

Compartment Review Presentation

Atlanta Forest Management Unit

Compartment 80 Entry Year 2016

Acreage: 1,862 County Alpena

Management Area: Alpena Lake Plain

Revision Date: 09/02/2014

Stand Examiner: Dale Parris

Legal Description:

T29N R06E, Sections 5, 8, 9, 16, and 17

Identified Planning Goals:

All harvests have been prescribed following the direction indicated in the Alpena Lake Plains Management Area Plan. In all cases the unique characteristics of the individual stand was taken into considertion when writing the prescription. Lowland forest types are being targeted for harvest where moisture levels permit and regeneration of the stand is feasible. Upland forest types were targeted for harvest where current stand conditions made restarting the stand or improving the stand necessary. Wildlife, recreation (mainly hunting), adjacent stands, and the larger landscape were considered in all management decisions.

Soil and topography:

The northern 160 acres of the comparment off of Elevere road are dominated by two soil types; Tonkey silt loam in the north and Cathro muck in the south. The southern 1,700 acres of the compartment are dominated by a number of muck soils. These soils listed from most to least dominate are the Cathro muck, Lupton muck, Tawas muck, Rollaway muck, Au Sable muck and Deford muck with the Rollaway muck bordering the main streams and Wolf Creek. The higher ground in the southwest corner of the compartment consists of Ossineke fine sandy loam, Klacking loamy sand, McGinn loamy sand, and Coppler loamy sand. The transition from the low ground in the east to the high ground in the southwest consists of some Angelica loam and some Tacoda-Wakeley complex.

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

The land around compartment 80 is mostly wooded with sparse cottages and other residences. An L-shaped island of 120 acres is present in the southwest corner of the compartment.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

A SCA has been designated in the south central portion of Compartment 80. This area consists of springs and seeps which are the start of streams within the Wolf Creek Watershed. No harvests will be permitted in this area.

Watershed and Fisheries Considerations:

Wolf Creek runs through the south east portion of section 16. Butterfield Creek and several smaller feeder streams drain the large swamp complex into Wolf Creek. A SCA has been designated in the south central portion of Compartment 80. This area consists of springs and seeps which are the start of streams within the Wolf Creek Watershed. The integrity of this underground flow of water and this emerging water system needs to be protected.

Wildlife Habitat Considerations:

The primary focus of wildlife habitat management will be to address the habitat requirements identified for the listed featured species found in this compartment. These species include American woodcock, beaver, black bear, mallard, pileated woodpecker, ruffed grouse, snowshoe hare, wild turkey, white-tailed deer, and wood duck. Based on the selected featured species, some of the most significant wildlife management issues in the management area are the maintenance of young forest and large open grassland complexes; the retention of large, over-mature trees and snags; and the maintenance and expansion of hard mast and mesic conifer components.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and coarse-textured glacial till. The glacial drift thickness varies between 100 and 400 feet. Beneath the glacial drift is the Devonian Antrim Shale. The Antrim

is quarried for clay/shale products. Gravel pits are located all around the Compartment and potential is considered good on the upland areas. This area has been developed for the Antrim Shale. One gas well, on state land, is located in section 17.

Vehicle Access:

The southern 1,700 acres of the compartment can be accessed at its southwest corner using Andor Road and from the east using Beaver Lake Road. The northern 160 acres of the compartment can be accessed along its northern edge using Elevere Road.

Survey Needs:

None Needed

Recreational Facilities and Opportunities:

There are no facilities within the compartment. Oportunities for hunting are present but access trails are limited due to a high percentage of wet ground.

Fire Protection:

This compartment is located in the south central part of Alpena County making protection coverage somewhat difficult. Rast fire suppression in this area resulted in equipment being dispatched from Alpena D.N.R., Atlanta D.N.R., Lincoln D.N.R. and several local V.F.D's.

Additional Compartment Information:

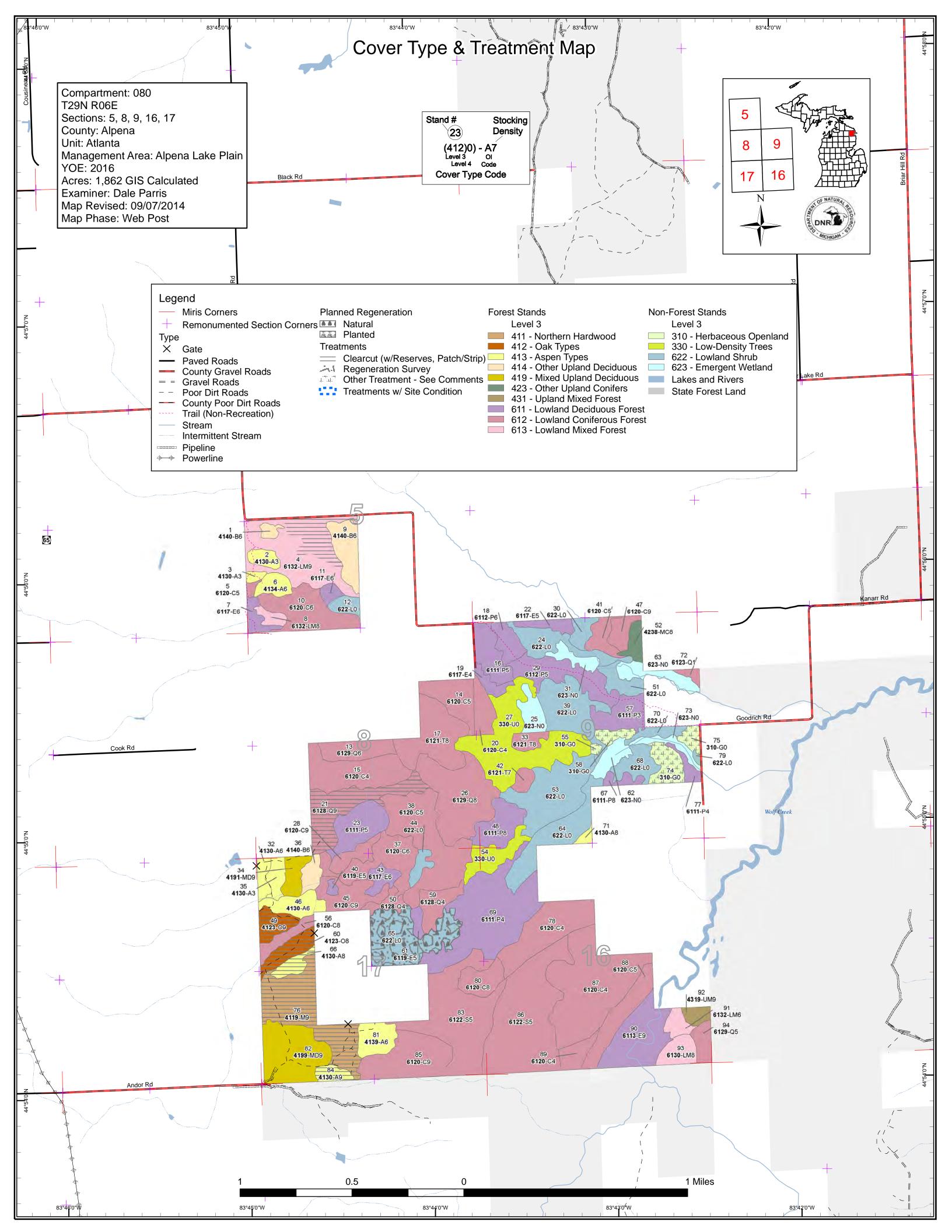
A high majority of Compartment 80 is flat land dominated by lowland coniferous and lowland mixed deciduous forest. Pockets of aspen are present throughout on slightly higher and slightly better drained soils. The southwest portion of the compartment has higher ground with moderately rolling hills. This higher ground consists of hardwoods and mixed upland deciduous forest with a large red oak component.

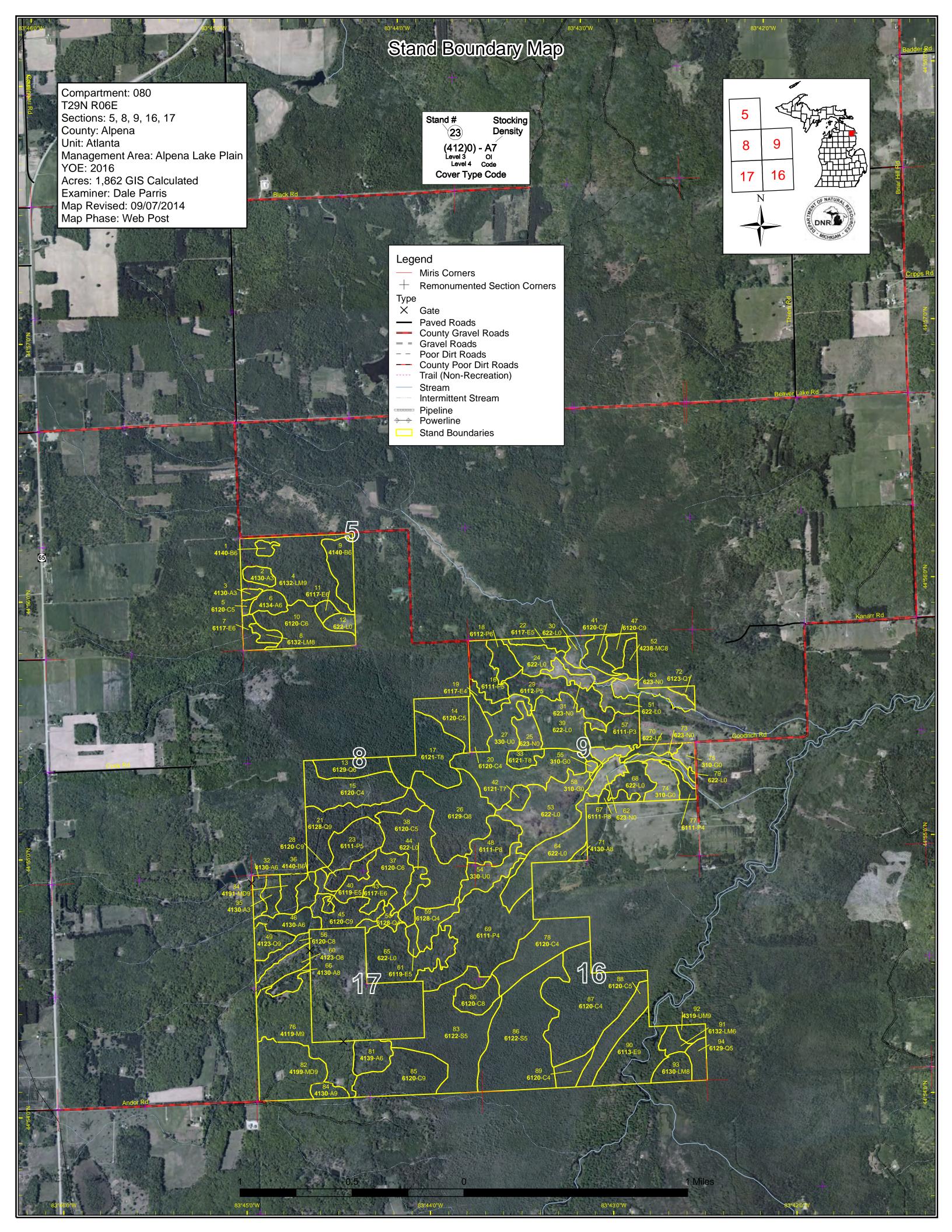
The following reports from the Inventory are attached:

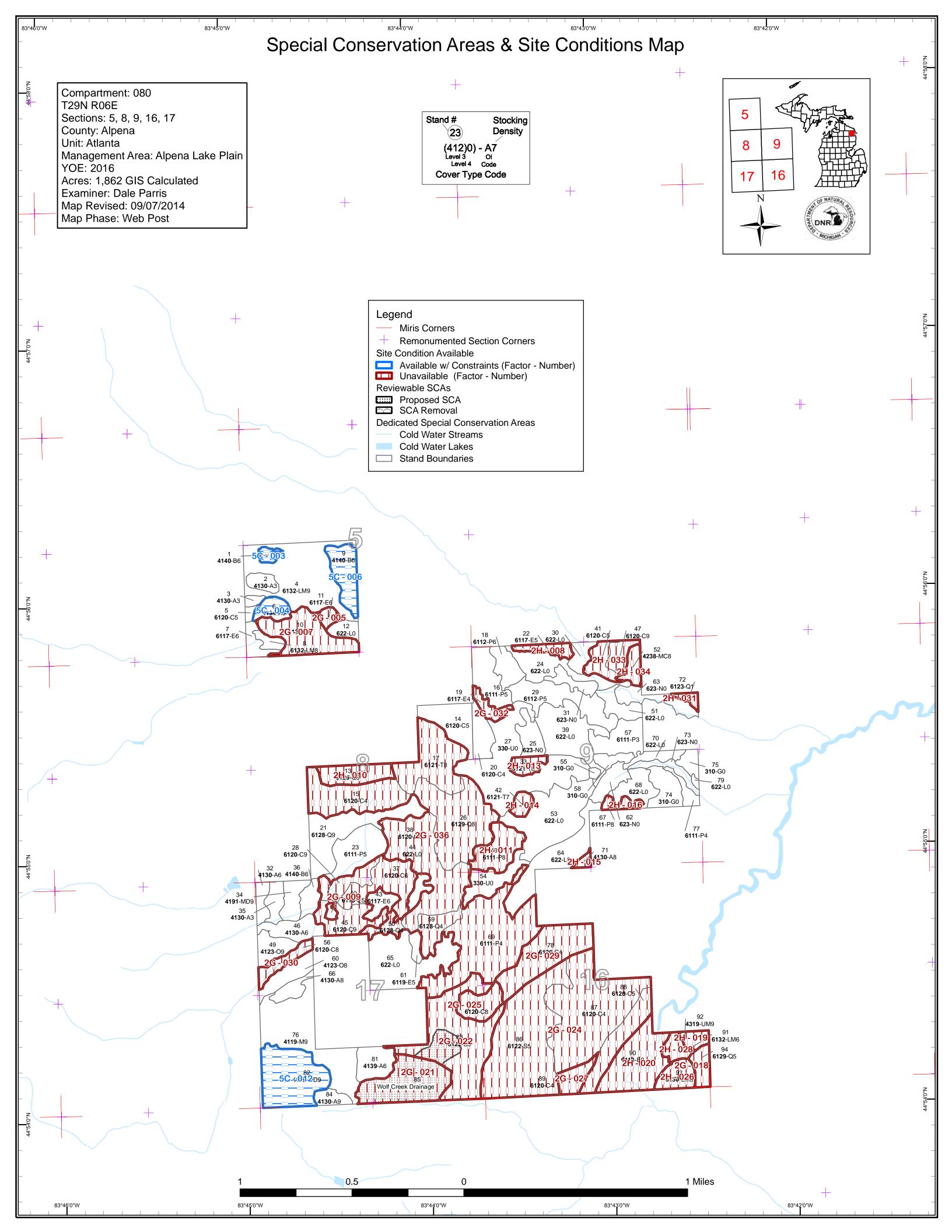
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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

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







Compartment 080 Year of Entry 2016

Atlanta Mgt. Unit

Dale Parris : Examiner



Age Class

						Age	Class									
		6.0	0,79	Park /	\$6.50 \ \$6.50 \	AD PA	\$ / S	89.00	, o,	0.00 G	86.70	on a second	70,70	,	S A	, de
Aspen	0	0	0	52	0	6	11	7	0	0	0	0	0	0	76	
Cedar	0	0	0	0	0	0	0	0	0	2	226	121	123	0	471	
Herbaceous Openland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Low-Density Trees	86	0	0	0	0	0	0	0	0	0	0	0	0	0	86	
Lowland Aspen/Balsam Poplar	0	0	48	34	25	107	0	0	0	0	0	0	0	0	214	
Lowland Conifers	0	0	0	3	0	7	57	0	22	0	55	0	0	0	144	
Lowland Deciduous	0	0	0	6	15	6	0	0	4	7	40	0	0	0	78	
Lowland Mixed Forest	0	0	0	0	0	0	0	12	0	0	0	69	7	0	88	
Lowland Shrub	235	0	0	0	0	0	0	0	0	0	0	0	0	0	235	
Lowland Spruce/Fir	0	0	0	0	0	0	0	167	0	0	0	0	0	0	167	
Marsh	48	0	0	0	0	0	0	0	0	0	0	0	0	0	48	
Mixed Upland Deciduous	0	0	0	0	0	0	10	0	0	0	43	0	0	0	53	
Northern Hardwood	0	0	0	0	0	0	0	58	0	0	0	0	0	0	58	
Oak	0	0	0	0	0	0	0	0	0	24	0	0	0	0	24	
Paper Birch	0	0	0	7	0	19	3	0	0	0	0	0	0	0	29	
Tamarack	0	0	0	0	0	0	40	0	0	12	0	0	0	0	52	
Upland Conifers	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	
Total	395	0	48	102	40	151	121	243	27	51	364	190	130	0	1862	



Report 2 – Proposed Treatment Summaries

Atlanta Mgt. Unit Year of Entry 2016

Compartment 080
Total Compartment Acres: 1,862

Acres by Treatment Type

Commercial Harvest - 155 Tree Planting - 0 Other - 0

Habitat Cut - 0 Opening Maintenance - 26

		Cover Type by Harvest Method							
		/	Contract of	Section of	1.00 S	Sternoo	OK.		Se de la constant de
Aspen Types		13	0	0	0	0	0	13	
Lowland Coniferous Forest		38	0	0	0	0	0	38	
Lowland Mixed Forest		22	0	0	0	0	0	22	
Northern Hardwood		58	0	0	0	0	0	58	
Oak Types	·	24	0	0	0	0	0	24	
	Total	155	0	0	0	0	0	155	

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Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 080 Year of Entry 2016

DEPARTME	DNR MICHIGAN
	MICHIGAN

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	54080004-Cut	22.2	6132 - Mixed Lowland Forest with Cedar	High Density Log	110	141-170	Harvest	Clearcut with Reserves	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal

<u>Prescription</u> Clearcut with reserves. Leave retention in pockets. Focus retention pockets where cedar is present and in more wet areas. Mark to retain the Specs: few large white pine to the northeast of the stand near the road.

Specs. The large write pine to the northeast of the stand hear the road

Other Comments:

This harvest should be restricted to dry summer or frozen winter.

Next Regeneration survey. Acceptable regeneration constists of a medium to well stocked stand of Quaking aspen, balsam poplar, northern white

Steps: cedar, and balsam fir.

<u>Proposed</u>

Start Date: 10/01/2015

54080021-Cut 38.1 6128 - Lowland High 105 141-170 Harvest Clearcut with 6128 - Lowland Cmpt. Review Coniferous, Mixed Reserves Coniferous, Mixed Proposal Density Log Deciduous Deciduous

<u>Prescription</u> Clearcut with reserves. Retain 3-10 percent of the stand in pockets. Focus retention pockets in wet areas and in areas with cedar. Harvest in <u>Specs:</u> dry summer or frozen winter.

Other Comments:

Greater than 10 percent retention will likely be necessary. Due to the soil moisture in various portions of the stand. Getting approval for retaining greater than 10 percent of the stand should not be an issue. Notify the neighboring property owner prior to the sale. Ask the neighbor if they would like to have some of their timber harvested at the same time. Windthrow in retention pockets is expected. The forest road leading to the sale may pass through private land to the south. Windthrow is not as big a concern in the adjacent private property due to the small size of the harvest and the west winds being blocked by the neighboring timber. If retention is along the property line it should be in bubbles so that the property line is not confused.

Next Regeneration survey 1 year after harvest. Acceptable regeneration includes a medium to well stocked stand of balsam poplar, northern white Steps: cedar, balsam fir, white spruce, and quaking aspen. Regeneration dominated by balsam poplar is likely and acceptable.

Proposed

Proposed Start Date: 10/01/2015

49 54080049-Cut 11.5 4123 - Red Oak High 92 81-110 Harvest Clearcut with 4123 - Red Oak Cmpt. Review Proposal

Prescription Clearcut with reserves. Clearcut leaving 3-10% retention in pockets. Focus retention pockets in areas with large crowned oak in tandem with adjacent conifer cover. Also focus retention pockets at the south end of the stand where the slope into the adjacent lowland is steep. In addition, retain 1-3 red oak and/or white oak per acre (where present) with a white oak preference.

Other Comments:

Next

Acceptable regeneration is a medium to well stocked stand of northern red oak, white oak, sugar maple, and paper birch with lower amounts of

Steps: red maple, aspen, balsam fir, and ironwood.

Proposed

Start Date: 10/01/2015

60 54080060-Cut 12.9 4123 - Red Oak Medium 97 51-80 Harvest Clearcut with 4123 - Red Oak Cmpt. Review Density Log Reserves Proposal

Prescription Clearcut with reserves. Leave 3-10 percent retention in pockets. Focus retention pockets around large crowned red oak mast trees, quality

<u>Specs:</u> sugar maple, and white pine. Retain all white pine.

Other Start this sale ASAP to limit advanced regeneration growth before roller chopping. Stump heights must be minimal and slash must be chipped so that advanced regeneration can be roller chopped ASAP after harvest. Consider leaving the stand as open as possible for ease of roller chopping when marking retention pockets. The regeneration from the recent harvest was undesirable mostly due to deer browse on oak regen and over abundance of red maple regen. This clearcut with reserves followed by roller chopping is aimed at getting desirable regeneration. The

proposed start date based on the 45 day compartment review appeal window is 2/1/2015.

Next Perform a regeneration survey one year post harvest/roller chopping. Acceptable regeneration is a medium to well stocked stand of northern red oak, sugar maple, and white pine. Lesser amounts of red maple and ironwood is acceptable in the mix.

Proposed

Start Date: 02/01/2015

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Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 080 Year of Entry 2016

DEPARTME	DNR MICHIGAN	
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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
66	54080066-Cut	7.0	4130 - Aspen	Medium Density Log	71		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
_										

Specs:

Prescription Clearcut, leaving 3-10% retention in a single pocket at the east end of the stand where there is lower ground. Protect the few scattered, large sugar maple and the white pine advanced regeneration both of which is located in the wildlife openning. Protect the few sapling white pine along

the edge of the wildlife openning.

The retention at the east end of the stand will protect the white spruce advanced regeneration. Other

Comments:

Acceptable regeneration is a medium to well stocked stand of bigtooth aspen, paper birch, and sugar maple. Inevitably some white ash will be in Next Steps:

the regeneration (undesirable due to EAB).

Proposed

10/01/2015 Start Date:

54080076-Cut 4119 - Mixed High 78 81-110 Harvest Clearcut with 4119 - Mixed Cmpt. Review Northern Hardwoods Density Log Reserves Northern Hardwoods Proposal

Prescription Clearcut with reserves. Retain 3-10 percent of the stand in retention pockets. Focus retention pockets around large crowned oak and/or in areas where quality sugar maple and basswood trees are present. In addition, retain 1 to 3 oak per acre (where present), focusing on retaining mast Specs:

producing oak trees with large crowns.

<u>Other</u> This treatment must be started ASAP so that ash can be sold. The proposed start date based on the 45 day compartment review appeal window

Comments: is 2/1/2015.

Complete a regen survey at 1 year post harvest due to possible dominance of beech. Acceptable regeneration is a medium to well stocked Next Steps:

stand of northern red oak, aspen, sugar maple, basswood, and paper birch. Low amounts of beech and ironwood regeneration is acceptable. If

high amounts of beech regeneration is dominating the site, herbicide application targeting beech will be necessary.

Proposed

02/01/2015 Start Date:

54080084-Cut 6.3 4130 - Aspen High 81-110 Harvest Clearcut with 413 - Aspen Cmpt. Review 84 Density Log Reserves Proposal

Prescription Clearcut with reserves. Retain 3-10 percent of the stand in retention pocket(s). Focus retention in the clump of oak surrounded by sapling maple

and present just to the southwest of the oil well. Mark to retain the handful of large red pine present in the stand.

Other Comments:

<u>Next</u> Acceptable regeneration is a well stocked stand of aspen.

Steps:

Proposed

Start Date: 10/01/2015

NF 54080055-3105 - Mixed Non-Forest Other - Specify 3105 - Mixed Cmpt. Review 55 NonFor **Upland Herbaceous** Management Upland Herbaceous Proposal

Prescription Plant to food and cover crops for

wildlife or maintain grasses using Specs:

mechanical methods or fire as funding

allows.

Other Comments:

Next Monitor for cover type and perform Steps: opening maintenance on 5-10 year

rotation

Proposed

Unspecified Start Date:

Report 3 -- Treatments Prescribed Compartment: 080 Atlanta Mgt. Unit Year of Entry 2016 with No Limiting Factor s t а **Treatment** Acres CoverType Size BA **Treatment Treatment Cover Type** Approval n Method Objective **Status** d Name Density Age Range Type 3105 - Mixed Non-Forest 3105 - Mixed Cmpt. Review NF 54080058-5.4 Other - Specify 58 Upland Herbaceous NonFor Management Upland Herbaceous Proposal Prescription Plant to food and cover crops for wildlife or maintain grasses using Specs: mechanical methods or fire as funding allows <u>Other</u> Comments: Monitor for cover type and perform **Next** opening maintenance on 5-10 year Steps: rotation Proposed Start Date: Unspecified NF_54080074-74 13.8 3105 - Mixed Non-Forest Other - Specify 3105 - Mixed Cmpt. Review NonFor Upland Herbaceous Management Upland Herbaceous Proposal Prescription Plant to food and cover crops for wildlife or maintain grasses using Specs: mechanical methods or fire as funding allows. Other Comments: <u>Next</u> Monitor for cover type and perform opening maintenance on 5-10 year Steps: rotation **Proposed** Unspecified Start Date: NF 54080075-75 5.5 3105 - Mixed Non-Forest Other - Specify 3105 - Mixed Cmpt. Review NonFor Upland Herbaceous Management Upland Herbaceous Proposal Prescription Plant to food and cover crops for wildlife or maintain grasses using Specs: mechanical methods or fire as funding allows. <u>Other</u> Comments: Monitor for cover type and perform Next Steps: opening maintenance on 5-10 year rotation Proposed Unspecified Start Date: 65 NF 54080065-45.6 6229 - Mixed Regeneration Intermediate 6112 - Lowland Cmpt. Review lowland shrub Survey (natural Proposal Survey Survey Aspen regen) Prescription A follow-up regeneration needs to be done. Specs: Other Comments: <u>Next</u> Steps:

Total Treatment

Proposed Start Date:

> 227.0 **Acreage Proposed:**

10/01/2014

Atlanta Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 080 a Site Condition s Year of Entry 2016 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: **Other** Comment: <u>Next</u> Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

Limiting Factor

Acreage Proposed: 0.0

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Availa	ability for I	Management					
Total	Acres	Acres	D	omina	nt Site	e Cond	ditions
Acres	Available	Not Available		No	5C	2H	2G
76	73	2	Aspen	65	9	2	
471	35	437	Cedar	35		18	418
214	107	107	Lowland Aspen/Balsam Poplar	107		25	82
144	38	106	Lowland Conifers	38		20	86
78	21	57	Lowland Deciduous	21		47	10
88	69	19	Lowland Mixed Forest	69		19	
167		167	Lowland Spruce/Fir				167
53	53		Mixed Upland Deciduous	10	43		
58	58		Northern Hardwood	58			
24	24		Oak	24			
29	29		Paper Birch	7	22		
52		52	Tamarack			12	40
7		7	Upland Conifers			7	
6		6	Upland Mixed Forest			6	
1,466	507	959	Total Forested Acres	433	74	157	802
	35%	65%	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.

	Dominant Site ond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
003	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3				
Co	omments:						
004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9				
Co	omments:						

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005	Not Available	2G: Too wet (sensitive soils, does not include access issues)	4	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)		
С	omments:					
006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19			
С	omments:					
007	Not Available	2G: Too wet (sensitive soils, does not include access issues)	34	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3H: Deer Wintering Areas	
С	omments:					
008	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7			
С	omments:					
009	Not Available	2G: Too wet (sensitive soils, does not include access issues)	61	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3H: Deer Wintering Areas	
С	comments:					
010	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	17			
С	omments:					

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011 N	lot Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	21	
Com	nments:			
012	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	43	
Com	nments:			
013 N	lot Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	2G: Too wet (sensitive soils, does not include access issues)
Com	iments:			
014 N	lot Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	2G: Too wet (sensitive soils, does not include access issues)
Com	nments:			
015 N	lot Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	
Com	iments:			
016 N	lot Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	2B: Unknown if access through adjacent landowner(s) is possible
Com	iments:			

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018	Not Available	2G: Too wet (sensitive soils, does not include access issues)	9			
С	omments:					
019	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	6			
С	omments:					
020	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	40			
С	comments:					
021	Not Available	2G: Too wet (sensitive soils, does not include access issues)	40	3H: Deer Wintering Areas	3K: Rare or unique landforms	
С	omments:					
Т	his stand has sprir	ngs coming up from the ground	d that ar	e the start of streams flowi	ng to lower ground.	
022	Not Available	2G: Too wet (sensitive soils, does not include access issues)	75			
С	omments:					
024	Not Available	2G: Too wet (sensitive soils, does not include access issues)	201	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)		
С	comments:					

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025	Not Available	2G: Too wet (sensitive soils, does not include access issues)	15	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
C	omments:			
026	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	12	
C	omments:			
027	Not Available	2G: Too wet (sensitive soils, does not include access issues)	10	2H: Blocked by physical 5D: Unproductive Forest obstacle (e.g. upland Land stand in a lowland area)
C	omments:			
028	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	
C	omments:			
029	Not Available	2G: Too wet (sensitive soils, does not include access issues)	41	2H: Blocked by physical 5D: Unproductive Forest obstacle (e.g. upland Land stand in a lowland area)
C	omments:			
030	Not Available	2G: Too wet (sensitive soils, does not include access issues)	9	
C	omments:			

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031	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	
С	omments:			
032	Not Available	2G: Too wet (sensitive soils, does not include access issues)	6	
С	omments:			
033	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	19	3H: Deer Wintering Areas
С	omments:			
034	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	
С	omments:			
036	Not Available	2G: Too wet (sensitive soils, does not include access issues)	298	
С	omments:			

Atlanta Mgt. Unit

Compartment: 080 Year of Entry: 2016



Report 6 - 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				
Wolf Creek Drainage	Spring-Seeps, Riparian Areas	Spring Seep	SCA	51.5				
Comments								
This area consists of springs and seeps which are starting to form streams at the very head of a drainage system. The integrity of this underground flow of water and this emerging water sustem needs to be protected.								

Atlanta Mgt. Unit Compartment: 080
Year of Entry 2016



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation Area	on Type	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxystocked trout populations and those of other coldwate conditions for coldwater fishes may occur in Michigal groundwater inflows, or are located in colder (norther Director's action and designated as trout resources be	er fish species to persist from year to year. Suitable n lakes if they are relatively deep, have substantial rn) areas of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved of stocked trout populations and those of other coldwater year to year. Coldwater streams in Michigan typically contributions of groundwater to their stream flows. So designated as trout resources by Fisheries Order 210	er fish species (e.g., slimy sculpin) to persist from provide these conditions due to substantial uch streams are established by Director's action and

s t	Atlanta	a Mgt. Unit		Report 8	– Forested	Stands Compartment: 080 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4140 - Other Upland Deciduous	High Density Pole	3.2	61	51-80	The aspen are in good health but are a small diameter for their age.
2	4130 - Aspen	High Density Sapling	6.2	33		This stand is well stocked with a consitent density of slow groing aspen throughout. The aspen look to be in good health.
3	4130 - Aspen	High Density Sapling	2.3	33		This stand is well stocked. The aspen are in good health.
4	6132 - Mixed Lowland Forest with Cedar	High Density Log	63.9	110	141-170	This stand has a consitent spaced out component of aspen throughout the canopy. Deer are using this stand and even more so the cedar stand to the south for winter travel and thermal cover.
5	6120 - Lowland Cedar	Medium Density Pole	1.8	95	111-140	This stand has lots of windthrow and regeneration gaps. The aspen present are overmature, dying, and likely rotten inside. The cedar present are in poor health.
6	4134 - Aspen, Spruce/Fir	High Density Pole	8.5	61	51-80	This stand is very dense and experiencing stem exclusion. The aspen form a supercanopy over the spruce and fir.
7	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	7.1	45	51-80	Pockets of cedar are present with some cedar blown down along the edges. The balsam poplar is at the north end of the stand.
8	6132 - Mixed Lowland Forest with Cedar	Medium Density Log	4.7	113	51-80	A 10 in. dbh cedar cored at 98 plus 15 for an age of 113. This stand has variable age regeneration pockets due to windthrow incidents.
9	4140 - Other Upland Deciduous	High Density Pole	18.7	58	1-50	Despite the low basal area this stand is well stocked. These aspen are in good health.
10	6120 - Lowland Cedar	High Density Pole	34.1	128		There is lots of sign of deer yarding up here for the winter.
11	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	4.1	81	51-80	Most of the black ash are dead or dying due to EAB.
13	6129 - Mixed Coniferous Lowland Forest	High Density Pole	17.0	105	111-140	There is not much understoty to this. The stand looks healthy.
14	6120 - Lowland Cedar	Medium Density Pole	21.0	112	111-140	This stand looks to be healthy. The canopy is too open to offer good thermal cover for wildlife.
15	6120 - Lowland Cedar	Low Density Pole	38.4	105		Open areas in canopy have catail and tamarack regen.
16	6111 - Lowland Balsam Poplar	Medium Density Pole	18.6	33	51-80	This stand has pockets where there is only tag alder. These are likely vernal pools.

s t	Atlanta	Atlanta Mgt. Unit			– Forested	Stands Compartment: 080 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	6121 - Tamarack	Medium Density Log	40.0	64	51-80	This stand has cattail scattered throughout, indicating a high water table.
18	6112 - Lowland Aspen	High Density Pole	11.0	33	51-80	
19	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	6.1	31	1-50	The balsam poplar are log sized in the southern most portion of the stand. These balsam poplar, along with the cedar and tamarack are much older than the 31 year age of the average balsam poplar.
20	6120 - Lowland Cedar	Low Density Pole	11.8	112	51-80	
21	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	38.1	105	141-170	The age of the dominant component of the canopy (Northern white cedar) was estimated due to rotten tree centers making aging difficult. Therefore, age was based off of adjacent stands. This stand is used by deer in the winter.
22	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	6.9	94	51-80	The age of this stand is highly variable due to past disturbance.
23	6111 - Lowland Balsam Poplar	Medium Density Pole	24.9	46		A good portion of the stand is in the 3 to 6 in dbh range. The diameter of the balsam fir varies highly.
26	6129 - Mixed Coniferous Lowland Forest	Medium Density Log	56.8	64		This stand is similar to the stand to the north, except for it has a more dense understory and it contains a lot of covertype transition along its border making it less homogeneous.
28	6120 - Lowland Cedar	High Density Log	9.7	105	171-200	This stand is used by deer in the winter.
29	6112 - Lowland Aspen	Medium Density Pole	29.8	29	1-50	This stand has about 10 apple trees spaced out through it.
32	4130 - Aspen	High Density Pole	6.0	39		This stand is well stocked and looking healthy.
33	6121 - Tamarack	Medium Density Log	6.8	93	1-50	This stand is a borderline pole stand.
34	4191 - Mixed Upland Deciduous with Conifer	High Density Log	9.9	62	81-110	This stand has a lower canopy packed with tall submerchantable/merchantable balsam fir saplings (3-6 in dbh). A large amount of the log sized aspen present is in the southern third of the stand. Due to the way that the log sized aspen are spaced out in clumps and the amount of pole size aspen dominated area, this is a borderline sapling stand.
35	4130 - Aspen	High Density Sapling	7.8	31		The southern fifth of this stand is lowland. (4 in 39 yrs, 4in 25 yrs, 4in 31 yrs)
36	4140 - Other Upland Deciduous	High Density Pole	7.4	36	51-80	A tag alder pocket is present in the south end of the stand.

s t	Atlanta	a Mgt. Unit		Report 8	Forested	Stands Compartment: 080 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	6120 - Lowland Cedar	High Density Pole	31.6	105	111-140	
38	6120 - Lowland Cedar	Medium Density Pole	60.7	105		The basal area is highly variable due to the openness of the canopy. Standing water is likely present throughout the stand most of the year.
40	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	1.8	53	1-50	This stand varies greatly in age due to past disturbance. This stand is surrounded by even lower areas of coniferous forest.
41	6120 - Lowland Cedar	Medium Density Pole	10.0	111	81-110	This stand has a good amount of windthrow.
42	6121 - Tamarack	Low Density Log	5.2	93	1-50	
43	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	7.9	41	51-80	There is a thick understory/lower canopy that consists of balsam fir and white spruce.
45	6120 - Lowland Cedar	High Density Log	19.5	111	141-170	This stand received moderate use by yarding deer.
46	4130 - Aspen	High Density Pole	14.2	31		This is a healthy, well stocked aspen stand.
47	6120 - Lowland Cedar	High Density Log	8.5	111	200+	
48	6111 - Lowland Balsam Poplar	Medium Density Log	20.7	51	51-80	The age of this stand is likely highly varible between species.
49	4123 - Red Oak	High Density Log	11.5	92	81-110	
50	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	6.5	50		
52	42380 - Non Pine Upland Conifer, Mixed Deciduous	Medium Density Log	7.2	54	81-110	The age of this stand is highly variable due to past disturbance and sucession. The cedar are likely 100 plus years. Most other canopy species are well olderer than the balsam fir that made up the highest percentage of the canopy. The basal area is highly variable likely ranging from 50 to 150.
56	6120 - Lowland Cedar	Medium Density Log	9.0	116		This is a lowland, ravine runoff.
57	6111 - Lowland Balsam Poplar	High Density Sapling	18.3	22		This sapling aspen stand is well stocked and fairly healthy.
59	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	14.0	86		This stand is borderline nonforested. It barely meets the 25 percent canopy cover.

s t	Atlanta	Atlanta Mgt. Unit			Forested	Stands Compartment: 080 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
60	4123 - Red Oak	Medium Density Log	12.9	97	51-80	This stand was treated within the last 10 years.
61	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	4.0	58		This stand contains some retention from the adjacent harvest that could not be cut due to wet soil. The canopy closure will fall into the 25-50% range or lower when black ash die due to EAB.
66	4130 - Aspen	Medium Density Log	7.0	71		
67	6111 - Lowland Balsam Poplar	Medium Density Log	4.5	56	81-110	This stand is in a very wet area.
69	6111 - Lowland Balsam Poplar	Low Density Pole	81.7	51		In the harvested areas only sapling black ash remain, along with some balsam poplar, spruce, and balsam fir saplings.
71	4130 - Aspen	Medium Density Log	2.2	65		This stand has aerial imagery that is similar to the north eastern most portion of stand 63 that contained log sized bigtooth aspen in the overstory as well as traces of log and pole sized quaking aspen and balsam poplar. Pole sized paper birch are also likely present in the canopy as well as traces of pole/sapling sized black ash. The age estimate is based on the size (11 in. dbh) of the bigtooth aspen in the NE portion of stand 63.
72	6123 - Lowland Fir	Low Density Sapling	2.9	32		This is a sapling stand with a few scattered log trees of representative canopy species.
76	4119 - Mixed Northern Hardwoods	High Density Log	57.5	78	81-110	The age for this stand was taken from the average of 2, 13 in. dbh basswood. The aspen in this stand are mostly over mature.
77	6111 - Lowland Balsam Poplar	Low Density Pole	4.8	32	1-50	27 plus years was cored on a 9 in tamarack (Plus 5 for 32 years). (6 in. BAM 21 years) (5.5 in. BAM 37 years) (9 in. BAM 32 years) The BAM diameter is highly variable throughout. The northern point of the stand is mostly tag alder and small 1-2 in. sapling aspen.
78	6120 - Lowland Cedar	Low Density Pole	41.3	113		Canopy trees are stunted due to high soil moisture.
80	6120 - Lowland Cedar	Medium Density Log	14.7	121		
81	4139 - Aspen, Mixed Deciduous	High Density Pole	15.0	37		The east fifth of this stand drops down to lowland.
82	4199 - Other Mixed Upland Deciduous	High Density Log	43.3	109	81-110	Red oak of 23 to 24 inches are common. The red oak have very large canopies, which is another indication that the large diameter oak remain from last harvest. The smooth bark on the smaller diameter red oak (8-12 in. dbh) indicate very vigorous growth. The larger sugar maple (12 in. dbh) are of poor quality. The smaller sugar maple (3-7 in. dbh) have been highly suppressed.
83	6122 - Black Spruce	Medium Density Pole	74.6	72	81-110	Due to the wet lowland soil the canopy trees (except for the tamarack) are stunted and of small diameter.



Stand Age 5 57 2 128 1 72 1 104 0 120	81-110 51-80	General Comments: About 5 large red pine are present throughout the stand. Trace large white pine and hemlock are present. The basal area is highly variable (100-230). Springs of water are emerging from a few scattered spots throughout the stand. Due to the wet lowland soil the canopy trees (except for the tamarack) are stunted and of small diameter.
2 128 1 72 1 104	51-80	Trace large white pine and hemlock are present. The basal area is highly variable (100-230). Springs of water are emerging from a few scattered spots throughout the stand. Due to the wet lowland soil the canopy trees (except for the
1 72 1 104		is highly variable (100-230). Springs of water are emerging from a few scattered spots throughout the stand. Due to the wet lowland soil the canopy trees (except for the
1 104		
	51-80	
0 120		
	81-110	The larger black ash are dead or dying due to EAB.
140		This is a sparse swamp stand that sees very slow tree growth due to high soil moisture levels throughout the year.
9 109	111-140	The green ash are dead or dying. The red maple are at the point where their inner rot is leading to limb loss/die back.
. 128	111-140	Black and green ash are showing considerable EAB damage.
91	81-110	The second age of 41 years is for the dense balsam fir in the lower canopy.
0 71		The second age of 39 years is for the 5-6 inch dbh Balsam fir in the lower canopy.
5 80	1-50	
	91 0 71	91 81-110 0 71



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
12	6220 - Alder/willow	6.3	No	Low	
24	6220 - Alder/willow	21.1	No	Unspecified	Stand swapped from Forested to Non-Forested.
25	6230 - Cattail	11.0	No	Unspecified	
27	3303 - Mixed Low Density Trees	69.5	No	Unspecified	This is a stand consisting of sparse trees mixed with catail. (Tree Species: BAM, tamarack, tag alder, shrub willow, red maple, paper birch, cedar) Trees are generally stunted and unhealthy due to the high water table (Except for tamarack). Catails are present throughout.
30	6220 - Alder/willow	7.3	No	Unspecified	This nonforested stand has a sparse amount of pole/sapling sized paper birch scattered throughout.
31	6233 - Wet Meadow	7.5	No	Unspecified	This is a grass covered area that is most likely wet all year.
39	6220 - Alder/willow	35.8	No	Unspecified	
44	6220 - Alder/willow	5.6	No	Low	This nonforested stand is covered in alder and catail. There are white spruce and balsam fir scattered and in pockets with the occasional cedar, but the canopy coverage is less than 25 %.
51	6220 - Alder/willow	10.3	No	Low	
53	6220 - Alder/willow	48.7	No	Low	This non-forested stand is mostly lowland shrub tag alder/willow, but there are emergent wetland catail areas in the areas less dense with shrubs.
54	3303 - Mixed Low Density Trees	17.0	No	Unspecified	This nonforested stand bas catail throughout, and could be considered an emergent wetland. Stunted and scattered tree species present include paper birch, balsam poplar, cedar, and black ash.
55	3105 - Mixed Upland Herbaceous	1.4	Unspecified	Unspecified	
58	3105 - Mixed Upland Herbaceous	5.4	Unspecified	Unspecified	
62	6230 - Cattail	9.8	No	Unspecified	
63	6233 - Wet Meadow	12.7	No	Low	

Report 9 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
64	6220 - Alder/willow	32.5	No	Unspecified	
65	6229 - Mixed lowland shrub	45.6	Natural Regen	Aspen	This stand was recently clearcut except for a few scattered balsam fir and aspen. Some pockets of unharvested areas that contain sapling black ash remain. These pockets also contain some aspen, spruce, and balsam fir saplings.
68	6220 - Alder/willow	14.2	No	Unspecified	Stand swapped from Forested to Non-Forested.
70	6220 - Alder/willow	6.5	Unspecified	Unspecified	Stand swapped from Forested to Non-Forested.
73	6239 - Mixed Emergent Wetland	6.8	No	Low	This is an emergent wetland runoff with catails and grass through the center and tag alder/shrub willow along both outer edges.
74	3105 - Mixed Upland Herbaceous	13.8	No	Unspecified	
75	3105 - Mixed Upland Herbaceous	5.5	Unspecified	Unspecified	
79	6220 - Alder/willow	1.0	No	Unspecified	