



ATLANTA FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION
COMPARTMENT 56 ENTRY YEAR: 2014

Compartment Acreage: 954 County: Montmorency

Revision Date: July 9, 2012

Stand Examiner: Chad Fate

Legal Description: T31N, R4E, Sec. 17 & 18.

Management Area: Thunder Bay Outwash

Management Goals: Antrim Gas, timber, recreational snowmobile trails, Orv trails, and wildlife habitat.

Soil and Topography: Mostly flat outwash plains with grayling and rubicon sands. There are some steep hills sloping down to Brush Creek and Coopers Creek.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Private property to the north along Brush Creek. Private property to the east. All State land to the south and west. There are many gas wells and pipelines in and around the compartment.

Unique, Natural Features (include only non-site specific and non-sensitive information): None listed.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None Listed. However, there is an old Dam and mill site near juncture of Cooper and Brush Creek.

Special Management Designations or Considerations: Recreation Trails (snowmobile and ORV). Cold water stream. Jack Pine Budworm in the past.

Watershed and Fisheries Considerations: Brush Creek and Coopers Creek.

Wildlife Habitat Considerations: Compartment 56 is primarily upland conifer, aspen, some oak, and a drainage system with lowland brush, hardwoods, and conifers. The majority of the compartment is jack pine in various age classes as a result of past management practices. Openings have either been planted to jack pine or are converting naturally to jack pine and upland brush. It was recommended in the last review period that most openings should be allowed to convert to upland brush to enhance type diversity. Soils are sandy, making management in meadow or food and cover crops difficult. Therefore the recommendation made in the previous review period will continue into this review period. Kirtland's warbler (KW) is found in some of the jack pine stands, though this is not officially part of the Clear Lake KW Management Area. Other featured species found in this compartment include white-tailed deer, black bear, ruffed grouse, American woodcock, and snowshoe hare. The area along Brush Creek has potential to be suitable for eastern massasauga rattlesnakes and red-shouldered hawks.

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, which is quarried for clay/shale elsewhere in the State. The nearest gravel pit lies less than one mile to the east. The potential in the compartment appears to be good. The western portion of the compartment has been drilled and is producing from the Antrim Shale. Additional drilling is possible; however, the Antrim Shale is pinching out in this area. Most of this compartment is leased.

Vehicle Access: Adequate.

Survey Needs: No survey needs are required.

Recreational Facilities and Opportunities: Snowmobile trail, ORV trail, trail head parking lot, hunting, and fishing.

Fire Protection: Adequate.

Additional Compartment Information: There are a few trash piles scattered throughout. Some illegal deer blinds. Illegal ORV use in the north east part of the compartment and crossing Brush Creek.

- **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**

Cover Type & Treatment Map

Compartment: 56
 T31N R04E Sec. 17, 18
 County: Montmorency
 Unit: Atlanta
 YOE: 2014
 Acres: 955 GIS Calculated
 Examiner: Chad Fate
 Map Revised: 08/17/2012
 Map Phase: Pre-Review

18 17
 N
 DNR
 DEPARTMENT OF NATURAL RESOURCES
 MICHIGAN

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- Remonumented Section Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Pipeline
- Stream
- Intermittent Stream
- Lakes and Rivers
- ORV Trails
- ORV Routes
- Snowmobile Trails
- ORV Trail
- ORV Route
- Snowmobile Trail

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)

Forest Stands

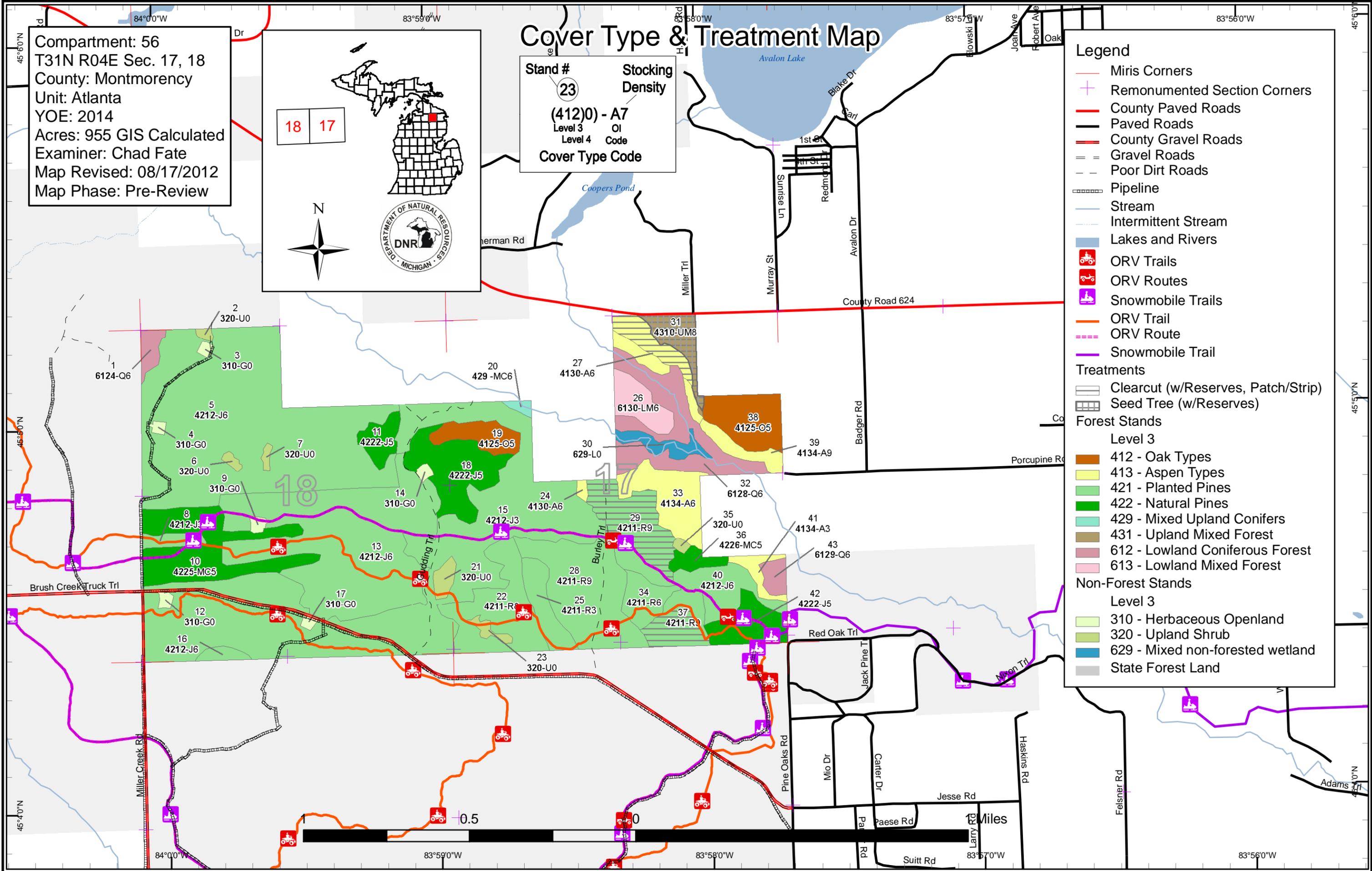
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

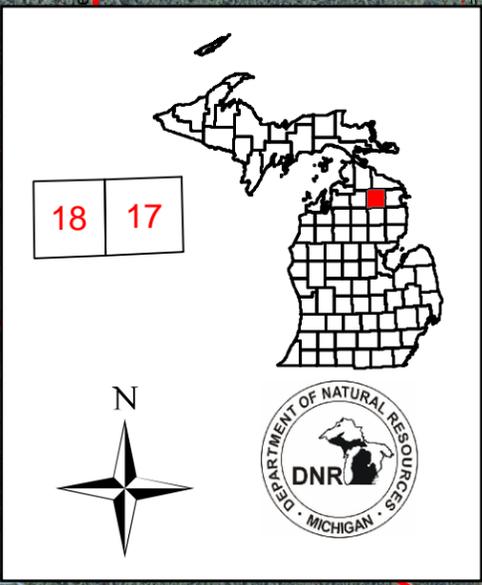
Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 629 - Mixed non-forested wetland
- State Forest Land



Stand Boundary Map

Compartment: 56
 T31N R04E Sec. 17, 18
 County: Montmorency
 Unit: Atlanta
 YOE: 2014
 Acres: 955 GIS Calculated
 Examiner: Chad Fate
 Map Revised: 08/17/2012
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- Remonumented Section Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Stream
- Intermittent Stream
- Pipeline
- ORV Trails
- ORV Routes
- Snowmobile Trails
- ORV Trail
- ORV Route
- Snowmobile Trail
- Stand Boundaries

Forest Stands

Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 629 - Mixed non-forested wetland

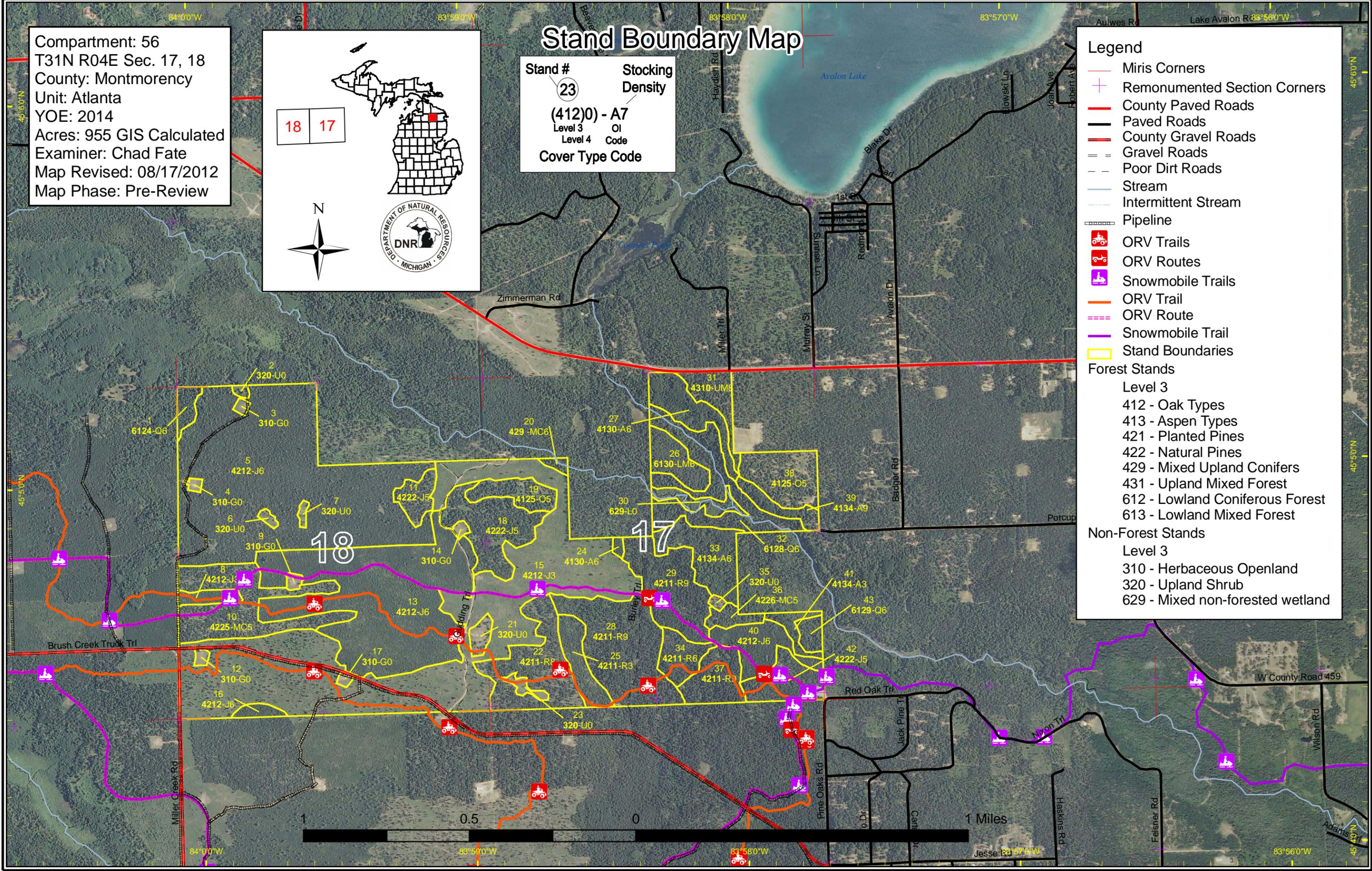


Table 1 – Total Acres by Cover Type and Age Class



	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	5	1	39	0	0	0	7	0	0	0	0	0	53
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Jack Pine	199	123	18	217	16	0	0	0	0	0	0	0	0	0	573
Lowland Conifers	0	0	0	0	0	0	5	0	37	5	0	0	0	0	46
Lowland Mixed Forest	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12
Lowland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Natural Mixed Pines	0	0	42	0	0	0	5	0	0	0	0	0	0	0	47
Oak	0	0	11	21	0	0	0	0	0	0	0	0	0	0	32
Red Pine	0	0	23	0	0	0	99	32	0	0	0	0	0	0	154
Upland Conifers	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11
Upland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	223	123	99	252	56	0	109	32	46	16	0	0	0	0	955



Table 2 – Proposed Treatment Summaries

Atlanta Mgt. Unit
Year of Entry 2014

Compartment 056
Total Compartment Acres: 954.5

Acres by Treatment Type

Commercial Harvest - 58	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen	10	0	0	0	0	0	10
Red Pine	37	0	0	0	0	0	37
Upland Mixed Forest	0	0	11	0	0	0	11
Total	47	0	11	0	0	0	58



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
27	54056027-Cut	9.8	4130 - Aspen	High Density Pole	42	81-110	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription:</u> Harvest all species except leave all red and white pine. Retention is left in a 300 ft buffer along Brush Creek. No additional retention required.</p> <p><u>Specs:</u> Use grouse drumming log spec.</p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Acceptable regeneration is medium to high density aspen with mixed pine.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

29	54056029-Cut	25.9	42110 - Planted Red Pine	High Density Log	78	111-140	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Harvest all species and leave large diameter red pine that meet the "Legacy Tree" specifications of 26" DBH or larger. Only cut the north side of the snowmobile trail. No additional retention is needed at this time. Leave all aspen to die naturally and provide snags. Whole tree chip to help facilitate planting. Use 6" spec. for stump heights. Use trail spec.</p> <p><u>Other Comments:</u> In the future when the area south of the snowmobile trail is treated, make sure to leave 3-10% retention for the entire parent stand.</p> <p><u>Next Steps:</u> Trench and plant to Red Pine. Mechanical and/or burn treatments may be necessary to accomplish planting operations. Chemical applications may be necessary to eliminate competition and achieve the management objective. Acceptable regeneration is a medium to well stocked stand of red pine.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

31	54056031-Cut	11.1	4310 - Pine, Oak Mix	Medium Density Log	91	1-50	Harvest	Seed Tree with Reserves	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription:</u> Cut all trees except leave 10 BA of well developed oak and 10 BA of red and white pine. Cut with snow off and whole tree skid to scarify the soil and chip the tops. Leave 3-10% retention in pockets along the north side of the stand.</p> <p><u>Other Comments:</u> There is illegal ORV use throughout this stand. Berm/block access from County Rd 624.</p> <p><u>Next Steps:</u> Acceptable regeneration is a medium to high density mix of aspen, oak, and pine. Regen Check. If natural regen fails, trench and plant with red pine.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

37	54056037-Cut	10.8	42110 - Planted Red Pine	High Density Log	65	111-140	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Harvest all species and leave large diameter red pine that meet the "Legacy Tree" specifications of 26" DBH or larger. Only cut the portion of the stand south of the Atlanta ORV Trail. No additional retention is necessary at this time. Leave all aspen to die naturally and provide snags. Whole tree chip to help facilitate planting. Use 6" stump height spec. Use trail spec.</p> <p><u>Other Comments:</u> In the future when the area north of the orv trail is treated, make sure to leave 3-10% retention for the entire parent stand.</p> <p><u>Next Steps:</u> Trench and plant to Red Pine. Mechanical and/or burn treatments may be necessary to accomplish planting operations. Chemical applications may be necessary to eliminate competition and achieve the management objective. Acceptable regeneration is a medium to well stocked stand of red pine.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

**Total Treatment
Acreage Proposed: 57.7**

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	-----------	--------------	-----------	----------	----------------	------------------	----------------------	-----------------

#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Error

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

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

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
54002031-N-CCR Burn/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

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 Steps: 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.

Proposed Start Date: 10/01/2010

54002031-N-CCR Burn/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
--	-----	---------------------------	-------------------	----	--	---------	------------------------	--	------------------------------------

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 Steps: 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.

Proposed Start Date: 10/01/2010

**Total Treatment
Acreage Proposed: 5.8**

Stand	Atlanta Mgt. Unit		5 – Forested Stands			Compartment: 056	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
1	6124 - Lowland Spruce-Fir	High Density Pole	4.7	60			stand is small in size. leave for diversity.
5	42120 - Planted Jack Pine	High Density Pole	177.1	33			
8	42120 - Planted Jack Pine	High Density Sapling	4.6	18			
10	42250 - Pine, Oak	Medium Density Pole	41.7	29			
11	42220 - Natural Jack Pine	Medium Density Pole	8.1	33	1-50		
13	42120 - Planted Jack Pine	High Density Pole	118.2	18			fire hazard/salvage cut in 1991 from outbreak of jack pine bud worm.
15	42120 - Planted Jack Pine	High Density Sapling	198.5	6			
16	42120 - Planted Jack Pine	High Density Pole	3.3	33			
18	42220 - Natural Jack Pine	Medium Density Pole	28.8	39	1-50		
19	4125 - Black, N. Pin Oak	Medium Density Pole	11.4	25			New stand added.
20	429 - Mixed Upland Conifers	High Density Pole	1.7	80	171-200		too steep
22	42110 - Planted Red Pine	Medium Density Log	34.5	68	51-80		Stand was thinned in 2004 by harvesting all species except oak and red pine.
24	4130 - Aspen	High Density Pole	1.1	35			
25	42110 - Planted Red Pine	High Density Sapling	12.3	25			
26	6130 - Fir, Aspen, Maple	High Density Pole	12.2	37			
27	4130 - Aspen	High Density Pole	16.7	42	81-110		
28	42110 - Planted Red Pine	High Density Log	48.6	66	111-140		
29	42110 - Planted Red Pine	High Density Log	31.9	78	111-140		



S
t
a
n
d

Atlanta Mgt. Unit

5 – Forested Stands

Compartment: 056
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	4310 - Pine, Oak Mix	Medium Density Log	11.3	91	1-50	illegal orv use
32	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	36.6	80	141-170	Cooper creek and Brush creek meet and flow through the stand. illegal orv crossing the creek where the old bridge was located.
33	4134 - Aspen, Spruce/Fir	High Density Pole	22.8	40		
34	42110 - Planted Red Pine	High Density Pole	10.8	26	51-80	under planted in 1986
36	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	5.1	65		
37	42110 - Planted Red Pine	High Density Log	16.0	65	111-140	tall large diameter rp.
38	4125 - Black, N. Pin Oak	Medium Density Pole	21.0	38	1-50	illegal orv use, party spot
39	4134 - Aspen, Spruce/Fir	High Density Log	7.4	83		Stand contains a steep bank of the creek. Too steep to harvest.
40	42120 - Planted Jack Pine	High Density Pole	17.8	26		
41	4134 - Aspen, Spruce/Fir	High Density Sapling	5.1	25		
42	42220 - Natural Jack Pine	Medium Density Pole	16.2	45	51-80	snowmobile trail and orv trail through stand. lots of illegal trails throughout.
43	6129 - Mixed Coniferous Lowland Forest	High Density Pole	4.6	92	141-170	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	3205 - Mixed Upland Shrub	1.0	No	Unspecified	
3	3102 - Grass	1.0	No	Unspecified	gas well
4	3102 - Grass	1.0	No	Unspecified	gas well
6	3205 - Mixed Upland Shrub	1.2	No	Unspecified	
7	3205 - Mixed Upland Shrub	1.1	No	Unspecified	
9	3102 - Grass	1.3	No	Unspecified	gas well
12	3102 - Grass	1.2	No	Unspecified	gas well
14	3102 - Grass	1.1	No	Unspecified	gas well
17	3102 - Grass	1.1	No	Unspecified	gas well
21	3205 - Mixed Upland Shrub	3.7	No	Unspecified	gas well in the center with scattered jack pine and oak brush
23	3205 - Mixed Upland Shrub	2.4	No	Unspecified	Shrub with scattered jack pine and oaks
30	629 - Mixed non-forested wetland	7.2	No	Unspecified	tag alder with creek flowing through it.
35	3205 - Mixed Upland Shrub	1.0	No	Unspecified	



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



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.

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

Conservation Area	Type	Description
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.