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32	54156032-Cut	6.3	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	83 J	111-140	Harvest	Crown Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription -thin dense RP pockets north of trail (see treatment layer) to 100-110 BA leaving roughly 2/3rds residual BA

-do not cut all aspen in this area, let mortalize for regeneration and visual concerns Specs:

-shortwood only and protect ski/hiking trail in sale specs

-require operations restriction July 15th - Dec. 1st to avoid ski/hiking trail, oak wilt and/or bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

Other_ Comments: <u>Next</u>

s

Steps: **Proposed**

10/01/2013 Start Date:

54156037-Cut 42110 - Planted 81-110 Seed Tree with 42211 - Natural Cmpt. Review 37 42.8 High 83 Harvest Red Pine Density Log Reserves Red Pine, Mixed Proposal Deciduous

Prescription -harvesting early per compartment review decision of 02/04/08

-Compartment 156 RPP (54-044-09-01) Specs:

-cutting for RPP

-shelterwood/seed tree cut

-leave 20-30 BA (representative of all overstory species) throughout the stand and leave 30-60 along recreation trails for visual

-Summer cut only to scarify the soil

Other_ Comments:

<u>Next</u> -regen survey

Steps: -may need to scarify if harvest doesn't create good seed bed

-pine, oak, & aspen regeneration of medium to well stocking is expected

Proposed

Start Date: 02/04/2008

54156038-Cut 14.4 42111 - Planted 83 51-80 Harvest Seed Tree with Cmpt. Review 38 High 42211 - Natural Red Pine, Mixed **Density Log** Reserves Red Pine, Mixed Proposal Deciduous

Deciduous

Prescription -harvesting early per compartment review decision of 02/04/08

-Compartment 156 RPP (54-044-09-01) Specs:

-cutting for RPP

-shelterwood/seed tree cut

-leave 20-30 BA (representative of all overstory species) throughout the stand and leave 30-60 along recreation trails for visual

-Summer cut only to scarify the soil

<u>Other</u> Comments:

<u>Next</u> -regen survey

Steps: -may need to scarify if harvest doesn't create good seed bed

-pine, oak, & aspen regeneration of medium to well stocking is expected

Proposed

02/04/2008 Start Date:

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 156 Year of Entry 2014

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	CHIGA

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	54156040-Cut	5.3	42110 - Planted Red Pine	High Density Log	82 I	141-170	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription -thin treatment area to 110-120 BA leaving roughly 2/3rds residual BA

Specs:

- -maintain at least 10' spacing within rows for equipment and maximize retention of logs to achieve utility log size
- -leave trees with most live crown and greater potential to increase/respond in bole size post-harvest
- -shortwood only and protect ski/hiking & snowmobile trails in sale specs
- -require operations restriction July 15th Dec. 1st to avoid trail, oak wilt and/or bark slip conflicts

Pole

-include option to extend sale contract 1-2 years due to shorter harvest window

<u>Other</u> Comments:

Next Steps:

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Proposed

10/01/2013 Start Date:

54156044-Cut 89 4133 - Aspen, High 82 111-140 Harvest Clearcut with 4133 - Aspen, Cmpt. Review Mixed Pine Mixed Pine Density Reserves Proposal

Prescription -clearcut

-leave 1-2 released oak and/or RP per acre Specs:

-no other retention due to size

-shortwood only and protect ski/hiking trail in sale specs

-require operations restriction July 15th - Dec. 1st to avoid ski/hiking trail, oak wilt and/or bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

<u>Other</u> -access using brown road from north

Comments:

<u>Next</u> -regen survey 3-5 years (due high density and somewhat lower vigor in aspen) -aspen, rp, and oak regeneration of medium to well stocking is expected Steps:

<u>Proposed</u>

10/01/2013 Start Date:

42110 - Planted High 42110 - Planted 54156046-Cut 93 141-170 Cmpt. Review 83 Harvest Crown Thinning Red Pine Density Log Red Pine Proposal

Prescription -thin stand to 110-120 BA leaving roughly 2/3rds residual BA

-cut all JP, cut aspen and other species as needed for operability Specs:

- -some areas will be lightly marked or unmarked
- -maintain at least 10' spacing within rows for equipment and maximize retention of logs to achieve utility log size
- -leave trees with most live crown and greater potential to increase/respond in bole size post-harvest
- -shortwood only and protect ski/hiking trail in sale specs
- -require operations restriction July 15th Dec. 1st to avoid ski/hiking trail, oak wilt and/or bark slip conflicts
- -include option to extend sale contract 1-2 years due to shorter harvest window

<u>Other</u>

Comments:

Next Steps:

<u>Proposed</u>

Start Date: 10/01/2013

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 156 Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
52	54156052-Cut	10.0	42110 - Planted Red Pine	High Density Log	83	171-200	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription -mark stand removing every third row due to variable row direction in spots

Specs: -mark-to-cut any other species as needed for equipment access

-residual BA should be around 110-130

-require shortwood

-protect trail and historical site (see OFS point)

-require operations restriction July 15th - Dec. 1st to avoid ski/hiking trail, oak wilt and/or bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

-smallest crowned RP of planted RP being thinned this yoe **Other**

Comments:

<u>Next</u> Steps:

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Proposed

Start Date: 10/01/2013

54156054-Cut 27.7 4310 - Pine, Oak High 82 81-110 Harvest Shelter Wood 42260 - Natural Cmpt. Review Mix **Density Log** with Reserves Pine. Mixed Proposal Deciduous

Prescription -shelterwood

-leave 30-40 BA rp and oak/acre (den and mast trees) Specs:

-protect trees over 26 inches, use special protection spec

-leave retention pocket(s) (3-7%) along CR 489 where WP saps are less dense for visual

-require shortwood only to protect WP saplings in specs

-require operations restriction July 15th - April 15th to avoid oak wilt conflicts -include option to extend sale contract 1-2 years due to shorter harvest window

Other_ -actual treatment line to north was traversed during inventory

Comments:

-regen survey 3-5 years <u>Next</u>

Steps: -wp, oak, and rp regeneration of medium to well stocking is expected

Proposed

Start Date: 10/01/2013

54156056-Cut 22.2 42111 - Planted High 82 141-170 42111 - Planted Cmpt. Review Red Pine, Mixed Red Pine, Mixed Proposal **Density Log**

Deciduous

Harvest

Crown Thinning

Deciduous

Prescription -thin stand rp and oak to 110-120 BA leaving roughly 2/3rds residual BA

Specs: -cut all JP

-remove rows as needed for equipment access

-maintain at least 10' spacing within rows for equipment and maximize retention of logs to achieve utility log size

-leave trees with most live crown and greater potential to increase/respond in bole size post-harvest

-shortwood only and protect ski/hiking trail in sale specs

-require operations restriction July 15th - Dec. 1st to avoid ski/hiking trail, oak wilt and/or bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

Other -heaviest component of oak vs other prescribed plantations, more variable BA Comments:

Next Steps:

<u>Proposed</u>

10/01/2013 Start Date:

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 156 Year of Entry 2014

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t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
62	54156062-Cut	14.8	42110 - Planted Red Pine	High Density Log	83	200+	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription -3rd row thin

<u>Specs:</u> -rows are fairly well defined, should not need to mark

-require operations restriction July 15th - Dec. 1st to avoid ski/hiking trail, oak wilt and/or bark slip conflicts

-include option to extend sale contract 1-2 years due to shorter harvest window

Other Comments: Next

s

Steps:

Proposed

Start Date: 10/01/2013

70 54156070-Cut 38.3 4131 - Aspen, Oak High 82 Harvest Clearcut with 4131 - Aspen, Oak Cmpt. Review Density Log Reserves Proposal

Prescription -clearcut

Specs: -leave 2-3 pine/ac and 1-2 oak/ac

-require shortwood only to protect subcanopy pine and slopes in specs -protect ski/hiking trail to sw corner of treatment on hilltop in specs -protect pine trees over 26 inches, use special protection spec

-include retention pockets 3-10% for dense subcanopy WP pockets and steep slopes

Other -access stand to north and use for landing area to avoid conflicts with slopes and CR 489/Town Hall Hwy intersection traffic to the south

Comments:

Next -aspen, oak, and mixed pine regeneration of medium to well stocking is expected

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

Total Treatment

Acreage Proposed: 447.0

Atlanta Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 156 a Limiting Factor s Year of Entry 2014 n Treatment **Acres** CoverType Size Stand BA **Treatment Treatment Cover Type Approval** Name Method Objective Status Density Age Range Type d #Error Prescription Specs: <u>Other</u> Comment: <u>Next</u> Steps: <u>Proposed</u> 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

 eatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
02031-N- CCR n/Scarify	2.9	42220 - Natural Jack Pine	High Density Pole	69		Harvest	Clearcut with Reserves	42121 - Planted Jack Pine, Mixed Deciduous	Cmpt. Review Proposal - Incomplete

Specs:

Prescription Do not cut red pine, white pine, oak. Acceptable regeneration is any combination of aspen, oak, jack pine, red pine, or white pine resulting in a medium or well stocked stand. Retain 3 to 10 percent of stand area in one or more patches. Location(s) will be determined during sale prep and will be representative of the stand's species mix as a whole.

Other_

Comments:

Next Post harvest: if this treatment falls inside of a BSA, then burn or scarify before planting jack pine. When planting, attempt to avoid the use of trenching. If the treatment is not inside a BSA, plant jack pine.

Steps: Proposed

10/01/2010 Start Date:

> 2.9 54002031-N-42220 - Natural 69 42121 - Planted Cmpt. Review High Harvest Clearcut with CCR Jack Pine Density Reserves Jack Pine, Mixed Proposal -Pole Deciduous Incomplete **Burn/Scarify**

Specs:

Prescription Do not cut red pine, white pine, oak. Acceptable regeneration is any combination of aspen, oak, jack pine, red pine, or white pine resulting in a medium or well stocked stand. Retain 3 to 10 percent of stand area in one or more patches. Location(s) will be determined during sale prep and will be representative of the stand's species mix as a whole.

Other_

Comments:

Post harvest: if this treatment falls inside of a BSA, then burn or scarify before planting jack pine. When planting, attempt to avoid the use of Next Steps:

trenching. If the treatment is not inside a BSA, plant jack pine.

Proposed

Start Date: 10/01/2010

Total Treatment

5.8 Acreage Proposed:

S t	Atlanta	a Mgt. Unit		5 – Fo	prested Sta	nds Compartment: 156 Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	4123 - Red Oak	High Density Log	3.2	93	51-80	-borders recreation parking lot -a fair amount of natural rp coming in under large oak -A LOT OF RECREATIONAL ACTIVITY.	
2	4191 - Mixed Upland Deciduous with Conifer	High Density Log	15.5	93		-steep south of ski trail passing through e-w -mixed stand -left as buffer	
3	4310 - Pine, Oak Mix	High Density Log	49.8	78	51-80	-more open mixed stand of oak and rp -fair amount of oak mast trees -some dense sucanopy growth of rm and oak but is patchy -subcanopy rm 30% and oak 30% -some pine regen coming in in small pockets -evidence of good rp regen underneath oak in small adj nw oak stand	
4	42110 - Planted Red Pine	High Density Log	18.7	83	111-140	-most red pine have full crowns with good growing space except along trail -ski/hiking trail through stand -rm subcanopy coverage 40% -oak subcanopy coverage 20%	
5	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	15.0	80	81-110	New stand added.	
6	4130 - Aspen	High Density Log	154.3	81		-about 35-40% subcanopy of red maple -more rp and mast oak trees in sw 20 acres of stand, some natural rp regen -north portion above trail seems slightly older	
7	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	29.8	72	81-110	-poorer site for rp with heavier amounts of aspen and jp -around 30% planted rp is being overtopped by bta -poor site prep before planting	
8	4311 - Pine, Aspen Mix	High Density Sapling	30.1	15		-good mix of healthy regen	
9	4133 - Aspen, Mixed Pine	High Density Pole	48.5	83		-variance was granted on 11/30/2007 to salvage part of stand leveled by a tornadomixed stand, steep to west, relic pine, younger rp scattered in pockets throughout -ski trail goes through stand	
10	4130 - Aspen	High Density Sapling	4.2	15		-lots of blowdown along perimeter, possibly from past tornado?	
12	42110 - Planted Red Pine	High Density Log	16.7	83	171-200		
13	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	17.7	5		-part of salvage cut 2007 tornado -regen is adequate but fair amt is rm	
14	4130 - Aspen	High Density Pole	2.6	45		-healthy bta pocket	

S t	Atlanta	i Mgt. Unit		0 1	orestea ota	Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
15	42110 - Planted Red Pine	High Density Log	13.7	72	111-140		
16	42110 - Planted Red Pine	High Density Log	5.4	72	81-110	-bisecting slope/soil change running n-s separates site quality differences	
17	42220 - Natural Jack Pine	High Density Pole	21.3	65	51-80	-jp are healthy -some small areas have jp around 85 yrs of age, appear to mostly be within east portion	
18	4133 - Aspen, Mixed Pine	Low Density Sapling	17.7	5		-blow down from 2007 tornado, aspen growth coming in with a significant amount of down logs	
19	4132 - Aspen, Jack Pine	High Density Pole	21.4	51		-western half is less dense and with more conifer	
21	42210 - Natural Red Pine	Medium Density Log	5.3	81	1-50	-isolated stand of larger red pine -most red pine have fulll release and good crown development -mostly opeen/variable density	
22	4130 - Aspen	Medium Density	18.8	5		was salvage cut in 2005	
23	4123 - Red Oak	High Density Pole	29.9	46	51-80	-mixed stand of varying size classes -left rp and some larger oak	
24	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	14.6	81	1-50	-some older aspen from last treatment was left unharvested along east edge of RP stand to the adjacent west to limit branch growth -most aspen have been surpressed dead/dying and red maple remains surpressed but persisting	
25	42110 - Planted Red Pine	High Density Log	6.3	82	111-140	-good pruning, slower growth in rp	
26	4133 - Aspen, Mixed Pine	High Density Pole	26.2	36	1-50	-multiple age classes in pine -natural red pine coming in -tornado created blow-down/diversity/habitat	
27	42210 - Natural Red Pine	Medium Density Log	9.7	73	51-80	-getting some natural rp reproduction to the adj stand to west -Part of stand was leveled by a tornado in 2007. Downed timber was salvaged, standing oak and pine were left -most red pine have more open crown development	
28	4311 - Pine, Aspen Mix	High Density Log	24.3	82	111-140	-about 20-25% of rp is being overtopped by aspen and oak -MIXED STAND, SMALLER SIZE -plantation with failed site prep	
29	4123 - Red Oak	High Density Pole	17.1	36	1-50	-old oak cc -good oak regen from stump sprouts	

5 - Forested Stands

Compartment: 156

Atlanta Mgt. Unit

S t	Atlanta	a Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 156 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4123 - Red Oak	High Density Log	15.7	92	51-80	-stand assumed to be left as a buffer for trail -mast oak trees encompass 40-50% stand cover due to moderate openness and lack of treatment
31	42210 - Natural Red Pine	Medium Density Log	6.8	148	81-110	-most regen has been surpressed by dense RP -variable density rp stand -old RP with large developed crowns, tall, and high seed output potential -contains some legacy RP, oldest rp in comp
32	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	33.9	83	111-140	-poor quality aspen -mixed stand, steep in places -pockets of aspen where red pine failed to establish -some minor natural rp regen to south end of stand
33	4133 - Aspen, Mixed Pine	High Density Pole	16.6	39		
36	4133 - Aspen, Mixed Pine	High Density Sapling	11.0	36		-mixed stand
37	42110 - Planted Red Pine	High Density Log	42.8	83	81-110	
38	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	14.4	83	51-80	
39	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	5.3	83	111-140	
40	42110 - Planted Red Pine	High Density Log	8.5	82	141-170	-variable stand -poorer quality with a few utility poles -stand is on a hillside -rp regen to south of stand
41	4130 - Aspen	High Density Sapling	2.7	14		-SOME SCATTERED PINE & OAK POLESSOME PINE REPRODUCTION IN PLACES.
42	4310 - Pine, Oak Mix	High Density Log	60.4	91	81-110	-most oak and red pine have good release and vigor -mix of rp, oak, and some overmature aspen in pockets to east 1/2
43	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	5.0	83	51-80	
44	4133 - Aspen, Mixed Pine	High Density Pole	8.9	82	111-140	New stand added. -bta overtopping most rp -planted rp with failed site prep
45	4133 - Aspen, Mixed Pine	High Density Pole	6.9	39		New stand addedpockets of unthinned rp within stand

S t				5 – Fe	orested Sta	nds Compartment: 156 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	42110 - Planted Red Pine	High Density Log	9.3	83	141-170	-row direction not well defined -good quality and pruning in rp -ba is variable in some places
47	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	23.0	83	111-140	-good quality logs, just entering large log size class -best site rp in compartment -planting record taken of 40 acre card
48	4310 - Pine, Oak Mix	High Density Log	41.4	72	51-80	-SKI TRAIL THRU STAND. VERY MIXED UNDERSTORY, RED&WHITE PINE-OAK-MAPLE -most pine crowns have full release
49	4123 - Red Oak	High Density Log	101.4	87	51-80	New stand added. -oak are healthy -some surpressed and natural pine regen
51	4191 - Mixed Upland Deciduous with Conifer	High Density Log	18.2	93	51-80	-mast oak -wildlife using scattered large bole aspen -great diversity
52	42110 - Planted Red Pine	High Density Log	10.0	83	171-200	-only 1/6th to 1/7th live crown
53	4199 - Other Mixed Upland Deciduous	High Density Sapling	4.4	16		
54	4310 - Pine, Oak Mix	High Density Log	27.7	82	81-110	New stand addedHEAVY WP SUBCANOPY, need release -some places appear to have been planted to rp, age suggests that it was
55	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	5.3	82	51-80	-various patches of natural rp under oak throughout -most pine and oak have good release
56	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	22.2	82	141-170	
57	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	4.2	16		-left pine and a few oak
58	4199 - Other Mixed Upland Deciduous	High Density Log	14.2	71	81-110	-poor quality stems
60	4130 - Aspen	High Density Sapling	12.7	27		
61	4130 - Aspen	High Density Sapling	40.3	25		
62	42110 - Planted Red Pine	High Density Log	14.8	83	200+	
63	4191 - Mixed Upland Deciduous with Conifer	High Density Log	9.8	89	81-110	-some surpressed pine

S t	Atlanta	Atlanta Mgt. Unit			prested Stand	Compartment: 156 Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
65	4131 - Aspen, Oak	High Density Sapling	13.9	25			
67	4310 - Pine, Oak Mix	High Density Log	9.2	101	51-80	-largest jp in comp -rather scenic and mesic site -better site more mesic aspen and oak are healthy -evidences of hard maple and ironwood in south half	
68	4130 - Aspen	Medium Density	8.7	16			
69	4133 - Aspen, Mixed Pine	High Density Log	8.7	82		-good species diversity	
70	4131 - Aspen, Oak	High Density Log	38.3	82		-steep in places-ridge running nw to se	
71	4130 - Aspen	High Density Sapling	9.4	16			
73	6127 - Lowland Pine	High Density Pole	7.0	18	51-80	planted rp and wp	
74	42110 - Planted Red Pine	Medium Density Log	16.2	83	81-110	-cut all but rp and oak about 18yrs ago -most rp have good are free to grow	
75	42260 - Natural Pine, Mixed Deciduous	High Density Pole	5.3	18		-looks like wp was partially planted -majority is natural origin	
76	4131 - Aspen, Oak	High Density Log	8.0	92		-rich subcanopy	
77	4132 - Aspen, Jack Pine	High Density Sapling	5.9	15		New stand addedwas cut with rp to west -interplanted jp in low stocked areas to south -regen looks good	
78	6111 - Lowland Balsam Poplar	High Density Sapling	69.1	26			
79	4130 - Aspen	High Density Pole	18.3	38	:	A - wetland on edge is in TNC registry for intermittent wetland with several T&E plant species present. natural community niked as G3, S3. May be a high quality site and could be an ERA. See note in compartment file 9/21/05.	
80	6132 - Mixed Lowland Forest with Cedar	High Density Log	23.5	123		-overstory aspen has mostly mortalized -significant amount of down bole wood -high variability in canopy structure, still even-aged	
81	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	6.4	95			

s t	Atlanta	Mgt. Unit		5 – Fo	orested Star	Ods Compartment: 156 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
82	6112 - Lowland Aspen	High Density Sapling	1.6	27		
83	6111 - Lowland Balsam Poplar	High Density Sapling	29.6	27		New stand added.
84	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	43.3	101	51-80	-significant wp and rm regen -rather scenic stand -some fairly good quality oak -highly variable stand canopy structure
85	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	28.2	126		-canopy fairly broken up in places -larger aspen to nw
86	6118 - Lowland Deciduous with Cedar	High Density Pole	30.8	54		-relatively low volume of bam, poor quality/small diameter to east -high amounts of 3-5 in balsam fir under bam -NW to SW leg of stand is very diverse
88	6111 - Lowland Balsam Poplar	High Density Sapling	7.3	26		-some willow, ash and birch -traces of elm -very wet -some cattails and stagnant growth
89	6120 - Lowland Cedar	High Density Log	5.0	128		

6 - Nonforested Stands

Compartment: 156 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
11	122 - Road/Parking Lot	2.9	N\A	Unspecified	
20	310 - Herbaceous Openland	2.0	No	Unspecified	
34	310 - Herbaceous Openland	2.0	No	Unspecified	
35	310 - Herbaceous Openland	1.0	No	Unspecified	
50	3101 - Poverty Grass, Cladonia	1.0	No	Low (NonForested)	
59	122 - Road/Parking Lot	10.9	N\A	Unspecified	
64	622 - Lowland Shrub	22.8	No	Unspecified	
66	310 - Herbaceous Openland	1.3	No	Unspecified	
72	6225 - Bog	9.0	No	Low (NonForested)	
87	623 - Emergent Wetland	4.2	No	Unspecified	

Compartment: 156 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

Compartment: 156
Year of Entry 2014



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	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (rai threatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations of managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitution.	I Features Inventory (MNFI) within the Occurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are rocesses and values. The public may
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wilderness and Froposed for legal dedication, but for which legal dedication by le nomination process is defined by Part 351, Wilderness and Nature Environmental Protection Act, 1994 PA 451. The program is admirequire the submittal of a Natural Areas Nomination Packet to the proposed sites in various stages of review. Final dedication of no Areas is accomplished through legislative action.	gislature has not occurred. The ral Areas, of the Natural Resources and inistered by the DNR. Nominations DNR. This is an active program, with