ATLANTA FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 85 ENTRY YEAR: 2012

Compartment Acreage: 1679 County: Alpena

Revision Date: October 26, 2010

Stand Examiner: Cody Stevens

Legal Description: T29N R09E Sec 29, 30, 31, 32 & 33

RMU (if applicable): Alpena Lake Plain

Management Goals:
The main goal in this compartment is to conduct multiple resource management for the good of the citizens of the State of Michigan.

Soil and Topography:
The topography of the compartment is low wet ground with some high ground on the east edge and the dominate cover types are cedar, spruce and tamarack in the low ground and aspen on the higher ground.

Ownership Patterns, Development, and Land Use in and Around the Compartment:
The compartment has some private parcels scattered throughout. The compartment has some recreational use by ORVs & snowmobiles on the higher ground.

Unique, Natural Features:
Some species are present in and around the compartment.

Archeological, Historical, and Cultural Features.
None known at this time.

Special Management Designations or Considerations:
None at this time.

Watershed and Fisheries Considerations:
Fisheries Concerns:

Wildlife Habitat Considerations:
This compartment is dominated by cedar, spruce and tamarack swamp with aspen found on uplands. Game species likely to be present in this compartment include white-tailed deer, black bear, coyote, red fox, bobcat, ruffed grouse, beaver, and snowshoe hare. Additional species with potential to be present include northern saw-whet owl, common raven, northern short-tailed shrew, long-tailed weasel, deer mouse, black-capped chickadee, red-breasted nuthatch, downy woodpecker, northern brown snake, and broad-winged hawk. Harvests proposed in aspen will result in increased food and cover available for deer and grouse as well as others dependent on early-successional forests (e.g. chestnut-sided warbler, indigo bunting, and long-tailed weasel).

Mineral Resource and Development Concerns and/or Restrictions:
Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 50 and 400 feet. Beneath the glacial drift is the Devonian Antrim Shale. There is no known economic use for the Antrim Shale. A gravel pit is located in the southwest corner of Section 31, but potential is considered limited, except Section 31 (good). This area has had limited drilling to date. The Antrim Shale is pinching out in this area. The closest Antrim well is 1 mile to the west. To the northeast is PdC (deep) production. This field, Hardwood Point, has produced over 1.8 Bcf gas. There are several leases for oil & gas exploration in the compartment, mostly associated with the deep play. The north half of Section 34 is nominated for the May 2010 O&G lease auction.

Vehicle Access:
This compartment is accessed from two County Roads: Tolan Road and Sand Hill Road. There are limited two tracks for traversing the area.

Survey Needs:
None needed at this time.

Recreational Facilities and Opportunities:
There are many opportunities for hunting, fishing and wildlife viewing in the area.

Fire Protection:
Fire response to the compartment will be covered by the Alpena DNR office as well as the Sanborn Fire Department.

Additional Compartment Information:

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - **Cover Type by Age Class**
  - **Cover Type by Management Objective**
  - **Compartment Volume Summary**
  - **Proposed Treatments – No Limiting Factors**
  - **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
  - **Base feature information, stand numbers, cover types**
  - **Proposed treatments**
  - **Proposed road access system**
  - **Suggested potential old growth**

Cover Type & Treatment Map

Compartment 85
T29N, R09E, Sec. 29, 30, 31, 32 & 33
County: Alpena
Unit: Atlanta
YOE: 2012
Acres: 1,679 GIS Calculated
Stand Examiner: Cody Stevens
Map Revised: 8/16/2010
Map Phase: Pre-Review

Legend

- Miris Corners
- Highway
- Paved Roads
- Poor Dirt Roads
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 623 - Emergent Wetland

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

30 29 31 32 33

Michigan DNRE

1 0.5 0 1 Miles

83°24'0"W 83°23'0"W 83°22'0"W 83°21'0"W 83°25'0"W 44°53'0"N 44°52'0"N

Brousseau Rd N Sand Hill Rd North Branch Black River 23

30 29 31 32 33

1 6120-C9; 2 6116-B6; 3 6121-T6; 4 6120-C6; 5 6116-B6; 6 6120-C9; 7 6120-C7; 8 622-L0; 9 6120-C6; 10 6118-E6; 11 4130-A6; 12 6121-T6; 13 623-N0; 14 4130-A9; 15 623-N0; 16 6121-T6; 17 6120-C8; 18 622-L0; 19 6120-C6; 20 6129-Q5; 21 4130-A3; 22 310-G0; 23 6112-P6; 24 6119-E9; 25 6120-C8; 26 310-G0; 27 6112-P3; 28 4139-A9; 29 622-L0; 30 4131-A9; 31 6120-C9; 32 6120-C8; 33 6116-B9; 34 622-L0; 35 4226-MC9; 36 6122-S6; 37 622-L0; 38 6121-T6; 39 6120-C6; 40 4130-A9; 41 623-N0; 42 6120-C4; 43 622-L0; 44 4131-A6; 45 6120-C6; 46 6120-C5; 47 622-L0; 48 6128-Q5; 49 4123-O9; 50 6120-C9; 51 6120-C6; 52 622-L0; 53 4130-A6; 54 6111-P3; 55 4221-R9; 56 6120-C9; 57 6115-E5; 58 4130-A6

Stand Boundary Map

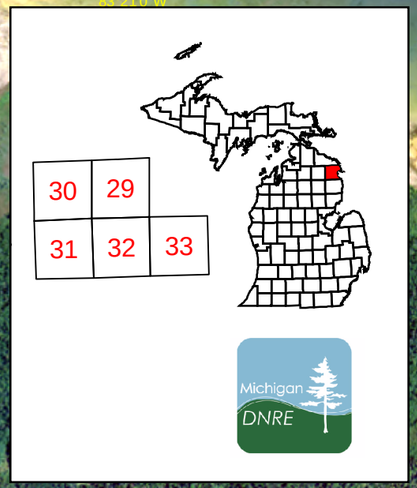
Compartment 85
T29N, R09E, Sec. 29, 30, 31, 32 & 33
County: Alpena
Unit: Atlanta
YOE: 2012
Acres: 1,679 GIS Calculated
Stand Examiner: Cody Stevens
Map Revised: 8/16/2010
Map Phase: Pre-Review

Legend

- Miris Corners
- Highway
- Paved Roads
- Poor Dirt Roads
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

Forest Stands
- Level 3
  - 412 - Oak Types
  - 413 - Aspen Types
  - 422 - Natural Pines
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest

Non-Forest Stands
- Level 3
  - 310 - Herbaceous Openland
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland



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

1 0.5 0 1 Miles

83°25'0"W 83°24'0"W 83°23'0"W 83°22'0"W 83°21'0"W 44°53'0"N 44°52'0"N

Dedicated & Proposed Special Conservation Area Map

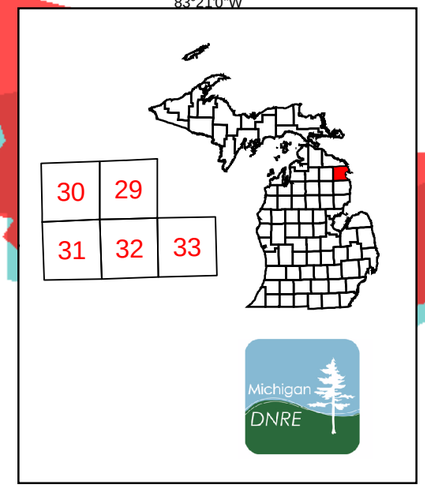
Compartment 85
T29N, R09E, Sec. 29, 30, 31, 32 & 33
County: Alpena
Unit: Atlanta
YOE: 2012
Acres: 1,679 GIS Calculated
Stand Examiner: Cody Stevens
Map Revised: 8/16/2010
Map Phase: Pre-Review

Legend
- Miris Corners
- Stand Boundaries

Forest Stands
- Level 3
  - 412 - Oak Types
  - 413 - Aspen Types
  - 422 - Natural Pines
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest

Non-Forest Stands
- Level 3
  - 310 - Herbaceous Openland
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland

Dedicated Special Conservation Area
- Cold Water Streams
- Ecological Reference Areas
- Coastal Environmental Areas



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

30 29 31 32 33

19 **6120**-C6
23 **6112**-P6
11 **4130**-A6
8 **622**-L0
21 **4130**-A3
14 **4130**-A9
30 **4131**-A9
35 **4226**-MC9
4 **6120**-C6
3 **6121**-T6
1 **6120**-C9
2 **6116**-B6
32 **6120**-C8
12 **6121**-T6
13 **623**-N0
17 **6120**-C8
40 **4130**-A9
7 **6120**-C7
6 **6120**-C9
15 **623**-N0
42 **6120**-C4
44 **4131**-A6
50 **6120**-C9
5 **6116**-B6
20 **6129**-Q5
38 **6121**-T6
49 **4123**-O9
54 **6111**-P3
10 **6118**-E6
9 **6120**-C6
16 **6121**-T6
48 **6128**-Q5
53 **4130**-A6
56 **6120**-C9
18 **622**-L0
37 **622**-L0
39 **6120**-C6
51 **6120**-C6
22 **310**-G0
36 **6122**-S6
46 **6120**-C5
57 **6115**-E5
31 **6120**-C9
25 **6120**-C8
33 **6116**-B9
41 **623**-N0
43 **622**-L0
27 **6112**-P3
28 **4139**-A9
45 **6120**-C6
47 **622**-L0
55 **4221**-R9
58 **4130**-A6
34 **622**-L0
52 **622**-L0
29 **622**-L0
26 **310**-G0
24 **6119**-E9

1 0.5 0 1 Miles

83°25'0"W 83°24'0"W 83°23'0"W 83°22'0"W 83°21'0"W
44°53'0"N 44°52'0"N

Table 1 – Total Acres by Cover Type and Age Class

Atlanta Mgt. Unit **Compartment 085 Year of Entry 2012**

Data updated before 2:00 PM

Age Class

	Non-Forested	1-9	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	Total
Aspen	0	0	71	34	23	79	0	68	13	15	0	0	0	0	0	**303**
Cedar	0	0	0	0	0	0	0	0	0	82	25	385	114	0	0	**605**
Herbaceous Openland	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
Lowland Aspen/Balsam Poplar	0	0	8	61	4	0	0	0	0	0	0	0	0	0	0	**72**
Lowland Conifers	0	0	0	0	0	0	0	0	0	81	0	72	0	0	0	**153**
Lowland Deciduous	0	0	0	0	0	0	0	0	0	30	14	13	0	0	0	**57**
Lowland Shrub	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	**6**
Marsh	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	**17**
Oak	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	**12**
Paper Birch	0	0	0	0	24	0	0	0	0	6	0	0	0	0	0	**29**
Red Pine	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	**43**
Tamarack	0	0	0	0	0	0	0	0	0	39	0	240	0	0	0	**280**
Total	**102**	**0**	**79**	**94**	**51**	**79**	**0**	**68**	**56**	**282**	**38**	**716**	**114**	**0**	**0**	**1679**

Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Atlanta Mgt. Unit
Year of Entry 2012

Compartment 085
Total Compartment Acres: 1679

Acres by Treatment Type

Commercial Harvest - 96	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

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	96	0	0	0	0	0	**96**
Total	**96**	**0**	**0**	**0**	**0**	**0**	**96**

Table 3 -- Treatments Prescribed with No Limiting Factor

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
14	85014-C.Cut	35.4	4130 - Aspen	High Density Log	64	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal

Prescription Specs: clear cut leave scattered cedar.

Other Comments: Acceptable regen is any mix of aspen, maple and cedar. Trespass along West edge of stand.

Next Steps: Regen survey in 3-5 yrs after harvest.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28	85028-C.Cut	15.0	4139 - Aspen, Mixed Deciduous	High Density Log	87	Harvest	Clearcut	Aspen	Cmpt. Review Proposal

Prescription Specs: clear cut. no retention needed, similar species in adjacent stand which is to wet to harvest.

Other Comments: Acceptable regen is any mix of aspen and conifer.

Next Steps: Regen survey in 3-5 yrs after harvest.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
30	85030-C.Cut	32.2	4131 - Aspen, Oak	High Density Log	64	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal

Prescription Specs: clear cut leave scattered pine and oak residual.

Other Comments: Acceptable Regen is any mix of aspen, pine and oak.

Next Steps: Regen check in 3-5 yrs after harvest.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	85040-C.Cut	13.2	4130 - Aspen	High Density Log	76	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal

Prescription Specs: clear cut. no cut cedar and hemlock.

Other Comments: Acceptable regen is any mix of aspen, pine and oak.

Next Steps: Regen check in 3-5 yrs after harvest.

Total Treatment Acreage Proposed: 95.9

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: **0**

Data updated before 2:00 PM

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2012

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
022_St28C.Cut	25.0				Harvest	Clearcut with Reserves	Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: Cut with stand 14 in Compartment 24. Clear cut: In areas of heavy oak leave up to 10-20BA of oak and pine. In areas predominantly apsen only leave scattered oak.

Other Comments: Acceptable regen is any mix of aspen, oak and pine. Some white pine is present. Leave both a mix red and white oak. No retention is needed because leaving steep slope along northern edge of stand.

Next Steps: Regen survey 3-5 yrs after harvest.

54030_OutOfYOE-STR	1.2				Harvest	Seed Tree with Reserves	Natural Red Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: MMark red pine residual to average tree height spacing. Leave 10 BA white pine and all oak, if present. Paint in 2 chain wide buffer along High Country Pathway, using pathway as centerline. Allow whole tree skidding; require chipping of tops, with movement of tops to approved landings to be done concurrently with harvesting. Post sale: scarify sale area to regenerate red pine, but may exclude areas of heavy white pine regeneration.

Other Comments:

Next Steps: Continued scarification until full stocking of red pine is achieved.

54004_St8-Burn	12.1				Prescribed Burn	Unspecified	Red Oak	Cmpt. Review Proposal

Prescription Specs: Burn with adjacent stand in Compartment 24. Understory burn to remove red maple regeneration

Other Comments:

Next Steps: follow up with timber harvest next entry.

Total Treatment Acreage Proposed: **38.2**

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	High Density Log	46.7	102		nice cedar. birch and balsam mostly along west edge of stand. small strip cut in center of stand, regenerating to birch and ash.
2	6116 - Lowland Birch	High Density Pole	5.6	30		New stand added. old strip cuts in cedar stand. no cedar regen anywhere .
3	6121 - Tamarack	High Density Pole	25.3	84		scattered cedar and balsam fir, mainly in understory.
4	6120 - Lowland Cedar	High Density Pole	37.2	102		New stand added. short cedar, very wet with cat tails.
5	6116 - Lowland Birch	High Density Pole	18.3	30		scattered cedar.
6	6120 - Lowland Cedar	High Density Log	16.2	104		nice cedar, pockets of blow down.
7	6120 - Lowland Cedar	Low Density Log	17.0	110		New stand added. lots of open areas of swamp grass. real diverse stand.
9	6120 - Lowland Cedar	High Density Pole	97.0	110		nice cedar along west edge. scattered white pine. lots of blow down in sw corner of stand, mostly regenerating to ash.
10	6118 - Lowland Deciduous with Cedar	High Density Pole	12.7	104		New stand added. mix of mature cedar and young hdwd/aspen.
11	4130 - Aspen	High Density Pole	22.6	35		pocket of fir and spruce understory in center of stand.
12	6121 - Tamarack	High Density Pole	13.9	84		
14	4130 - Aspen	High Density Log	35.4	64		New stand added. mostly upland with low areas along sw.
16	6121 - Tamarack	High Density Pole	156.5	102		some areas of good timber, other areas are pretty wet with low quality. scattered white pine, birch and balsam fir.
17	6120 - Lowland Cedar	Medium Density Log	10.0	87		very wet
19	6120 - Lowland Cedar	High Density Pole	9.0	94		strip of upland along road with pine and aspen. center of stand low quality.
20	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	71.8	107		pockets of tagalder and cat-tails. very wet, not froze in february.
21	4130 - Aspen	High Density Sapling	71.4	14		small pocket of low ground along wilds rd. mix of species regenerating.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	6112 - Lowland Aspen	High Density Pole	4.3	34		scattered hemlock and fir in understory.
24	6119 - Mixed Lowland Deciduous Forest	High Density Log	13.8	92		New stand added. drainage runs through entire stand. edge of stand could be cut. treat with stands to west.
25	6120 - Lowland Cedar	Medium Density Log	4.6	109		New stand added. very wet.
27	6112 - Lowland Aspen	High Density Sapling	60.6	25		
28	4139 - Aspen, Mixed Deciduous	High Density Log	15.0	87		New stand added. aspen ridges and edge of swale.
30	4131 - Aspen, Oak	High Density Log	32.2	64		oak mainly in north. lots of rocks on surface.
31	6120 - Lowland Cedar	High Density Log	51.8	109		nice stand of cedar. road through west edge of stand.
32	6120 - Lowland Cedar	Medium Density Log	7.4	87		Stand swapped from Non-Forested to Forested.
33	6116 - Lowland Birch	High Density Log	5.5	86		New stand added.
35	42260 - Natural Pine, Mixed Deciduous	High Density Log	17.5	81	111-140	New stand added. older pine with younger aspen.
36	6122 - Black Spruce	High Density Pole	6.4	102		New stand added.
38	6121 - Tamarack	High Density Pole	83.9	102		New stand added. wet, especially along north edge.
39	6120 - Lowland Cedar	High Density Pole	63.6	104		old deer blind in middle of stand.
40	4130 - Aspen	High Density Log	13.2	76		New stand added. old foundations in small opening at south end of stand.
42	6120 - Lowland Cedar	Low Density Pole	38.1	104		wet, very short cedar.
44	4131 - Aspen, Oak	High Density Pole	29.7	42		pockets of hemlock along swamp edge.
45	6120 - Lowland Cedar	High Density Pole	30.2	104		huge deer blind in sw corner. scattered white pine and b. fir. spruce mainly in west edge of stand.
46	6120 - Lowland Cedar	Medium Density Pole	96.5	104		standing water throughout stand.....

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	81.2	86		Stand swapped from Non-Forested to Forested. very wet. headwaters of black river.
49	4123 - Red Oak	High Density Log	11.6	84	81-110	New stand added. oak has poor form.
50	6120 - Lowland Cedar	High Density Log	12.2	97		ash and bam along east edge. illegal trail and gate out to rr grade.
51	6120 - Lowland Cedar	High Density Pole	64.8	86		scattered white pine and red maple. short heights. 2-3 stick.
53	4130 - Aspen	High Density Pole	49.4	40		pocket of pine in center of stand. bigger diameters along east edge. scattered pine and red maple regen.
54	6111 - Lowland Balsam Poplar	High Density Sapling	7.5	14		New stand added.
55	42211 - Natural Red Pine, Mixed Deciduous	High Density Log	42.6	70	81-110	mix of mature pine with younger aspen.
56	6120 - Lowland Cedar	High Density Log	3.4	97		small stand of cedar, good wildlife cover.
57	6115 - Lowland Ash	Medium Density Pole	30.2	85		Stand swapped from Non-Forested to Forested. mix of lowland hdwd. pockets of tagalder mixed in.
58	4130 - Aspen	High Density Pole	33.7	25		mix of ridges and low ground, some scattered pine in understory. scattered mature oak.

6 – Nonforested Stands

Data updated before 2:00 PM

Compartment: 085
Year of Entry: 2012

Stand	Cover Type	Acres	Gen Cmts:
8	622 - Lowland Shrub	3.3	
13	623 - Emergent Wetland	1.9	New stand added.
15	623 - Emergent Wetland	6.5	Stand swapped from Forested to Non-Forested.
18	622 - Lowland Shrub	2.5	New stand added.
22	310 - Herbaceous Openland	23.9	
26	310 - Herbaceous Openland	15.9	
29	622 - Lowland Shrub	5.3	
34	622 - Lowland Shrub	5.5	New stand added.
37	622 - Lowland Shrub	6.2	
41	623 - Emergent Wetland	2.0	
43	622 - Lowland Shrub	8.4	
47	622 - Lowland Shrub	9.2	
52	622 - Lowland Shrub	10.9	

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.

Data updated before 2:00 PM

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.

Data updated before 2:00 PM

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.