

Compartment Review Presentation

Atlanta Forest Management Unit

Compartment 54103 Entry Year 2020 Acreage: 509

County Alpena

Management Area: Alpena Lake Plain

Revision Date: 2018-05-04 Stand Examiner: Dale Parris

Legal Description:

T31N R07E Sections 20, 21, & 29

Identified Planning Goals:

All harvests have been prescribed following the direction indicated in the Alpena Lake Plains Management Area (ALPMA) Plan and Timber Analysis. In all cases the unique characteristics of the individual stand was taken into consideration when writing the prescription. The timber analysis completed on the ALPMA, specific to Compartment 103, indicated that no specific covertype be of focus for harvest for the purpose of balancing the age classes of this covertype across the Management Area (MA). Wildlife, recreation, aesthetics, adjacent stands, and the larger landscape were considered in all management decisions.

Soil and topography:

The northwestern most 30 acres of Compartment 103 is mainly upland forest. The majority of the soil in these 30 acres is Rousseau fine sand (well drained). This upland area is composed of mildly rolling hills.

The rest of Compartment 103 is dominated by flat lowland ground. The soil in the main body of Compartment 103 is composed of Tawas muck (very poorly drained), Deford muck (very poorly drained), and Thunderbay very fine sandy loam (poorly drained). The lone 40 acres to the south is dominated by Lupton muck.

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

The northern boundary of Compartment 103 is adjacent to more State of Michigan owned land. The majority of the eastern boundary of Compartment 103 is the Lower South Branch of the Thunder Bay River. The remainder of the land adjacent to Compartment 103 is recreational, larger acreage, hunting type properties.

Unique Natural Features:

The largest portions of Compartment 103 are lowland shrub, lowland cedar, and lowland deciduous forest. The lone 40 acres to the south is northern white cedar dominate. Approximately 30 acres of mixed upland deciduous forest in the northwest corner is the only significant area of high ground in Compartment 103. Flooded area along the Lower South Branch of the Thunder Bay River at the eastern edge of the compartment makes for valuable wetland habitat.

Archeological, Historical, and Cultural Features:

The Natural Heritage Database (NHD) did not show there to be any known archaeological sites within Compartment 103.

As part of the NHD, the Michigan Natural Features Inventory (MNFI) at the Michigan State University Extension website listed a number of species that need to be taken into consideration when conducting forest management in Compartment 103. MNFI lists the bald eagle (Haliaeetus leucocephalus) as a species of concern having been observed in or near Compartment 103 in the past. Threatened species observed in or near Compartment 103 in the past are the redshouldered hawk (Buteo lineatus), and slippershell (Alasmidonta viridis). The pugnose shiner (Notropis anogenus) is an endangered species that has been found in the Lower South Branch of the Thunder Bay river in the past.

Special Management Designations or Considerations:

The Fisheries Division of the Michigan DNR needs to be consulted regarding all forest management that takes place near the Lower South Branch of the Thunder Bay River. Rutting and the disturbance of underground water flow needs to be considered when managing forests in and around sensitive lowland soils. Oak wilt needs to be taken into consideration in harvests that take place in and adjacent to stands that contain oak.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

This compartment is an excellent opportunity to manage for wildlife. It is part of a multiple compartment, large scale block of public land providing contiguous wildlife pathways that are necessary for many of our large game animals such as black

bear. There is also a large river corridor following the thunder bay river which is an excellent pathway for wildlife travel. Habitat components of cedar and wetland complexes provide food and cover for multiple species at a variety of age classes. We are working to maintain winter cover areas in this compartment as well as adjacent compartments. Species which benefit from our management include white-tailed deer, black bear, ruffed grouse, woodcock, and many other game and non-game species.

Mineral Resource and Development Concerns and/or Restrictions

Sections 20-21 & 28-29, T31N-R7E, Alpena County

Several active sand/gravel pits are located to the southwest. Potential for sand & gravel development within the compartment may be limited by wetlands. This area has had no drilling for oil and gas. The Antrim Shale is pinching out in this area and production is unlikely. There is no known oil and gas potential, and there are currently no active mineral leases in the area. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

Vehicle access to Compartment 103 is limited to M32 at the south end and Glennie Road to the west.

Survey Needs:

Currently, there are no survey corners needed to conduct timber sales within Compartment 103.

Recreational Facilities and Opportunities:

Compartment 103 does not contain any DNR designated recreation trails. Compartment 103 has opportunities for hunting whitetail deer, ruff grouse, bear, coyote, and turkey within season with the proper license(s).

Fire Protection:

In the case of a wildland fire, response to Compartment 103 will be from the Alpena DNR office as well as the Wilson Township Fire Department.

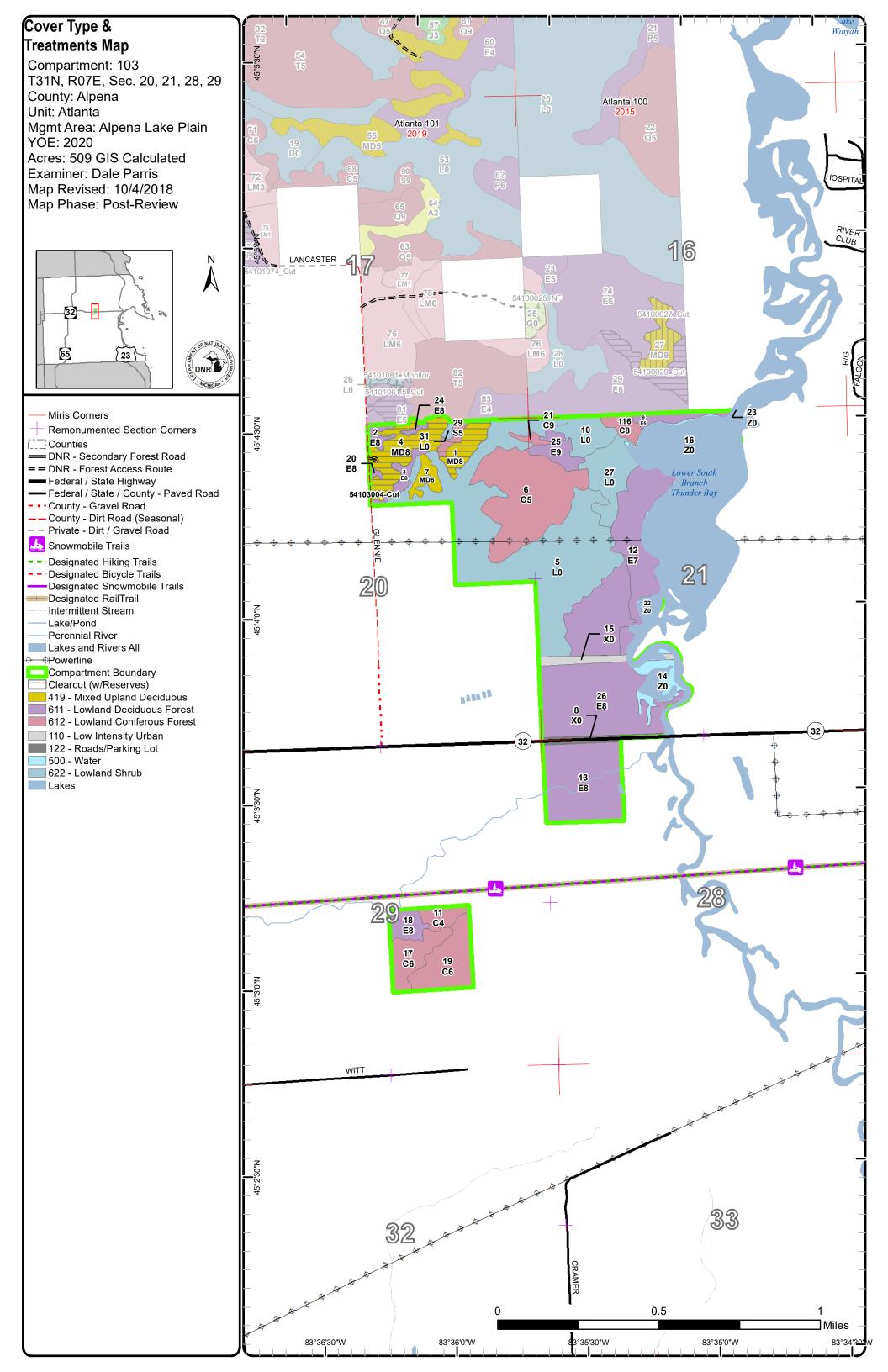
Additional Compartment Information:

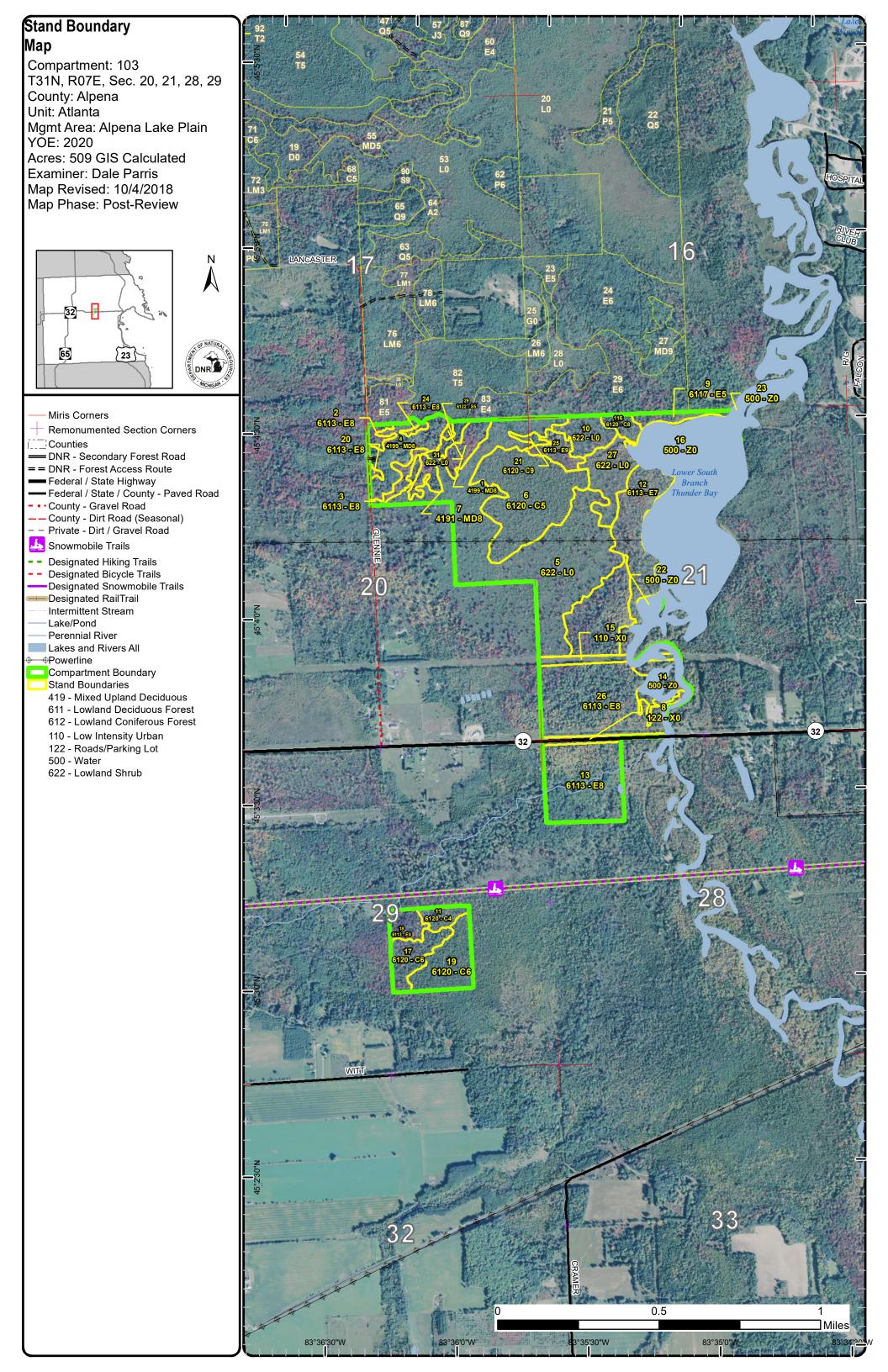
The following reports from the Inventory are attached:

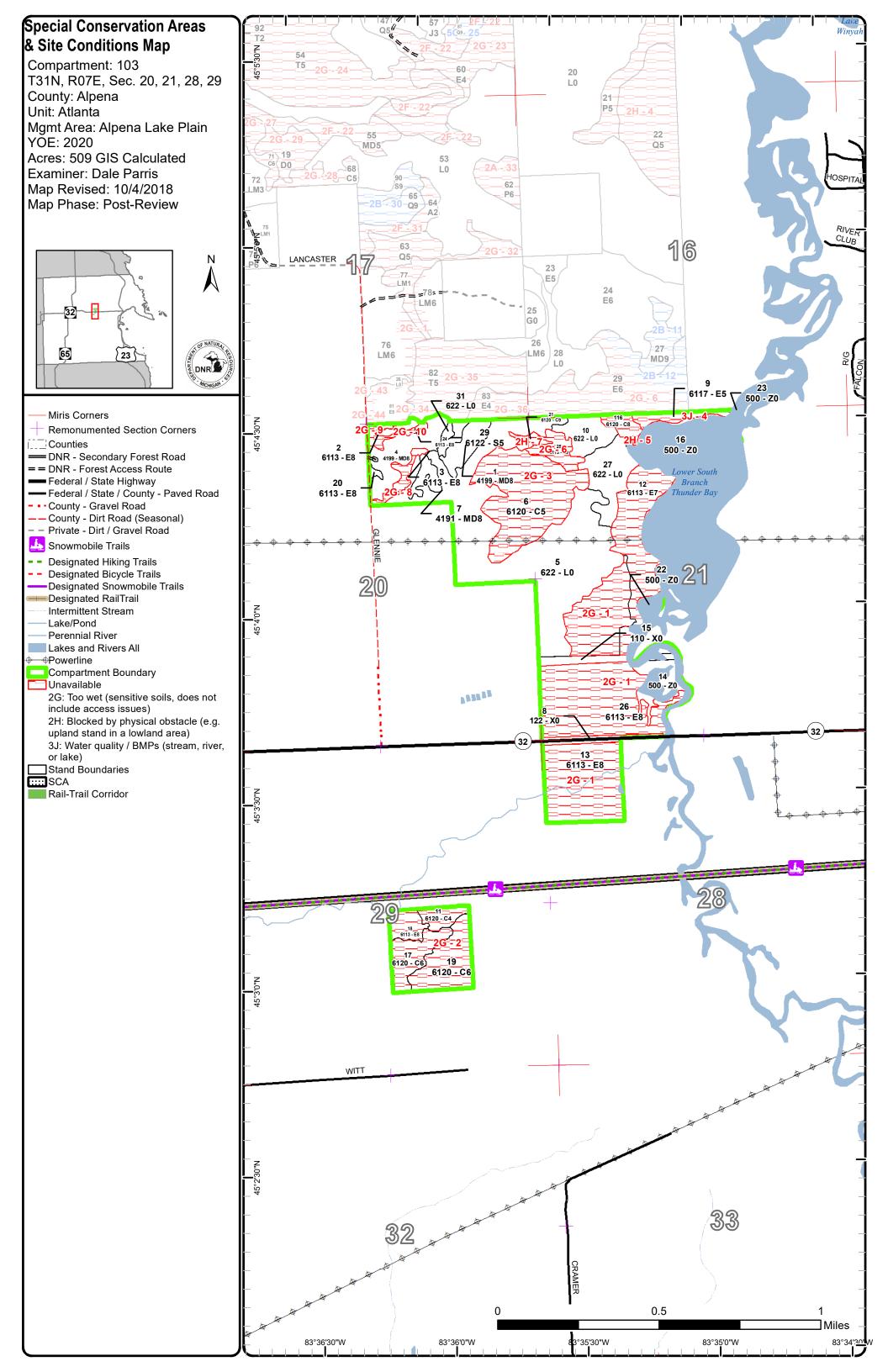
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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

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







Atlanta Mgt. Unit

Dale Parris: Examiner

Compartment 103 Year of Entry 2020



Age Class

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Cedar	0	0	0	0	0	0	0	0	0	12	0	53	23	0	0	0	0	0	88	
Lowland Deciduous	0	0	0	0	0	0	0	0	0	57	0	112	0	0	0	0	0	0	169	
Lowland Shrub	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	
Lowland Spruce/Fir	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30	
Urban	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Water	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
Total	220	0	0	0	0	0	0	3	0	99	0	165	23	0	0	0	0	0	510	



Report 2 – Treatment Summary

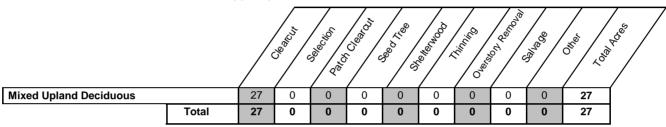
Atlanta Mgt. Unit Year of Entry: 2020

Acres of Harvest

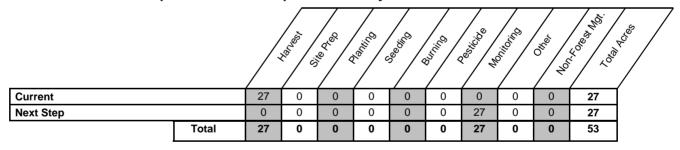
Compartment 103
Total Compartment Acres: 509

Commercial Harvest - 27 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Atlanta Mgt. Unit Report 3 -- Treatments Compartment: 101 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Approval n Method Objective Structure Status Name CoverType Density Age Range Type d 6119 - Mixed Clearcut 611 - Lowland 54101081.5 C 5.2 Poletimber 51-80 Harvest Even-Aged Approved 81 Lowland Deciduous Medium Deciduous Proposal ut Forest Forest **Habitat Cut: No Site Condition:** Prescription Clear-cut. Retention is not necessary due to the small size of the stand. Specs: Protect oak, pine, and spruce regeneration Retain all sub-merchantable trees to act as a water pump. Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Acceptable regeneration is a low to medium stocking of red maple, aspen, paper birch, oak, spruce, and balsam fir. Regen: Protect the integrity of the drainage at the south end of the stand. **Other** Comment: Monitor this stand post harvest to assess whether leaving sub-merchantables affects the water table. In addition, assess how the retention of sub-merchantables affects stand regeneration through water uptake. Note the effects on stand diversity. This was an out of YOE treatment approved at the 2020 YOE Compartment Review to be harvested with Compartment 103 Treatments to the south. **Proposed Start Date:** 10/1 /2019 54103001-Cut 8.7 4199 - Other Mixed Sawtimber 51-80 Harvest Clearcut 4191 - Mixed Even-Aged Draft Field **Upland Deciduous** Medium Upland Boundary Deciduous with Conifer

Habitat Cut: No Site Condition:

Prescription Clear-cut. Retention is not necessary due to the small size of the stand.

Specs:

Protect oak, pine, and spruce regeneration

Retain all sub-merchantable trees in the north to act as a water pump.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

<u>Acceptable</u> Acceptable regeneration is a mix of red maple, aspen, paper birch, oak, spruce, and balsam fir.

Regen:

Other The central portion of the stand is lowland and will need to be accessed for harvestability.

Comment:

Harvest in frozen winter or dry summer.

10/1 /2019 Proposed Start Date:

Atlanta Mgt. Unit Report 3 -- Treatments

s Year of Entry: 2020 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Approval Age n Method Objective Structure Status d Name CoverType Density Age Range Type 17.9 4199 - Other Mixed Clearcut with 4191 - Mixed Draft Field 54103004-Cut Sawtimber 81-110 Harvest Even-Aged **Upland Deciduous** Medium Retention Upland Boundary Deciduous with Conifer

Habitat Cut: No Site Condition:

Prescription Clear-cut with retention.

Specs:

Retain 3-10% of the stand in multiple pockets around large crowned mast producing oak trees (preferably on slopes that are harder to operate

Compartment: 103

on)

Protect pine/oak/spruce regeneration to provide for future stadn diversity and mast production.

Retain all pine (trace amount mostly near Glennie Road).

Include the "Dead and Down Creation, Grouse" log Specification 5.2.4.4 in the sale contract.

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

<u>Acceptable</u> Acceptable regeneration is a mix of aspen, red maple, birch, balsam, fir, pine, and oak.

Regen: Other

Comment:

Retention will likely be needed on the steep slope along east-west running forest trail just east of Glennie Road.

Thought should be put into the sale boundaries were slopes are present so that the producer can reach all timber.

Leave mast producing oak along edges with a one tree buffer to protect the oak from damage that can lead to oak wilt.

Protect the integrity of the drainage at the north end of the stand.

Proposed Start Date: 10/1 /2019

Total Treatment Acreage Proposed:

31.8

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Atlanta Mgt. Unit

Dale Parris : Examiner Year of Entry: 2020

Availability for Management Total Acres Acres Avail Acres Acres Available With Condition Not Available 87 0 0 87 Cedar Dominant Site Conditions 2G 2H 3J

87	0	0	87	Cedar	81	6	
169	1	0	168	Lowland Deciduous	164		5
132	132	0	0	Lowland Shrub			
3	3	0	0	Lowland Spruce/Fir			
30	30	0	0	Mixed Upland Deciduous	0		
10	10	0	0	Urban			
78	78	0	0	Water			
509	254		255	Total Forested Acres	244	6	5
	50%		50%	Relative Percent			

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site Dominant Site No. Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1 Unavailable	Unavailable 2G: Too wet (sensitive 143 Unspec soils, does not include access issues)		Unspecified	Unspecified	Unspecified	Unspecified

Comments:

These stands hold water throughout much of the year. The harvesting of these stands would cause major rutting, raise the water table, and disturb the natural flow of water through these soils. In addition, the harvest of these stands would likely cause the long term conversion of these stands to lowland shrub and undesired seasonal flooding in the area.

2 Unavailable	2G: Too wet (sensitive	41	Unspecified	Unspecified	Unspecified	Unspecified
2 Onavanabio	soils, does not include	• •	Chopodinod	Chopcomed	Chopcomod	Опоросию
	access issues)					

Comments:

These stands hold water throughout much of the year. The harvesting of these stands would cause major rutting, raise the water table, and disturb the natural flow of water through these soils. In addition, the harvest of these stands would likely cause the long term conversion of these stands to lowland shrub.

Report 4 – Site Conditions

Atlanta Mgt. Unit

Dale Parris: Examiner

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3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	46	5A: Not able to obtain desirable regeneration	5D: Unproductive Forest Land	Unspecified	Unspecified
		ater throughout much of the yea e soils. In addition, the harvest					
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
		es issues, the harest of this star of desirable in this covertype.	nd would	d likely have undesirable ru	un-off effects on the river fo	oding to the south, and wo	ould destabilize the shore
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	fairly open understo	cessible, there are a number of ory in this area it is undesirable arvest. The rutting of these soil	to harve	est this stand. The majorit	ty of this stand, especially the		
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
		ater throughout much of the yea e soils. In addition, the harvest					
7	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: In addition to having	g access blocked by the adjace	nt lowla	and, and this being low acr	eage, this log sized cedar v	vith an open understory is	unique to the area.

Report 4 – Site Conditions

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Atlanta Mgt. Unit

Dale Parris : Examiner Year of Entry: 2020

8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

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Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Mgt. Unit Compartment:
Year of Entry

Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS



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

Conservation Type Description Area	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
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S	Atlanta	ı Mgt. Unit		Report 7	– Forested	Stands Compartment: 103 Year of Entry: 2020
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	7.6	85	51-80	This stand has a large amoount of lowland shrub in its center. The rest of the stand has a fairly open understory. Sparse mast oak are present. This stand is accessible from the west.
2	6113 - Lowland Maple	Sawtimber Medium	2.6	82	1-50	This stand is too wet to harvest. Harvesting this stand would interrupt the flow of ground water through rutting.
3	6113 - Lowland Maple	Sawtimber Medium	4.0	82	1-50	This stand is too wet to harvest. Harvesting this stand would interrupt the flow of ground water through rutting.
4	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	18.0	82	81-110	This stand is full of rolling hills but few if any that are too steep to harvest. There is a 2.7 acre inclusion pocket of pole sized aspen from a separate harvest in the stand about a 100 feet off of Glennie road.
6	6120 - Lowland Cedar	Poletimber Medium	46.3	103	111-140	Yes stand has highly saturated soil. This stand is too wet to harvest. Dead make up 20+ percent of the canopy.
7	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	4.2	85	51-80	This stand is an upland island surrounded by lowland shrub. The south and eastern portions are more dominate to balsam fir.
9	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	4.8	86	1-50	There is a dense shrub understory throughout.
11	6120 - Lowland Cedar	Poletimber Poor	5.2	113	1-50	This stand would have a full canopy if the dead black and green ash were still alive. Standing dead ash and dead ash on the forest floor is present throughout the stand.
12	6113 - Lowland Maple	Sawtimber Poor	31.0	84	1-50	This stand has about 50% canopy of dead ash.
13	6113 - Lowland Maple	Sawtimber Medium	37.6	105	111-140	The green and black ash that would have made up about 15% - 30% of the canopy is dead. In February of 2018 most of the stand was frozen over with up to 1 foot of water. The stand is extremely flat ground. The ash regeneration is mostly in the southern half and the tag alder is mostly in the northern half. Red (silver) maple up to 36" in DBH are present. Red (silver) maple over to 25" in DBH are common. This stand is too wet to harvest.
17	6120 - Lowland Cedar	Poletimber Well	11.5	82	51-80	This stand holds even more water than stand 18 to the north.
18	6113 - Lowland Maple	Sawtimber Medium	6.2	85	51-80	King Creek catches the northwest corner of this stand. This stand is very wet. In the winter of 2018 this stand had frozen over standing water up to a foot deep scattered throughout.
19	6120 - Lowland Cedar	Poletimber Well	17.8	117	111-140	This stand appears to be wet throughout with sparse amounts of standing water. Tag alder is medium to heavy in the eastern third with low amounts present in the rest of the stand. The cedar are stunted due to excessive soil moisture and tend to have health to somewhat sparse and thinning crowns.

S t	Atlanta Mgt. Unit
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Report 7 – Forested Stands

Compartment: 103 Year of Entry: 2020



t a	Level 4	Size		Stand	ВА	Year of Entry: 2020 General
n d	Cover Type	Density	Acres	Age	Range	Comments:
20	6113 - Lowland Maple	Sawtimber Medium	0.7	82	1-50	This stand is too wet to harvest. Harvesting this stand would interrupt the flow of ground water through rutting.
21	6120 - Lowland Cedar	Sawtimber Well	1.5	101	141-170	This is a nice stand of cedar with minimal understory.
24	6113 - Lowland Maple	Sawtimber Medium	0.9	82	1-50	This stand is too wet to harvest. Harvesting this stand would interrupt the flow of ground water through rutting.
25	6113 - Lowland Maple	Sawtimber Well	6.7	86	81-110	This maple flat has a hunting shack at the west edge. The southern portion has a fairly open understory while the northern portion is fairly dense with shrub. When visited in February of 2018 this stand was under 1-2 feet of water forzen over.
26	6113 - Lowland Maple	Sawtimber Medium	74.7	103	51-80	Portions of the stand were covered in up to 1 foot of water in the winter of 2018. OPIC - FMD: "We raised the water table when this was cut. Best to avoid further cutting. Potential old growth."RDS, 1998
29	6122 - Black Spruce	Poletimber Medium	2.6	66	81-110	The black spruce get larger in diameter as you go north. This stand makes for a nice diversity pocket to the area.
116	6120 - Lowland Cedar	Sawtimber Medium	4.3	101	111-140	
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Compartment: 103

Year of Entry: 2020

Stand	Cover Type	Acres	Managed Site	General Comments:
5	622 - Lowland Shrub	105.1	No	This stand is lowland shrub with sparsely scattered pole/log sized red maple. Certain areas of the stand would be forested but the pole sized ash are all dead.
8	122 - Road/Parking Lot	4.3	No	OPIC - FMD: M-32 ROAD RIGHT OF WAY
10	622 - Lowland Shrub	10.0	No	This stand would be 50-75% canopy except the green ash are dead. This is a mix between a green ash sapling stand and lowland shrub. The green ash will likely be attacked and die when they reach 1 inch DBH by EAB. Therefore, the stand is lowland shrub. Scattered large red maple, aspen, and cedar are present.
14	500 - Water	11.6	No	This is basically side waters of the river with pockets of mature maple anPockets of red maple and marsh interspersed.
15	110 - Low Intensity Urban	5.7	No	Most of this powerline is covered with thick cattail with some lowland shrub. This may be indicative of what would happen to the stands to the north and south if they were to be harvested.
16	500 - Water	56.1	No	Water with pockets of cattail.
22	500 - Water	2.2	No	This is side waters of the river that is likely a result of the Lake Winyah flooding. There is some marsh and lowland shrub interspersed.
23	500 - Water	8.3	No	This is the Lower South Branch of the Thunder Bay River.
27	622 - Lowland Shrub	16.3	No	This stand is mostly dead pole sized ash over tag alder with scattered pole/log sized red maple, sapling/pole paper birch, pole/log cedar, and sapling/pole balsam fir. The red maple range from 4-12 inches in DBH. This is a lowland stand that is too wet to harvest.
31	622 - Lowland Shrub	0.9	No	This is lowland shrub with scatterd pole/log sized red maple.