



Compartment Review Presentation

Atlanta Forest Management Unit

Compartment 57

Entry Year 2016

Acreage: 1,385

County Montmorency

Management Area: Thunder Bay Outwash

Revision Date: 10/28/2014

Stand Examiner: Jeff Autenrieth

Legal Description:

T31N R4E Sec. 16, 19-21

Identified Planning Goals:

Manage recreation, timber and wildlife.

Soil and topography:

Mostly level upland with Jack and Red Pine. Mostly a PVCd, except for the north east area and small areas along Pleasant Valley Rd., which are swamp and or drainage. Most soils are very sandy except along the watershed from Brush Creek.

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

The western portion is mostly in State ownership, where the east portion of the compartment has a subdivision (Pine Oaks Subdivision) along its boundary. Trespasses have been discovered, mostly the trail construction type, and have, for the most part, been corrected. Trash dumping is a common practice in this compartment, most has been removed by D.N.R. staff and the Hillman Boy Scouts.

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:

Kirtlands Warbler have been recorded in this compartment.

Watershed and Fisheries Considerations:

Brush Creek is a cold water stream.

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 ruffed grouse, black bear, and white-tailed deer. Based on the selected featured species, some of the most significant wildlife management issues in the management area are the maintenance of young forest, 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. The glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift is the Devonian Antrim Shale. The Antrim is quarried for clay/shale elsewhere in the State. A gravel pit is located in Section 20 and potential is good. Part of the compartment has been drilled and is producing from the Antrim Shale.

Vehicle Access:

Pleasant Valley Rd. / Co. Rd. 487, Pine Oaks Rd., Brush Creek Truck Trail and Miller Creek Rd. are all county roads.

Survey Needs:

None needed.

Recreational Facilities and Opportunities:

Brush Creek Snowmobile trail along with the Hillman Connector and the Brush Creek ORV Route travel east and west through the compartment. Deer hunting is popular in this area.

Fire Protection:

Several fires have been recorded in this compartment, initial attack is usually provided by the Hillman V.F.D., Hillman is only 5 minutes to the east. Most cover types are dry jack pine, or have some jack pine in them. There is a lot of younger pine in this compartment.

Additional Compartment Information:

The following reports from the Inventory are attached:

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

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

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

Cover Type & Treatment Map

Legend

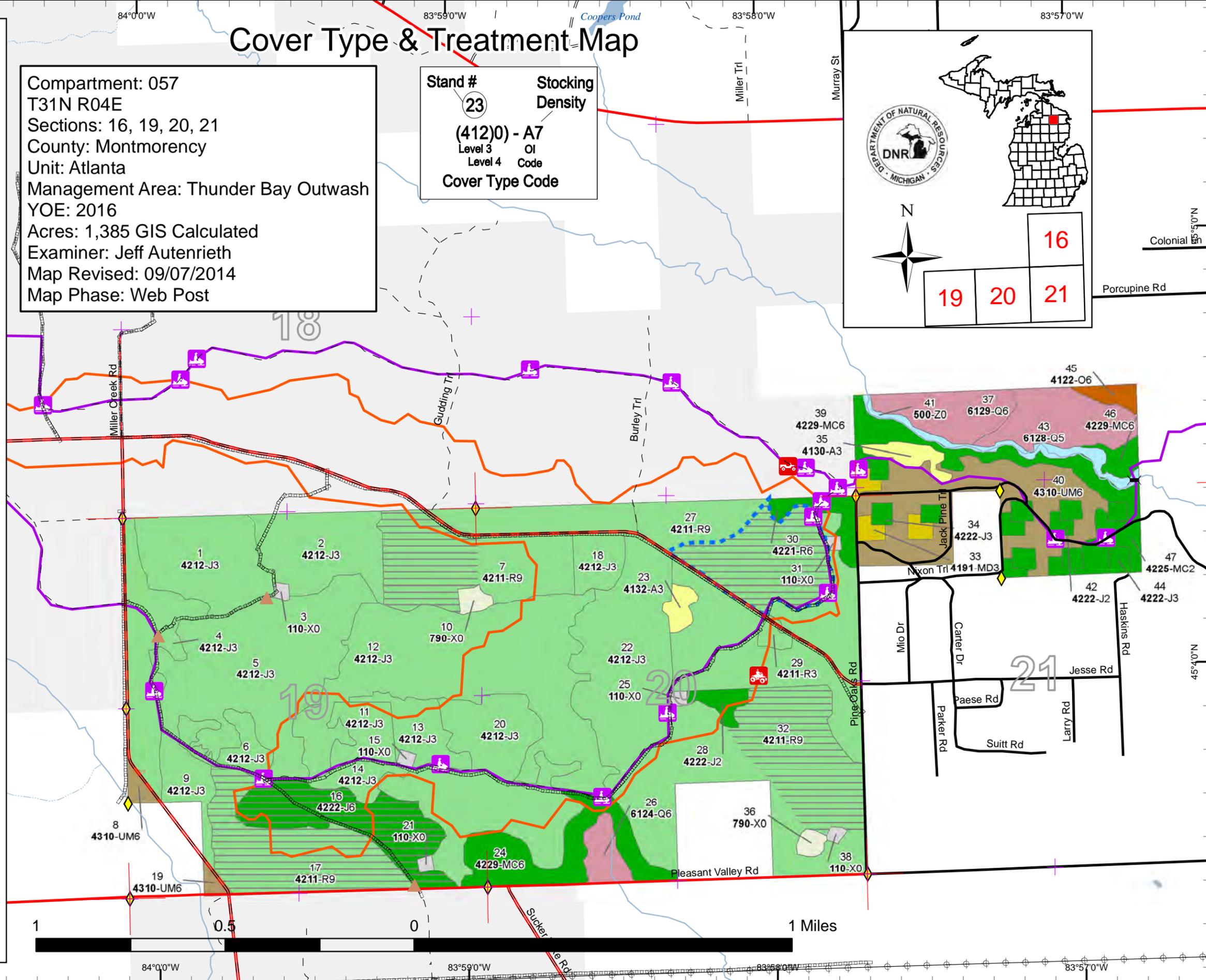
- Miris Corners
- + Remonumented Section Corners
- Type
- ▲ Berms
- ✕ Bridges
- ◆ PLSS Corner
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- - - Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Pipeline
- Powerline
- ORV Trails
- ORV Routes
- Snowmobile Trails
- ORV Trail
- Snowmobile Trail
- Planned Regeneration
- Natural
- Planted
- Treatments
- Clearcut (w/Reserves, Patch/Strip)
- Treatments w/ Site Condition
- Forest Stands
- Level 3
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Stands
- Level 3
- 110 - Low Intensity Urban
- 500 - Water
- 790 - Other Bare/Sparsely Vegetated
- Lakes and Rivers
- State Forest Land

Compartment: 057
 T31N R04E
 Sections: 16, 19, 20, 21
 County: Montmorency
 Unit: Atlanta
 Management Area: Thunder Bay Outwash
 YOE: 2016
 Acres: 1,385 GIS Calculated
 Examiner: Jeff Autenrieth
 Map Revised: 09/07/2014
 Map Phase: Web Post

Stand #
 23
 (412)0 - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

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 MICHIGAN

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 19 20 21



Stand Boundary Map

Legend

- Miris Corners
- + Remonumented Section Corners
- Type
- ▲ Berms
- ✕ Bridges
- ◆ PLSS Corner
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
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- 🚙 Snowmobile Trails
- ORV Trail
- Snowmobile Trail
- Stand Boundaries

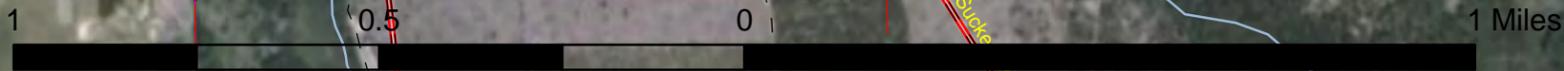
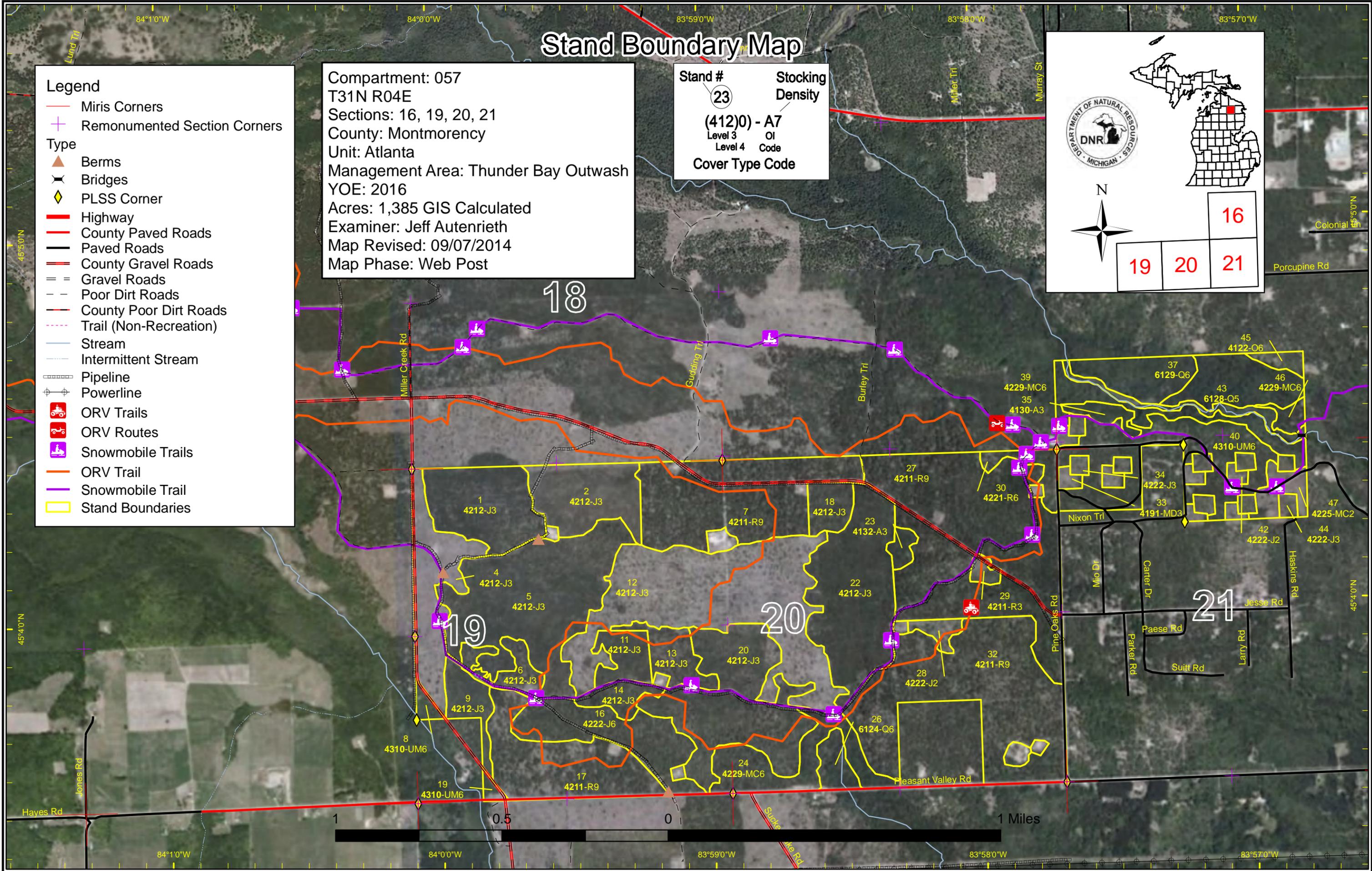
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Stand # **23** Stacking Density
(412)0 - A7
 Level 3 OI
 Level 4 Code
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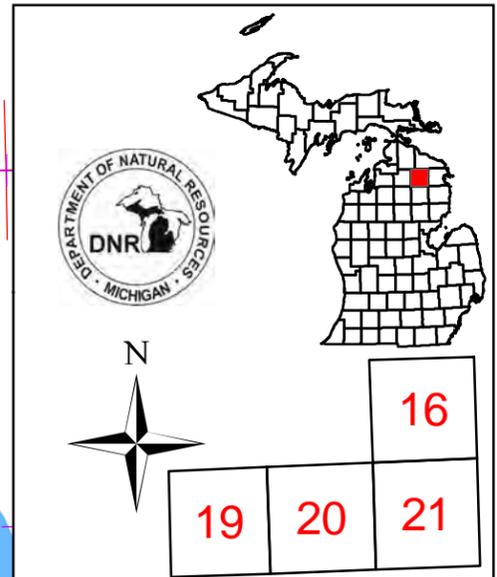
	16
19	20
	21



Special Conservation Areas & Site Conditions Map

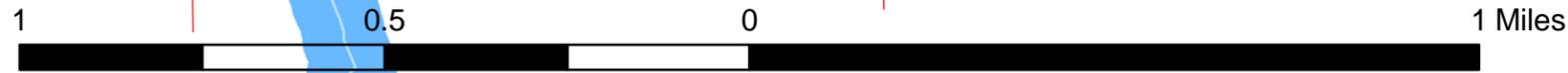
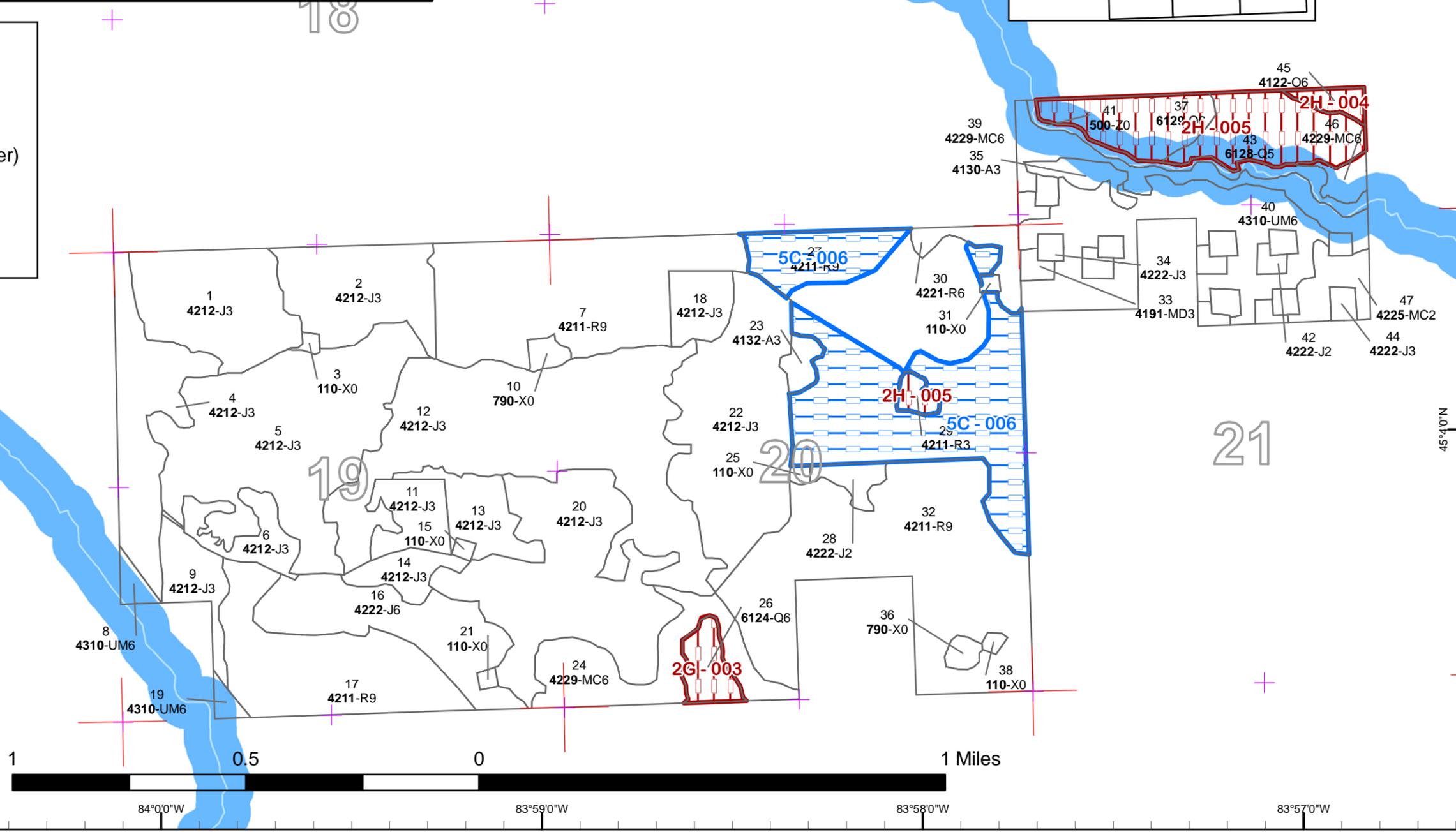
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 Map Revised: 09/07/2014
 Map Phase: Web Post

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
- Dedicated Special Conservation Areas
 - Cold Water Streams
 - High Priority Trout Stream Buffer



84°1'0"W 84°0'0"W 83°59'0"W 83°58'0"W 83°57'0"W

45°5'0"N

45°5'0"N

45°4'0"N

45°4'0"N

84°1'0"W

84°0'0"W

83°59'0"W

83°58'0"W

83°57'0"W

Report 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	0	0	7	5	0	0	0	0	0	0	0	0	0	0	12
Bare/Sparsely Vegetated	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Jack Pine	188	52	267	59	78	44	0	0	0	0	0	0	0	0	688
Lowland Conifers	0	0	0	0	0	0	0	0	0	54	10	0	0	0	64
Mixed Upland Deciduous	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
Natural Mixed Pines	11	0	0	0	36	0	0	5	0	23	0	0	0	0	75
Oak	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Red Pine	0	4	0	0	0	10	59	367	0	0	0	0	0	0	440
Upland Mixed Forest	0	0	0	0	0	0	0	71	0	0	0	0	0	0	71
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Total	222	63	274	64	114	54	59	443	5	77	10	0	0	0	1385



Report 2 – Proposed Treatment Summaries

Atlanta Mgt. Unit
Year of Entry 2016

Compartment 057
Total Compartment Acres: 1,385

Acres by Treatment Type

Commercial Harvest - 244 Tree Planting - 200 Other - 0
Habitat Cut - 0 Opening Maintenance - 0

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Natural Pines	44	0	0	0	0	0	44
Planted Pines	200	0	0	0	0	0	200
Total	244	0	0	0	0	0	244



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	54057007- Cut_small	36.6	42110 - Planted Red Pine	High Density Log	74	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Final harvest. Cut area south of Brush Creek Truck Trail, and west of access road to compression facility. Leave 3-10% of sale acres as retention. Chip all tops. Use 2" spec.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Trench and plant to red pine. Acceptable regen can be of medium/well stocked red pine.										
<u>Proposed Start Date:</u> 10/01/2015										
16	54057016-Cut	44.4	42220 - Natural Jack Pine	High Density Pole	55	81-110	Harvest	Clearcut	4310 - Pine, Oak Mix	Cmpt. Review Proposal
<u>Prescription:</u> Final harvest. Leave 3-10% retention in a pocket.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Trench and plant to jack pine. Acceptable regen can be of medium/well stocked pine, oak and aspen.										
<u>Proposed Start Date:</u> 10/01/2015										
17	54057017-Cut	58.8	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	64	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Final harvest. Cut north half of stand. Leave 3-10% retention as a pocket.										
<u>Other Comments:</u> Use standard trail specs.										
<u>Next Steps:</u> Trench and plant red pine. Acceptable regen can be of medium/well stocked red pine and oak.										
<u>Proposed Start Date:</u> 10/01/2015										
32	54057032- Cut_small	57.7	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	77	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Final harvest. Cut 1/4 of stand acreage. Leave 3-10% retention as a pocket. Cut north part of stand to buffer roads.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Trench and plant red pine. Acceptable regen can be of medium/well stocked red pine and oak.										
<u>Proposed Start Date:</u> 10/01/2015										
Total Treatment Acreage Proposed: 197.5										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
27 54057027- Cut_small_sm all	46.7	42110 - Planted Red Pine	High Density Log	77	171- 200	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Final harvest. Leave 3-10% retention in a pocket. Cut 1/4 of stand acreage.

Specs:

Other Use standard trail specs.

Comment:

Next Trench and plant red pine. Acceptable regen can be of medium/well stocked red pine and oak.

Steps:

Proposed

Start Date: 10/01/2015

Limiting Factor 5C: Delay treatment for age/size class diversity or exceptional site quality

**Total Treatment
Acreage Proposed: 46.7**

Report 5 – Site Conditions

Atlanta Mgt. Unit
Jeff Autenrieth : Examiner

Compartment 057
Year of Entry 2016

Availability for Management

Total Acres	Acres			Dominant Site Conditions			
	Available	Not Available		No	5C	2H	2G
12	12		Aspen	12			
688	688		Jack Pine	688			
64		64	Lowland Conifers			54	10
7	7		Mixed Upland Deciduous	7			
75	75		Natural Mixed Pines	75			
5		5	Oak			5	
439	435	4	Red Pine	326	109	4	
71	71		Upland Mixed Forest	71			
1,360	1,287	72	Total Forested Acres	1,179	109	62	10
	95%	5%	Relative Percent				

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
003	Not Available	2G: Too wet (sensitive soils, does not include access issues)	10				
Comments: Stand has wet soils, and also buffers creek.							
004	Not 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			
Comments:							
005	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	58	2B: Unknown if access through adjacent landowner(s) is possible	2G: Too wet (sensitive soils, does not include access issues)		
Comments: Stand is blocked on the south, west, and east side by the river, and on the north by private land.							

Report 5 – Site Conditions

Atlanta Mgt. Unit
Jeff Autenrieth : Examiner

Compartment 057
Year of Entry 2016

006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	109
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Comments:



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
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Comments



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.

ERA = Ecological Reference Area
 HCVA = High Conservation Value Area
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.

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Atlanta Mgt. Unit

Report 8 – Forested Stands

Compartment: 057
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42120 - Planted Jack Pine	High Density Sapling	46.4	33		
42120 - Planted Jack Pine	High Density Sapling	40.0	16		
42120 - Planted Jack Pine	High Density Sapling	42.5	6		
42120 - Planted Jack Pine	High Density Sapling	105.7	21		
42120 - Planted Jack Pine	High Density Sapling	14.2	20		
42110 - Planted Red Pine	High Density Log	87.1	74	141-170	
4310 - Pine, Oak Mix	High Density Pole	3.5	73	81-110	Stand slopes to west significantly. Adjacent stand to the west is low and very wet. "Q" type.
42120 - Planted Jack Pine	High Density Sapling	14.7	26		
42120 - Planted Jack Pine	High Density Sapling	14.8	20		
42120 - Planted Jack Pine	High Density Sapling	132.4	5		
42120 - Planted Jack Pine	High Density Sapling	17.5	20		Trenched and planted under red pine leave trees. No red pine regen.
42120 - Planted Jack Pine	High Density Sapling	10.4	21		New stand added.
42220 - Natural Jack Pine	High Density Pole	44.4	55	81-110	
42111 - Planted Red Pine, Mixed Deciduous	High Density Log	58.8	64	141-170	Jack pine removal cut.
42120 - Planted Jack Pine	High Density Sapling	12.5	37		Failed part of plantation? 7 yrs younger than adjacent stand.
4310 - Pine, Oak Mix	High Density Pole	2.5	74	51-80	
42120 - Planted Jack Pine	High Density Sapling	84.0	23		budworm cut '91
42120 - Planted Jack Pine	High Density Sapling	78.2	44		



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4132 - Aspen, Jack Pine	High Density Sapling	4.9	33		Aspen clone result from adjacent harvest.
24	42290 - Natural Mixed Pine	High Density Pole	35.9	45	111-140	
26	6124 - Lowland Spruce- Fir	High Density Pole	10.1	105		
27	42110 - Planted Red Pine	High Density Log	155.7	77	171-200	Aspen in pockets. Possible species removal cut in past.
28	42220 - Natural Jack Pine	Medium Density	5.8	21		
29	42110 - Planted Red Pine	High Density Sapling	3.8	16		Stand swapped from Non-Forested to Forested. Good oak recruits.
30	42210 - Natural Red Pine	High Density Pole	10.0	57	1-50	New stand added. Red pine left after harvest. Regeneration from coppice.
32	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	124.3	77	81-110	Previous species removal harvest. Aspen clones regenerating in pockets where over story was removed. Density of remaining trees varies significantly.
33	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	6.9	17		5 spot.
34	42220 - Natural Jack Pine	High Density Sapling	5.6	7		
35	4130 - Aspen	High Density Sapling	6.8	28		
37	6129 - Mixed Coniferous Lowland Forest	High Density Pole	23.6	94		Very wet area. Limited access. No access through state land other than by foot. There are some drainages and areas of standing water. Steep slopes down to river. Some blowdown, and slash in areas. Old trail coming from private land.
39	42290 - Natural Mixed Pine	High Density Pole	23.2	94	51-80	Steep slopes down to river. Check cold stream requirements.
40	4310 - Pine, Oak Mix	High Density Pole	64.7	79	81-110	Very old poor quality oak. 5 spots showed ok oak regeneration.
42	42220 - Natural Jack Pine	Medium Density	7.2	7		
43	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	30.2	94		Cherry/aspen saplings on edges and few small high areas. Stand has flowing/standing water. Mostly wet. Cedar is in pockets. Most of stand has tag alder understory component.
44	42220 - Natural Jack Pine	High Density Sapling	12.1	17		

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Atlanta Mgt. Unit

Report 8 – Forested Stands

Compartment: 057
Year of Entry: 2016



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
45	4122 - Oak, Pine	High Density Pole	4.8	85	81-110	
46	42290 - Natural Mixed Pine	High Density Pole	5.0	70	111-140	The best jack pine I've seen in the Atlanta unit. Snowmobile trail cuts stand.
47	42250 - Pine, Oak	Medium Density	11.2	7		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	11 - Low Intensity Urban	1.1	No	Unspecified	Well pad
10	790 - Other Bare/Sparsely Vegetate	3.3	No	Unspecified	
15	11 - Low Intensity Urban	1.1	No	Unspecified	Well pad
21	11 - Low Intensity Urban	1.0	No	Unspecified	Well pad
25	11 - Low Intensity Urban	1.0	No	Unspecified	Well pad
31	11 - Low Intensity Urban	1.0	No	Unspecified	Well pad
36	790 - Other Bare/Sparsely Vegetate	2.9	No	Unspecified	Frost pocket.
38	11 - Low Intensity Urban	1.1	Unspecified	Unspecified	Well pad
41	50 - Water	10.6	No	Unspecified	Brush Creek