CADILLAC FOREST MANAGEMENT UNIT

COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 124 ENTRY YEAR: 2014

County: Missaukee

Revision Date: 10/09/2012 2:21 PM

Stand Examiner: Steven Eisele, Forest Technician

Legal Description: T24N, R7W, Sections 3, 4, 5, and 6

Management Goals: Maintain species and age class diversity. Habitat /Vegetative with emphasis on timber.

Soil and Topography: Mostly Rubicon and Kalkaska sands. Terrain is rolling and hilly but levels out near streams and tributaries.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Mix of state and private parcels. Sections 3 and 6 are solid state ownership. Sections 4 and 5 have various private parcels with land locked state 40's. The NWNE of section 5 is listed as a possible disposal.

Unique, Natural Features (include only non-site specific and non-sensitive information): Potential for goshawk and red shouldered hawk. Turtle potential along creeks.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None known.

Special Management Designations or Considerations: The compartment has some very steep and hilly areas. Riparian zones should be noted and buffered if activity is to occur near them. Some of the lower quality oak/aspen areas may be suitable to some pine planting.

Watershed and Fisheries Considerations: Filer Creek, a high-quality tributary to the Manistee River, flows through Compartment 124. Filer Creek is a Designated Trout Stream, with excellent populations of naturally-reproducing brook and brown trout. Management for aspen near Filer Creek should be avoided due to potential for beaver impacts. All BMPs should be followed in wet areas near the streams. (M. Tonello, 9/25/12)

Wildlife Habitat Considerations: The intent of habitat management in this compartment is to maintain current timber types with a slight increase in aspen and a slight decrease in red/white pine in order to maintain the mixed upland and lowland hardwoods and conifer that currently exist. Many stands currently typed as aspen or oak have a lot of white pine coming into the understory; this encroachment is a concern. Featured species guidance will be considered for American bittern, American woodcock, beaver, black bear, eastern massasauga rattlesnake, mallard, pileated woodpecker, ruffed grouse, snowshoe hare, white-tailed deer, and wood duck. (E. Victory 9/2012)

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation that is quarried for gypsum in other areas of the State. A gravel pit is located one and one-half miles to the south and gravel potential is considered good. This area lies one mile west of leased for oil and gas and the Collingwood discovery, Pioneer #1-3, is located in Section 3.Cannon Creek Field, which produced 870,000 Mcf gas from the Devonian Traverse Formation.

Vehicle Access: A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

Survey Needs: None known.

Recreational Facilities and Opportunities: Recreational Facility Considerations: Motorsport type recreation is prevalent within this compartment. The Mis-Kal Snowmobile trail (#6), North Missaukee Route, North Missaukee ORV trail, Michigan Cross country cycle trail, and North Missaukee motorcycle trail all are found within this compartment. The North Missaukee Motorcycle Trail is designated by Directors Order to remain 2 wheeled vehicles only trail- therefore this trail should be kept tight, narrow, and curvy. The Proposed timber management activities impacting these trails should include trail protection specifications to reduce user impacts, as well as serve as an example of how silviculturally sound timber management practices can co-exist, and often improve recreation and wildlife experiences for future generations. Also deer and small game hunting are popular recreation activities. (T.M.N. 8-31-12)

Fire Protection: Access to this compartment can be from the Cycle trail, ORV route, forest roads or local county road and state highway. Most terrain and soils would not limit most suppression units. Residential use by recreationalists may increase the potential of wildfires (BET 8-1-12)

Additional Compartment Information:

The following 9 Inventory reports from are attached:

- ♦ Table 1 - Cover Type by Age Class
- ♦ Table 2 - Treatment Type Summary
- ♦ Table 3 – Treatments with No Limiting Factors
- ♦ Table 4 – Treatments with Limiting Factors
- ♦ Table 5 – Out of YOE Treatments (when applicable)
- ♦ Tables 6 & 7- Forested and Nonforested stands
- ♦ Tables 8 & 9 – Proposed and Dedicated Special Conservation Areas

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

- ♦ Base feature information, stand numbers, cover types
- ♦ Proposed treatments
- ♦ Suggested potential and current SCA’s

Table 1 – Total Acres by Cover Type and Age Class

Cadillac Mgt. Unit **Compartment 124 Year of Entry 2014**

Steven Eisele : Examiner

Age Class

	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	Total
Aspen	28	155	286	0	13	22	27	4	0	0	0	0	0	15	**549**
Bare/Sparsely Vegetated	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Herbaceous Openland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Low-Density Trees	34	0	0	0	0	0	0	0	0	0	0	0	0	0	**34**
Lowland Conifers	0	0	0	0	0	0	0	0	0	5	0	0	0	28	**33**
Lowland Deciduous	0	0	0	0	0	0	0	37	0	0	0	0	0	0	**37**
Lowland Spruce/Fir	0	0	0	0	0	0	17	0	0	0	0	0	0	0	**17**
Mixed Upland Deciduous	0	0	0	0	0	0	13	0	50	0	0	0	0	0	**63**
Natural Mixed Pines	0	0	0	0	0	5	55	19	18	0	0	0	0	144	**242**
Northern Hardwood	0	0	0	0	0	0	17	0	0	0	0	0	0	0	**17**
Oak	0	0	0	0	0	0	0	0	128	0	0	0	0	264	**392**
Red Pine	44	0	51	11	0	252	22	0	0	0	0	0	0	12	**393**
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	17	**17**
Upland Mixed Forest	0	0	0	0	0	0	25	0	0	0	0	0	0	101	**126**
Urban	24	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
White Pine	0	0	0	0	0	9	7	20	0	0	0	0	0	16	**53**
Total	**137**	**155**	**337**	**11**	**13**	**289**	**185**	**80**	**197**	**5**	**0**	**0**	**0**	**597**	**2005**

Table 2 – Proposed Treatment Summaries

Cadillac Mgt. Unit
Year of Entry 2014

Compartment 124
Total Compartment Acres: 2005

Acres by Treatment Type

Commercial Harvest - 395	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 26	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	27	0	0	0	0	0	**27**
Natural Mixed Pines	17	142	31	0	0	0	**189**
Northern Hardwood	0	17	0	0	0	0	**17**
Oak	11	49	0	0	0	0	**60**
Red Pine	12	0	0	0	63	0	**75**
Upland Conifers	17	0	0	0	0	0	**17**
Upland Mixed Forest	10	0	0	0	0	0	**10**
Total	**94**	**208**	**31**	**0**	**63**	**0**	**395**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	**63124002-Cut**	46.8	42110 - Planted Red Pine	High Density Pole	50	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Do a first thin, remove every third row.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	**63124005-Cut**	25.6	4123 - Red Oak	High Density Log	85	81-110	Harvest	Single Tree Selection	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Remove saw log oak, aspen and maple. Create some holes for regen.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
15	**63124015-Cut**	16.0	42110 - Planted Red Pine	High Density Pole	50	111-140	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Do a first thin. Remove every third row. Have logger establish, rows are curvey.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
16	**63124016-Cut**	5.3	4123 - Red Oak	High Density Log	85	81-110	Harvest	Single Tree Selection	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Remove sawlog oak over regen. Mark to cut.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	63124022-Cut	55.3	42290 - Natural Mixed Pine	High Density Pole	65	111-140	Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Mark pine sawlogs to 90-100ba. Remove all aspen and maple

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	63124024-Cut	18.2	42260 - Natural Pine, Mixed Deciduous	High Density Log	82	141-170	Harvest	Single Tree Selection	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Mark pine sawlogs down to 90-100ba. Remove all aspen and maple.

Other Comments: Some wet areas.

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	63124035-Cut	30.9	42290 - Natural Mixed Pine	High Density Pole	52	141-170	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Mark to leave mixed pine with good crowns for seed tree. Have logger tree length to scarigy.

Other Comments:

Next Steps: Plant to red pine if natural regen. not sucessful.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
36	63124036-Cut	10.7	4123 - Red Oak	High Density Log	80	81-110	Harvest	Clearcut with Reserves	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Mark oak to leave approx. 50-60ba Final harvest the rest.

Other Comments: Buffer M-66

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	63124037-Cut	16.6	429 - Mixed Upland Conifers	High Density Pole	65	111-140	Harvest	Clearcut with Reserves	429 - Mixed Upland Conifers	Cmpt. Review Proposal

Prescription Specs: Final harvest, plant to red pine. Leave oak. Add chip and low stump spec to sale proposal.

Other Comments:

Next Steps: Plant around low areasx

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	63124040-Cut	25.6	42260 - Natural Pine, Mixed Deciduous	High Density Log	60	111-140	Harvest	Single Tree Selection	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Overstory removal of larger diameter trees over natural regen.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
44	63124044-Cut	8.6	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	60	51-80	Harvest	Clearcut	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Final harvest. Monitor regen. Management Objective is Aspen

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56	63124056-Cut	10.0	4310 - Pine, Oak Mix	High Density Log	50	81-110	Harvest	Clearcut with Reserves	4310 - Pine, Oak Mix	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave Oak.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63	63124063-Cut	13.1	4131 - Aspen, Oak	High Density Pole	60		Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave some mast oak. Aspen is patchy

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
64	63124064-Cut_exp-1	8.0	42260 - Natural Pine, Mixed Deciduous	High Density Log	72	81-110	Harvest	Clearcut with Reserves	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave oak. Buffer snow and orv trail. Mark green to leave along both. Have trail protection specs in sale proposal.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72	63124072-Cut	14.1	4133 - Aspen, Mixed Pine	High Density Log	60		Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave some mast oak. Buffer trail, leave high stumps along it for trees that are cut.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75	63124075-Cut_exp-1	18.2	4123 - Red Oak	Medium Density Log	100	51-80	Harvest	Single Tree Selection	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Sawlog oak over aspen/maple/beech regen. Remove overstory oak

Other Comments: Have TMS look at. Heavy beech understory in spots.

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
78	63124078-Cut	42.6	42260 - Natural Pine, Mixed Deciduous	High Density Log	70	111-140	Harvest	Single Tree Selection	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Remove sawlog pine over aspen/maple regen. Buffer snow and orv trail.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
81	63124081-Cut	17.2	4110 - Sugar Maple Association	Medium Density Log	62	51-80	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal

Prescription Specs: Salvage dead ash patchs out of SE portion of stand

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75	63124075-Burn	25.8	4123 - Red Oak	Medium Density Log	100	51-80	Prescribed Burn	Unspecified	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Specs: Eleminate beech and ironwood understory

Other Comments:

Next Steps:

Proposed Start Date: Unspecified

Total Treatment Acreage Proposed: 408.5

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	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**

Data updated before 10:00 AM

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
	5.2	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete

Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date:

	3.5	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete

Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date:

	0.1	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete

Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date:

	0.0	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete

Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date:

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
63086083-Cut	10.2	4123 - Red Oak	High Density Log	80		Harvest	Shelter Wood with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

Prescription Specs: Mark red and white oak in groups reducing basal area down to an average of 30 sq.ft.(range from 20-50).

Other Comments: This is a natural continuation of stand 1 in Comp 79 (also prescribed).

Next Steps: Follow harvest with roller chopping of red maple in gaps from previous harvest. Goal is to decrease red maple and cause enough scarification with harvest to create a seedbed for adjacent pine to seed in, as well as oak. Stump sprout oak is not expected, but would be welcome. Regen survey per work instructions.

Proposed Start Date: 10/01/2013

Total Treatment Acreage Proposed: 19.0

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	High Density Pole	1.7	50	81-110	treated last year of entry
2	42110 - Planted Red Pine	High Density Pole	46.8	50	141-170	
3	4130 - Aspen	High Density Pole	68.1	23		
4	4123 - Red Oak	Medium Density Log	158.1	Uneven Age	1-50	seed tree cut last year of entry with underplanting of red pine
5	4123 - Red Oak	High Density Log	25.6	85	81-110	
6	4133 - Aspen, Mixed Pine	High Density Sapling	34.9	14		recently treated look up cut records
7	4123 - Red Oak	Medium Density Log	50.8	Uneven Age	1-50	treated last year of entry oak over aspen maple sprouts
8	4199 - Other Mixed Upland Deciduous	High Density Log	18.0	85	81-110	
9	4311 - Pine, Aspen Mix	High Density Sapling	13.8	Uneven Age	1-50	New stand added. treated last year of entry look up cut records some overstory oak and red pine left
10	42290 - Natural Mixed Pine	Medium Density Pole	5.2	50	51-80	
11	42210 - Natural Red Pine	High Density Pole	21.2	55	81-110	treated last year of entry
12	4139 - Aspen, Mixed Deciduous	High Density Sapling	41.6	14		recently treated look up cut records some mast oak left same as 10
13	4130 - Aspen	High Density Pole	48.9	24		recently treated look up cut records
14	4130 - Aspen	Medium Density Pole	12.6	40		retention stand has been cut all around it some aspen maple sprouts from adjacent cuts
15	42110 - Planted Red Pine	High Density Pole	16.0	50	111-140	
16	4123 - Red Oak	High Density Log	5.3	85	81-110	New stand added.
17	6118 - Lowland Deciduous with Cedar	High Density Log	36.9	70	51-80	
18	42110 - Planted Red Pine	Low Density Sapling	43.7	4		recently planted to red pine

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	6122 - Black Spruce	Low Density Pole	16.9	60		
20	4131 - Aspen, Oak	High Density Pole	15.8	55		good retention stand/buffer from all the previous cuts and private
21	42110 - Planted Red Pine	High Density Pole	11.5	38	111-140	
22	42290 - Natural Mixed Pine	High Density Pole	55.3	65	111-140	
23	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	10.8	Uneven Age	51-80	wet
24	42260 - Natural Pine, Mixed Deciduous	High Density Log	18.2	82	141-170	some wet areas
26	42210 - Natural Red Pine	High Density Pole	12.4	Uneven Age	141-170	no legal access
27	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	17.4	Uneven Age	171-200	New stand added. creek
29	6127 - Lowland Pine	High Density Log	5.2	90	111-140	New stand added.
30	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	22.1	63	51-80	treated last year of entry
31	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	7.6	Uneven Age	51-80	treat next year of entry
32	4136 - Aspen, Mixed Conifer	Medium Density Log	4.3	70		creek corridor steep banks
33	4133 - Aspen, Mixed Pine	High Density Pole	5.9	52		no legal access
35	42290 - Natural Mixed Pine	High Density Pole	30.9	Uneven Age	141-170	planted?
36	4123 - Red Oak	High Density Log	10.7	Uneven Age	81-110	New stand added.
37	429 - Mixed Upland Conifers	High Density Pole	16.6	Uneven Age	111-140	wet areas
39	42110 - Planted Red Pine	High Density Pole	4.7	55	81-110	look up plant records
40	42260 - Natural Pine, Mixed Deciduous	High Density Log	25.6	Uneven Age	111-140	New stand added.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	4130 - Aspen	High Density Sapling	11.4	16		recently treated
42	4123 - Red Oak	High Density Log	68.7	87	51-80	recently treated
43	4139 - Aspen, Mixed Deciduous	High Density Sapling	7.8	27		recently treated
44	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	8.6	Uneven Age	51-80	
45	42250 - Pine, Oak	High Density Pole	16.5	Uneven Age	81-110	may be old plantation has been treated a couple of times good regen in spots
46	42110 - Planted Red Pine	High Density Pole	69.8	55	81-110	third row thinned last year of entry merge with 42
48	4130 - Aspen	High Density Pole	19.5	27		recently treated
49	42200 - Natural White Pine	High Density Log	7.5	60	81-110	just getting to log size treat next year of entry some low wet areas along edge
50	4132 - Aspen, Jack Pine	High Density Pole	14.8	Uneven Age		also planted red pine but overtopped by aspen failed plantation merge with 49
51	42110 - Planted Red Pine	High Density Pole	8.9	52	81-110	New stand added.
52	42110 - Planted Red Pine	High Density Pole	45.9	55	111-140	pole andlog size red pine treat next year of entry hard to tell its planted
53	4130 - Aspen	High Density Sapling	22.5	16		recently treated
54	42110 - Planted Red Pine	High Density Pole	50.8	28	81-110	planted red pine with jack pine white pine volunteers merge with 57
55	4130 - Aspen	High Density Pole	5.4	16		recently treated
56	4310 - Pine, Oak Mix	High Density Log	10.0	Uneven Age	81-110	
57	42290 - Natural Mixed Pine	High Density Pole	12.6	Uneven Age	81-110	
58	4191 - Mixed Upland Deciduous with Conifer	High Density Log	32.3	85	51-80	low quality oak over white pine
60	4130 - Aspen	High Density Sapling	8.7	16		recently treated

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	42200 - Natural White Pine	Medium Density Pole	8.4	Uneven Age	51-80	New stand added. recently cut 6 acre unit called 64 cut on map
62	4130 - Aspen	High Density Pole	109.1	27		look up cut records
63	4131 - Aspen, Oak	High Density Pole	13.1	60		New stand added. final harvest with reserves leave some mast oak aspen is patchy
64	42260 - Natural Pine, Mixed Deciduous	High Density Log	18.9	72	81-110	New stand added.
65	4310 - Pine, Oak Mix	High Density Log	77.0	Uneven Age	81-110	low quality oak, white pine stumps
66	4319 - Mixed Upland Forest	High Density Log	25.3	60	81-110	like stand 72 but more maple and oak treat next year of entry
67	42110 - Planted Red Pine	High Density Pole	37.2	55	81-110	planted red pine with white pine mix curvey rows
69	42200 - Natural White Pine	High Density Pole	20.3	70	81-110	has been treated 2009
70	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	13.1	60	51-80	treat next year of entry
71	4130 - Aspen	High Density Pole	30.0	16		recently treated
72	4133 - Aspen, Mixed Pine	High Density Log	14.1	60		
73	42200 - Natural White Pine	Low Density Log	7.6	Uneven Age	1-50	New stand added. recently cut same as 64cut
74	4130 - Aspen	High Density Pole	32.7	25		recently treated
75	4123 - Red Oak	Medium Density Log	44.0	Uneven Age	51-80	recently treated look up cut records oak over aspen maple sprouts some areas of good aspen regen
76	4123 - Red Oak	High Density Log	28.7	85	51-80	has been treated
77	4130 - Aspen	High Density Sapling	27.9	7		recently treated
78	42260 - Natural Pine, Mixed Deciduous	High Density Log	42.6	Uneven Age	111-140	
81	4110 - Sugar Maple Association	Medium Density Log	17.2	62	51-80	New stand added. recently treated hardwood stand look up cut records

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
82	42100 - Planted White Pine	High Density Pole	9.4	50	81-110	spotty white pine plantation

6 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
25	3303 - Mixed Low Density Trees	22.1	No	Lowland Mixed Forest	filer creek
28	3303 - Mixed Low Density Trees	8.4	No	Unspecified	
34	3105 - Mixed Upland Herbaceous	2.3	No	Unspecified	
38	11 - Low Intensity Urban	19.7	Yes	Unspecified	m 66
47	122 - Road/Parking Lot	4.7	N\A	Unspecified	
59	3301 - Low Density Deciduous Tree	2.3	No	Unspecified	
68	3102 - Grass	0.8	No	Unspecified	open area along snowmobile trail
79	790 - Other Bare/Sparsely Vegetate	4.2	No	High (NonForested)	recently created oil pad closed
80	330 - Low-Density Trees	1.2	N\A	Unspecified	

Data updated before 10:00 AM

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.

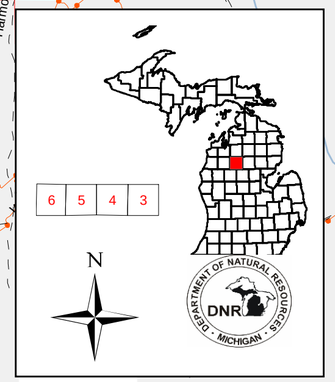
ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

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.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.

Cover Type & Treatment Map

Compartment: 124
T24N R07W
03 04 05 06
County: Missaukee
Unit: Cadillac
YOE: 2014
Acres: 2,005 GIS Calculated
Examiner: Steve Eisele
Map Revised: 10/08/2012
Map Phase: Pre-Review

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



Legend

- DNR Survey Corner
- Field Survey Corner
- Miris Corners
- Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Pipeline
- Motorcycle Trails (DNR License)
- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- Motorcycle (DNR Sticker)
- ORV Trail
- ORV Route
- MCCCT Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Forest Stands
Level 3
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands
Level 3
- 110 - Low Intensity Urban
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 790 - Other Bare/Sparsely Vegetated

1 0.5 0 1 Miles

Manistee River
S Manistee Riv Rd SW
Section 32 Rd SW
W Old M 66 SW
Old M 66 SE
Dutch John Rd SE
Vandermullen Rd SE
Harmony Ln SE
Section 31 Rd SW
Section 31 Rd
Beaver Dam Rd
W Fahrney Rd
N Burkett Rd
N Van Dermullen Rd
N De Young Rd
W Johnson Rd
Al Moses Rd
N Morey Rd
N Decker Rd
N Edwards Rd
Unknown 57 11 02
Unknown 57 11 06
Unknown 57 11 04
85°13'0"W
85°12'0"W
85°11'0"W
85°10'0"W
85°9'0"W
85°8'0"W
44°31'0"N
44°30'0"N
44°29'0"N

Stand Boundary Map

Compartment: 124
T24N R07W
03 04 05 06
County: Missaukee
Unit: Cadillac
YOE: 2014
Acres: 2,005 GIS Calculated
Examiner: Steve Eisele
Map Revised: 10/08/2012
Map Phase: Pre-Review

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

Legend

- DNR Survey Corner
- Field Survey Corner
- Miris Corners
- Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Pipeline
- Motorcycle Trails (DNR License)
- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- MCCCT Trail
- Snowmobile Trail
- Motorcycle (DNR Sticker)
- ORV Trail
- ORV Route
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

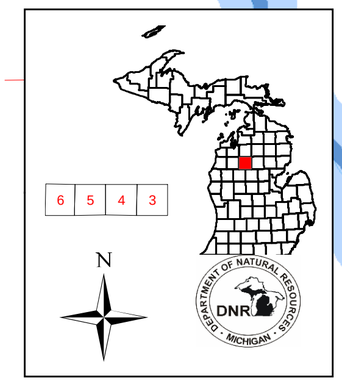
- 110 - Low Intensity Urban
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 790 - Other Bare/Sparsely Vegetated

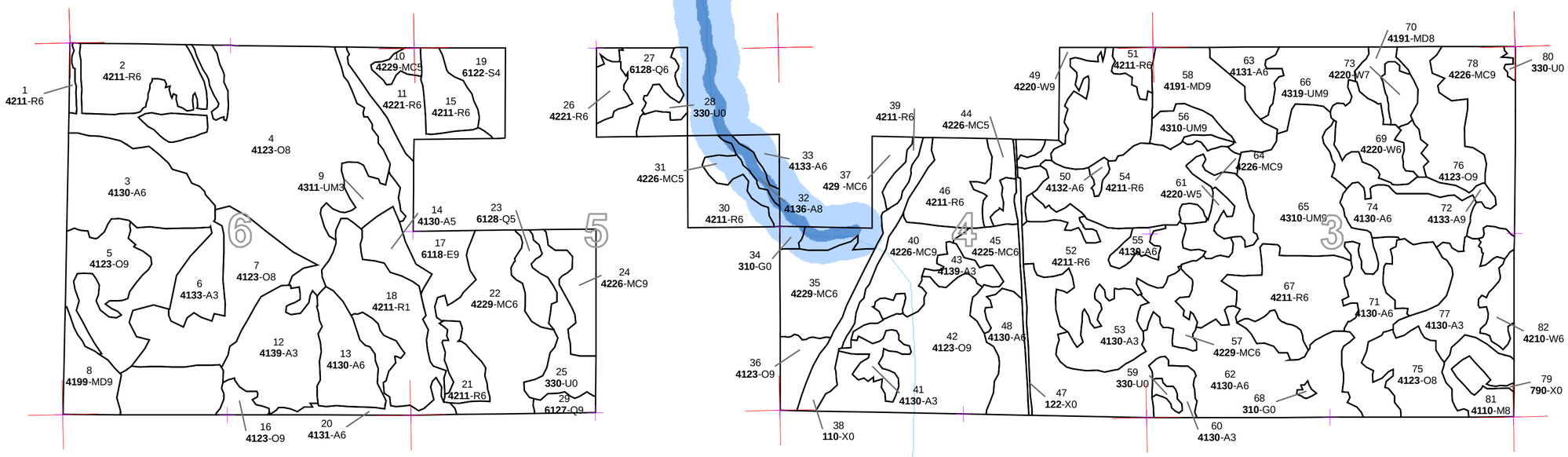
1 0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

Compartment: 124
T24N R07W
03 04 05 06
County: Missaukee
Unit: Cadillac
YOE: 2014
Acres: 2,005 GIS Calculated
Examiner: Steve Eisele
Map Revised: 10/08/2012
Map Phase: Pre-Review

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





Legend

- Miris Corners
- Remonumented Section Corners
- Stand Boundaries

Proposed Special Conservation Areas
- SCA - Special Conservation Area
- SCA Removal

Dedicated Special Conservation Areas
- Boat Access Sites
- Cold Water Streams
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer

Forest Stands
Level 3
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands
Level 3
- 110 - Low Intensity Urban
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 790 - Other Bare/Sparsely Vegetated

1 0.5 0 1 Miles

85°13'0"W 85°12'0"W 85°11'0"W 85°10'0"W 85°9'0"W 85°8'0"W
44°31'0"N 44°30'0"N 44°29'0"N