

CADILLAC FOREST MANAGEMENT UNIT**COMPARTMENT REVIEW PRESENTATION****COMPARTMENT # 150 ENTRY YEAR: 2012****Compartment Acreage (GIS Acres): 1,641 County: Wexford**

Revision Date: 10/11/2010 8:51 AM**Stand Examiner: Andy Church****Legal Description: T24N, R10W Sections 1-3, 10-12.****RMU (if applicable): 237**

Management Goals: Maintain a variety of cover types and age class diversity which favor a variety of game and non game species. Maintain visual impact integrity near main county roads and Manistee River. Preserve water quality by using BMPs. The Manistee is being nominated for Natural River Status and management plans should follow the guidelines set for the River.

Soil and Topography: Rubicon–Montcalm–Graycalm, Nester–Kawkawlin–Manistee and Tawas–Croswell–Lupton. Soils are poorly drained with perched water table in spots. Topography generally flat with steeper areas along Manistee River and tributaries.

Ownership Patterns, Development, and Land Use in and Around the Compartment: A private subdivision is located in S1/2SWNE of Section 10. A large pipeline corridor and a separate electric corridor traverse sections 11 and 12. A small private parcel on the south bank of the Manistee River is located in the NW corner of Section 10. This parcel has legal easement. Consumers' Energy owns timber rights on all of the significant red pine plantations.

Acquisition: N1/2SW Section 10. That portion of the W1/2NE South of the Manistee River Section 10. The SESESE of Section 12. The small parcel in the NWNW SEC.10 lying South of the Manistee River.

Disposals: None.

Unique, Natural Features (include only non-site specific and non-sensitive information): Historical wood turtle* record from vicinity of compartment (sections 3, 4, 9, and 10). Historical great blue heron rookery to SW. Red-shouldered hawk occurrence to E. Northern goshawk documented to NW. Bald eagle record to SE. Ginseng documented to E. Hill's thistle records to NE. Bog record to NE. Pine barrens documented to E and NE. Potential for eastern massasauga, wood turtle, and Blanding's turtle. Potential for red-shouldered hawk and northern goshawk. Potential for eagle, osprey, and great blue heron rookery.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): Nothing on record.

Special Management Designations or Considerations: Maintain visual impact integrity near Manistee River. Preserve water quality BMPs.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: Featured wildlife species are deer, ruffed grouse, and woodcock. The Manistee River runs along the north edge of the compartment. The river valley is utilized as a travel corridor for numerous wildlife species and is an important white-tailed deer wintering area. Wildlife habitat objectives are to continue to maintain species and age-class diversity across the compartment. (L. Smith. 9/24/10)

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 are the Mississippian Coldwater Shale and the Marshall Sandstone. The Marshall was previously used as a building stone. A gravel pit is located three miles to the north, but potential is considered to be limited. This area lies six miles south of the prolific Silurian Niagaran reef trend. There does not appear to be any potential for Niagaran reefs in this area. This area is not currently leased for oil and gas and potential is limited. The compartment is mostly surface only.

Vehicle Access: A forest road access plan is detailed on the compartment map.

Survey Needs: Survey Request in place for Section 10.

Recreational Facilities and Opportunities: None

Fire Protection: Areas of pine fuel types could support intense fires. Access due to terrain could affect fire growth in this compartment. Access would be fairly good for suppression equipment, except in areas the border the Manistee River. 10-4-10/BRA

Additional Compartment Information: None

- **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**

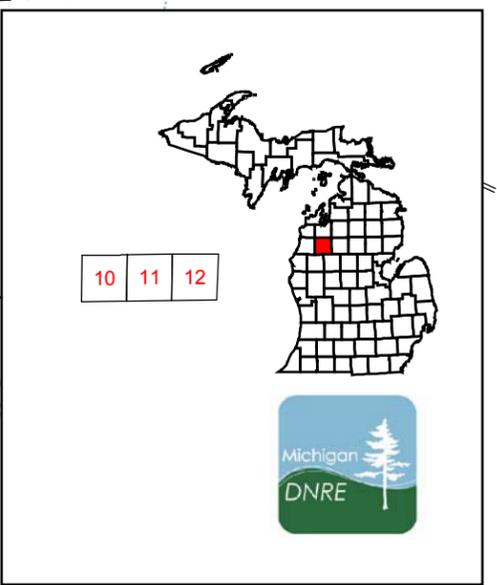
- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Suggested potential old growth**

Cover Type & Treatment Map

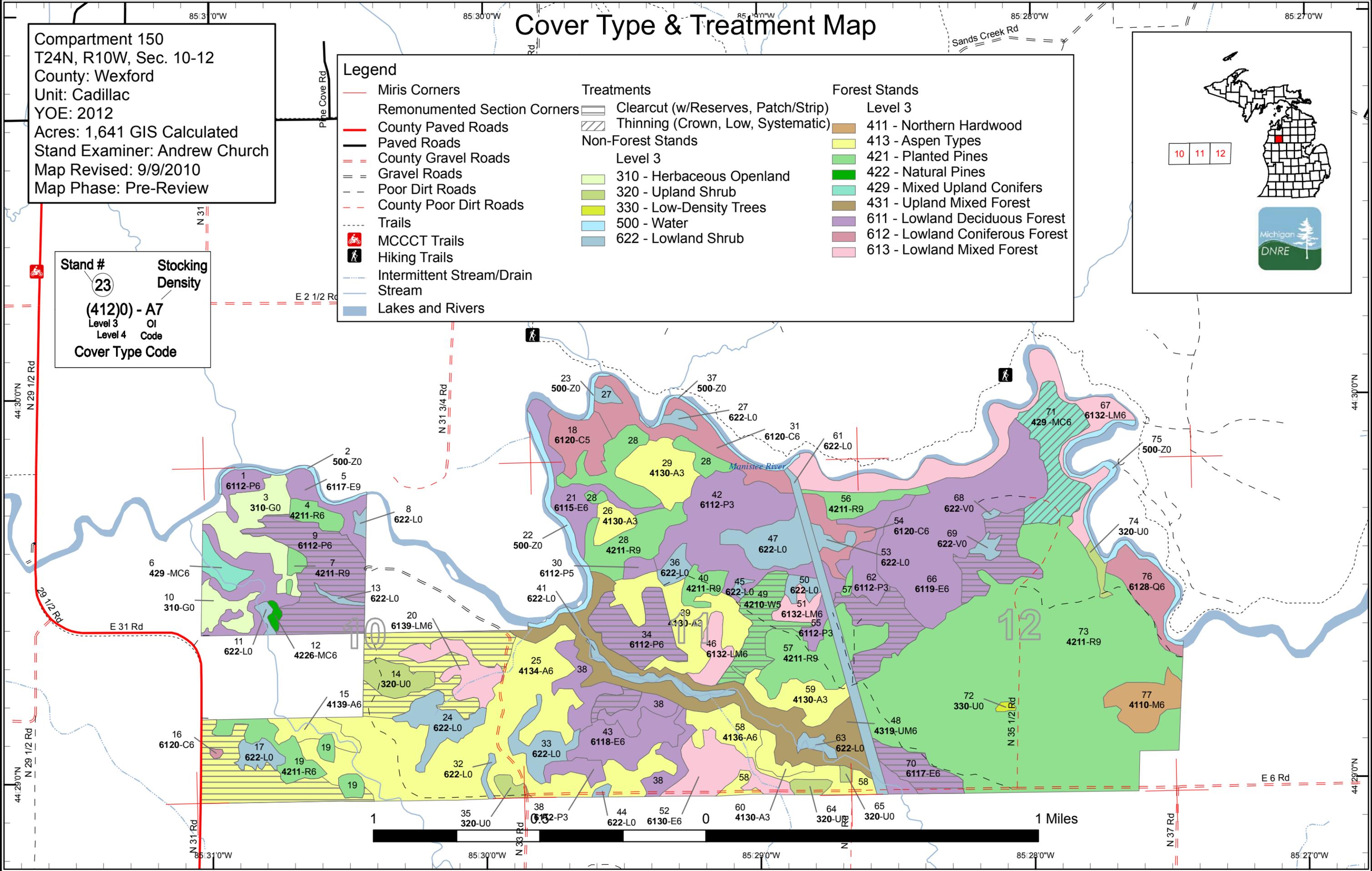
Compartment 150
 T24N, R10W, Sec. 10-12
 County: Wexford
 Unit: Cadillac
 YOE: 2012
 Acres: 1,641 GIS Calculated
 Stand Examiner: Andrew Church
 Map Revised: 9/9/2010
 Map Phase: Pre-Review

Legend

<ul style="list-style-type: none"> — Miris Corners — Remonumented Section Corners — County Paved Roads — Paved Roads — County Gravel Roads — Gravel Roads — Poor Dirt Roads — County Poor Dirt Roads — Trails MCCCT Trails Hiking Trails Intermittent Stream/Drain Stream Lakes and Rivers 	<p>Treatments</p> <ul style="list-style-type: none"> Clearcut (w/Reserves, Patch/Strip) Thinning (Crown, Low, Systematic) <p>Non-Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 310 - Herbaceous Openland 320 - Upland Shrub 330 - Low-Density Trees 500 - Water 622 - Lowland Shrub 	<p>Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 413 - Aspen Types 421 - Planted Pines 422 - Natural Pines 429 - Mixed Upland Conifers 431 - Upland Mixed Forest 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 613 - Lowland Mixed Forest
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



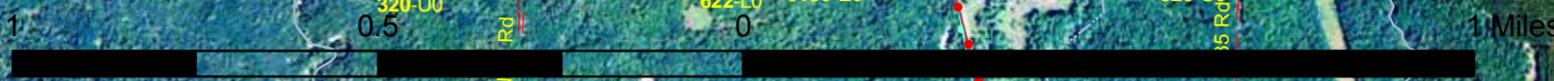
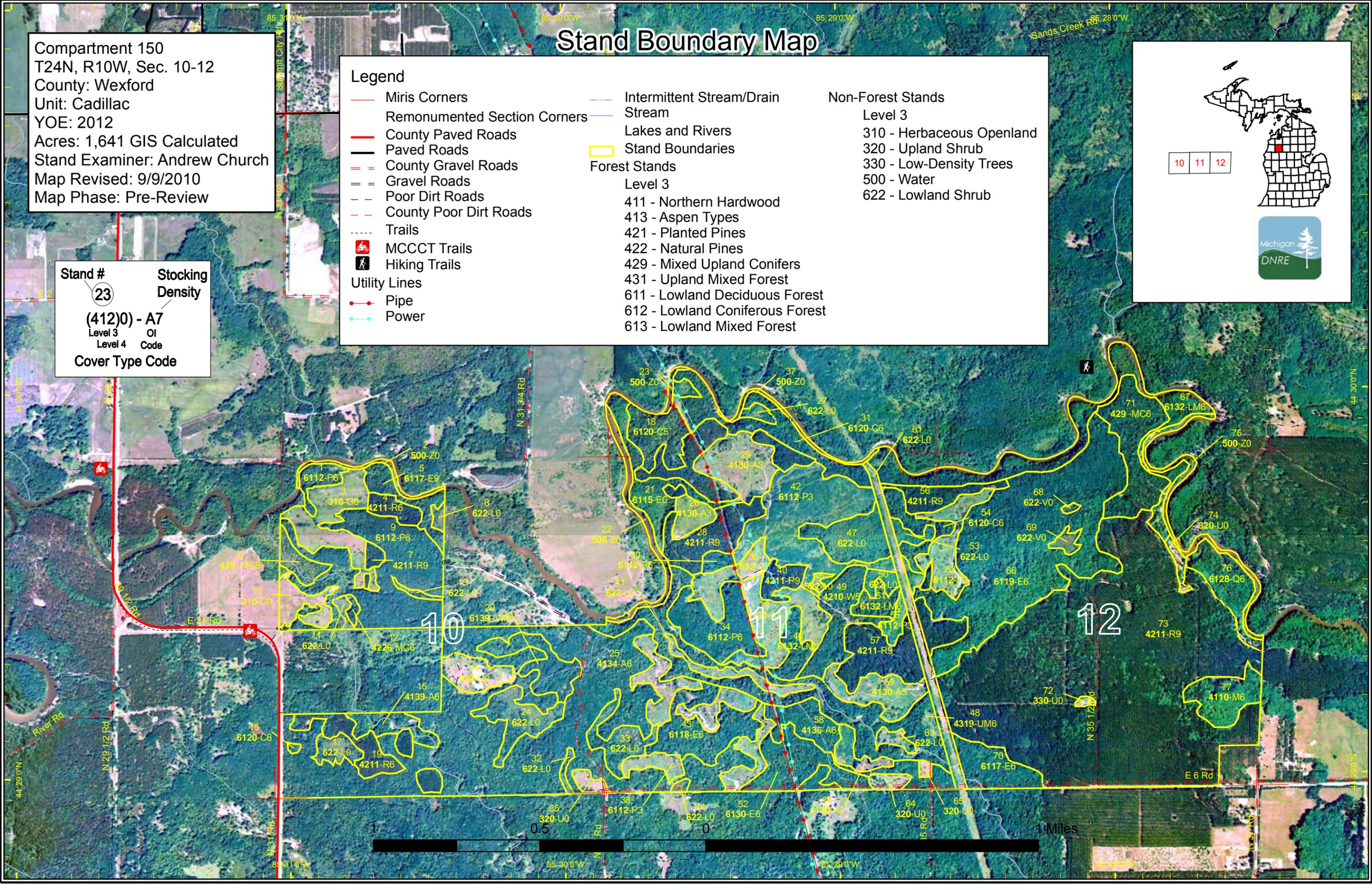
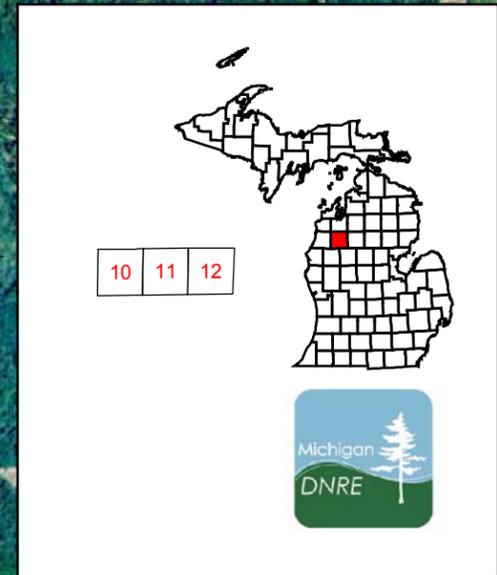
Stand Boundary Map

Compartment 150
 T24N, R10W, Sec. 10-12
 County: Wexford
 Unit: Cadillac
 YOE: 2012
 Acres: 1,641 GIS Calculated
 Stand Examiner: Andrew Church
 Map Revised: 9/9/2010
 Map Phase: Pre-Review

Legend

- | | | |
|----------------------------------|---------------------------------|---------------------------|
| —●— Miris Corners | — Intermittent Stream/Drain | Non-Forest Stands |
| —●— Remonumented Section Corners | — Stream | |
| — County Paved Roads | — Lakes and Rivers | Level 3 |
| — Paved Roads | — Stand Boundaries | 310 - Herbaceous Openland |
| — County Gravel Roads | Forest Stands | 320 - Upland Shrub |
| — Gravel Roads | Level 3 | 330 - Low-Density Trees |
| — Poor Dirt Roads | 411 - Northern Hardwood | 500 - Water |
| — County Poor Dirt Roads | 413 - Aspen Types | 622 - Lowland Shrub |
| — Trails | 421 - Planted Pines | |
| — MCCCT Trails | 422 - Natural Pines | |
| — Hiking Trails | 429 - Mixed Upland Conifers | |
| — Utility Lines | 431 - Upland Mixed Forest | |
| — Pipe | 611 - Lowland Deciduous Forest | |
| — Power | 612 - Lowland Coniferous Forest | |
| | 613 - Lowland Mixed Forest | |

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



Compartment 150
 T24N, R10W, Sec. 10-12
 County: Wexford
 Unit: Cadillac
 YOY: 2012
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 Map Revised: 9/9/2010
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Proposed and Dedicated Special Conservation Areas

Legend		
	Miris Corners	
	Remonumented Section Corners	
Proposed Special Conservation Areas		
	SCA - Special Conservation Area	
	SCA Removal	
Dedicated Special Conservation Areas		
	Campgrounds	
	Boat Access Sites	
	Cold Water Streams	
	Stand Boundaries	
Forest Stands		
Level 3		
	411 - Northern Hardwood	
	413 - Aspen Types	
	421 - Planted Pines	
	422 - Natural Pines	
	429 - Mixed Upland Conifers	
	431 - Upland Mixed Forest	
	611 - Lowland Deciduous Forest	
	612 - Lowland Coniferous Forest	
	613 - Lowland Mixed Forest	
Non-Forest Stands		
Level 3		
	310 - Herbaceous Openland	
	320 - Upland Shrub	
	330 - Low-Density Trees	
	500 - Water	
	622 - Lowland Shrub	

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

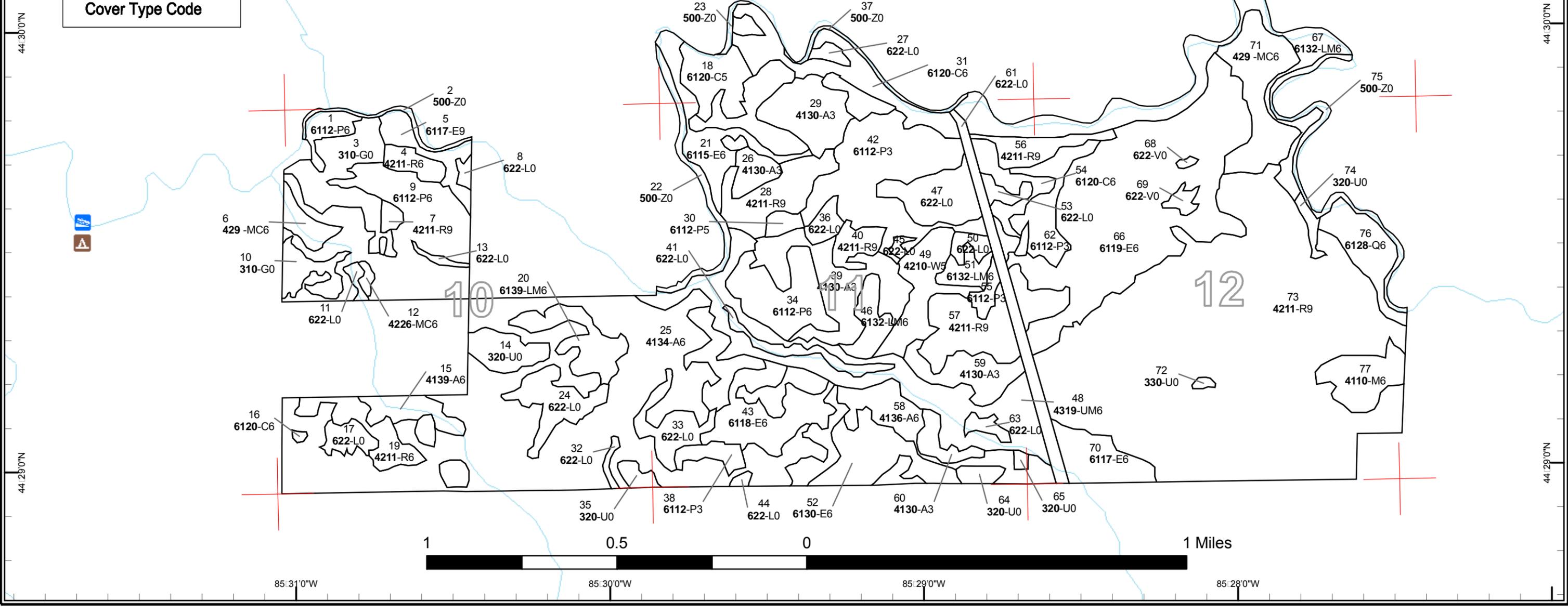
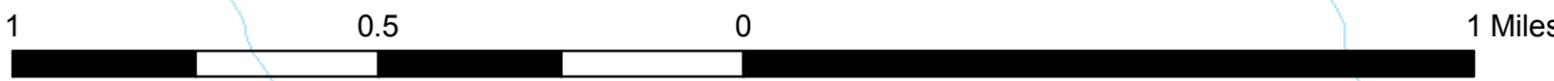
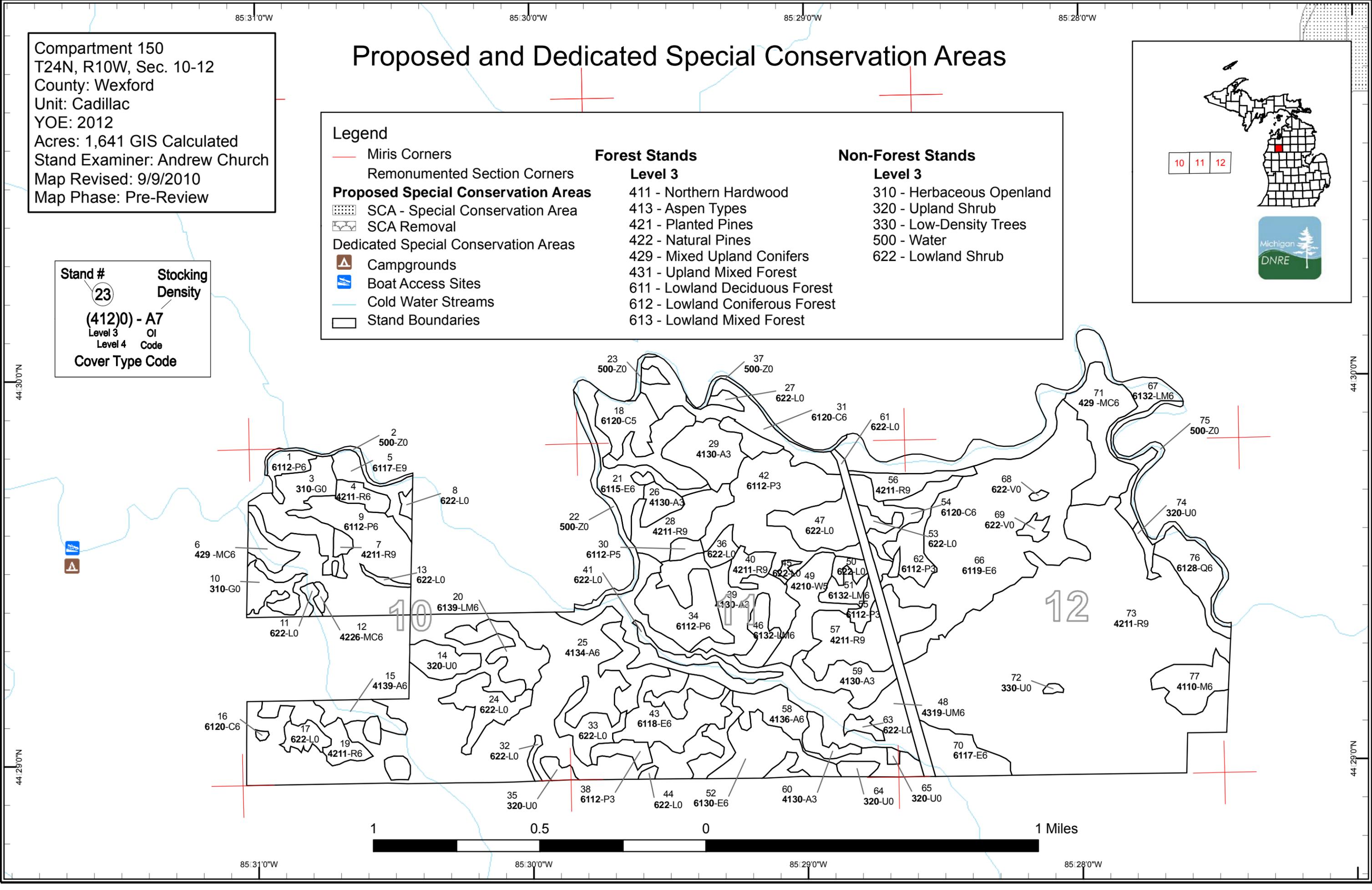
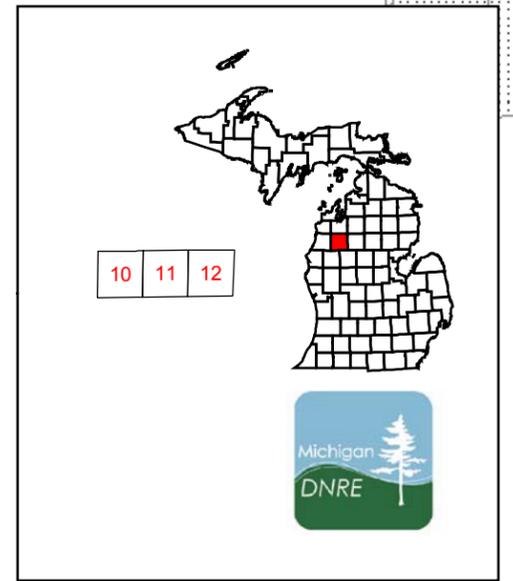


Table 1 – Total Acres by Cover Type and Age Class

Data updated yesterday after 6:00 PM



	Age Class														Total	
	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
Aspen	0	82	0	0	219	0	0	0	0	0	0	0	0	0	10	311
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Cedar	0	0	0	0	0	0	0	0	0	0	1	0	0	0	52	53
Herbaceous Openland	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Low-Density Trees	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Aspen/Balsam Poplar	0	51	57	0	0	0	100	0	0	0	0	0	0	0	0	209
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
Lowland Deciduous	0	0	0	0	0	0	142	0	0	0	0	19	0	0	37	197
Lowland Mixed Forest	0	0	0	0	23	0	0	0	0	0	0	0	0	0	77	100
Lowland Shrub	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105
Natural Mixed Pines	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Northern Hardwood	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	16
Red Pine	0	0	0	0	0	0	428	0	0	0	0	0	0	0	0	428
Upland Conifers	0	0	0	0	0	0	30	0	7	0	0	0	0	0	0	36
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	60
Upland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Water	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
Total	192	133	57	0	242	0	718	0	7	0	1	19	0	0	273	1641



Table 2 – Proposed Treatment Summaries

Data updated yesterday after 6:00 PM

Cadillac Mgt. Unit
Year of Entry 2012

Compartment 150
Total Compartment Acres: 1641

Acres by Treatment Type

Commercial Harvest - 242	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 5	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	69	0	0	0	0	0	69
Lowland Aspen/Balsam Poplar	71	0	0	0	0	0	71
Lowland Deciduous	59	0	0	0	0	0	59
Upland Conifers	0	0	0	0	30	0	30
White Pine	20	0	0	0	0	0	20
Total	218	0	0	0	30	0	248

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Data updated yesterday after 6:00 PM

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
25 63150025-Cut	68.7	4134 - Aspen, Spruce/Fir	High Density Pole	38	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal

Prescription Final harvest portion to break up age of stand. Leave all Cedar, Hemlock and Oak. Winter cut only. Buffer Silver Creek and tributaries at appropriate distances. Retention: Buffers, Cedar, Hemlock, and Oak. Acceptable alternative regen: Maple/Fir.

Other Comments: Mostly upland, but some lowland pockets. Thick fir understory in wet areas. Drainages mixed throughout. Scattered Cedar and Hemlock in wet areas.

Next Steps:

34 63150034-Cut	25.2	6112 - Lowland Aspen	High Density Pole	52	Harvest	Clearcut with Reserves	Lowland Aspen	Cmpt. Review Proposal
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Prescription Final harvest. Leave all Cedar, Hemlock, and Oak. Buffer Buttermilk Creek and Manistee River at appropriate distances. Retention: Buffers, Cedar, Hemlock, and Oak. Acceptable alternative regen: Swamp Hardwoods

Other Comments: Wet. Poor quality Aspen stand. Small drainage through middle armored by Cedars.

Next Steps:

43 63150043-Cut	5.1	6118 - Lowland Deciduous with Cedar	High Density Pole	87	Harvest	Clearcut	Aspen	Cmpt. Review Proposal
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Prescription Final Harvest portion. Habitat cut. Retention: uncut portion. Acceptable alternative regen: Maple/Fir

Other Comments: Habitat cut.

Next Steps:

49 63150049-Cut	19.7	42100 - Planted White Pine	Medium Density Pole	62	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription Final Harvest. Leave all Cedar and Hemlock. Buffer Buttermilk Creek at appropriate distance. Retention: Strip of uncut timber shown on map, Buffer along creek, Cedar, and Hemlock. Acceptable alternative regen: Maple/Fir.

Other Comments: Center of stand thinned last rotation. South and North portion still in unthinned planted rows of White Pine and White Spruce. The cut portion has thick understory of Aspen. Scattered Aspen throughout. White Pine is very poor quality.

Next Steps:

66 63150066-Cut	40.0	6119 - Mixed Lowland Deciduous Forest	High Density Pole	50	Harvest	Clearcut with Reserves	Lowland Deciduous with Cedar	Cmpt. Review Proposal
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Prescription Final Harvest portion of stand to diversify age class, and guard against flooding of regen. Winter cut only. Leave all Cedar and Hemlock. Retention: Uncut portion of stand, Cedar, and Hemlock. Acceptable alternative regen: Swamp hardwoods.

Other Comments: Mostly lowland with areas of high ground. Pockets of Cedar, and pockets of Swamp Hardwoods throughout. Many drainages throughout. Two small planted WP fingers in stand south of st#71.

Next Steps:

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Data updated yesterday after 6:00 PM

	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
70	63150070-Cut	13.4	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	52	Harvest	Clearcut with Reserves	Lowland Aspen	Cmpt. Review Proposal

Prescription: Final harvest. Leave all Cedar and Hemlock. Buffer Buttermilk Creek at appropriate distances. Winter cut only. Retention: Buffer, Cedar and Hemlock. Acceptable alternative regen: Swamp hardwoods.

Other Comments: Wet hummocky ground. Scattered Cedar and Swamp Hardwoods throughout. Good maple regen.

Next Steps:

71	63150071-Cut	29.5	429 - Mixed Upland Conifers	High Density Pole	58	Harvest	Systematic Thinning	Mixed Upland Forest	Cmpt. Review Proposal
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Prescription: Harvest every 3rd row. Cut all Aspen and Red Maple. Leave all Oak, and Mixed Hardwoods (other than Aspen and Red Maple). Buffer Manistee River at appropriate distances. Retention: Remaining Rows, Buffers, Oak, and Mixed Hardwoods.

Other Comments: Planted White Spruce, and White Pine stand growing on steps down to Manistee River. WP very poor quality. Setup for harvest last rotation but never cut.

Next Steps:

**Total Treatment
Acreage Proposed: 201.7**

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Data updated yesterday after 6:00 PM

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9 63150009-Cut	45.9	6112 - Lowland Aspen	High Density Pole	58	Harvest	Clearcut with Reserves	Lowland Aspen	Cmpt. Review Proposal

Prescription Final harvest. Leave all Hard Maple, Oak, Cedar and Hemlock. Winter cut only. Access through private. Survey corners needed. Retention:
Specs: Hard Maple, Oak, Cedar, and Hemlock. Acceptable alternative Regen: Swamp Hardwoods.

Other Wet. Thick understory. Many drainages throughout. Small pockets of Cedar mixed throughout stand. Mostly lowland with pockets of high
Comment: ground. High ground compromised of Northern Hardwoods.

Next
Steps:

Limiting Factor and No 2A: Adjacent landowner denies
Treatment Reason access
Access through private.

Total Treatment
Acreage Proposed: 45.9

Data updated yesterday after 6:00 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
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

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Cadillac Mgt. Unit

5 – Forested Stands

Compartment: 150
Year of Entry: 2012

Data updated yesterday after 6:00 PM

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6112 - Lowland Aspen	High Density Pole	6.4	53	81-110	Aspen stand along Manistee River.
4	42110 - Planted Red Pine	High Density Pole	6.2	55	171-200	Consumer's Red Pine stand. Never thinned.
5	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	10.7	Uneven Age	81-110	Some Cedar adjacent to river, but mostly Aspen/Fir stand. Heavy deer browse. Northern Hardwoods regenerating on hillside.
6	429 - Mixed Upland Conifers	High Density Pole	6.9	72	81-110	Upland tree species on hillside, Cedar along Silver creek. Stand is within buffer of Silver Creek. Good hardwood regen throughout.
7	42110 - Planted Red Pine	High Density Log	2.8	55	171-200	Consumer's Red Pine stand.
9	6112 - Lowland Aspen	High Density Pole	65.6	58	81-110	Wet. Thick understory. Many drainages throughout. Small pockets of Cedar mixed throughout stand. Mostly lowland with pockets of high ground. High ground compromised of Northern Hardwoods. Corners needed.
12	42260 - Natural Pine, Mixed Deciduous	High Density Pole	1.5	56	81-110	Pine/Aspen hillside sloping to Silver creek.
15	4139 - Aspen, Mixed Deciduous	High Density Pole	9.7	Uneven Age	81-110	located along silver creek. hawthorn in bottomlands along river, hard maple and aspen along hillside. steep. area too sensitive to harvest.
16	6120 - Lowland Cedar	High Density Pole	0.6	94	111-140	Nice small cedar pocket. Sспен overtopping shorter Cedar and Hemlock.
18	6120 - Lowland Cedar	Medium Density Pole	16.0	Uneven Age	51-80	Shelterwood harvested last rotation. Adequate regen of aspen and maple underneath canopy of Cedar, Hemlock, Fir.
19	42110 - Planted Red Pine	High Density Pole	18.4	55	171-200	Consumer's Red Pine stand. Two islands to East never thinned.
20	6139 - Mixed Lowland Forest	High Density Pole	16.0	Uneven Age	81-110	Occasional supercanopy Pines. Pockets of Swamp Hardwoods, Cedar and Hemlock mixed throughout. Large drainage through middle of stand.
21	6115 - Lowland Ash	High Density Pole	18.6	102	81-110	Swamp Hardwoods lining Manistee river. Heavy deer browse. Many drainages throughout.
25	4134 - Aspen, Spruce/Fir	High Density Pole	194.3	38	81-110	Mostly upland, but some lowland pockets. Thick fir understory in wet areas. drainages mixed throughout. Scattered Cedar and Hemlock in wet areas.
26	4130 - Aspen	High Density Sapling	6.9	6		Regenerating well. Mostly Aspen.



Data updated yesterday after 6:00 PM

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	42110 - Planted Red Pine	High Density Log	43.8	55	171-200	Consumers Red Pine stand.
29	4130 - Aspen	High Density Sapling	20.7	6		Regenerating well. Mostly Aspen. Wet pockets throughout.
30	6112 - Lowland Aspen	Medium Density Pole	3.2	55	1-50	Wet. Drainage through middle. Tag Alder and Willow throughout.
31	6120 - Lowland Cedar	High Density Pole	25.5	Uneven Age	81-110	Mostly Swamp Conifers with scattered Swamp Hardwoods throughout. Stand borders Manistee River.
34	6112 - Lowland Aspen	High Density Pole	25.2	52	81-110	Wet. Poor quality Aspen stand. Small drainage through middle armored by Cedars.
38	6112 - Lowland Aspen	High Density Sapling	34.4	7		Regenerating well. some overstory cedar retained.
39	4130 - Aspen	High Density Sapling	32.4	6		Harvested 2004. Regenerating well to Aspen. Southwest finger actually regenerated by beavers.
40	42110 - Planted Red Pine	High Density Log	7.1	55	171-200	Consumer's Red Pine stand.
42	6112 - Lowland Aspen	High Density Sapling	51.5	13		Mostly lowland with some upland. Many drainages throughout. Aspen regenerating well.
43	6118 - Lowland Deciduous with Cedar	High Density Pole	26.3	Uneven Age	81-110	Stand is large drainage. Timber extremely variable. Pockets of Cedar mixed throughout lowland Aspen and Maple stand. Pockets of Tag and Ash found.
46	6132 - Mixed Lowland Forest with Cedar	High Density Pole	9.2	Uneven Age	81-110	Cedar to South. Swamp Hardwoods to North. Wet.
48	4319 - Mixed Upland Forest	High Density Pole	59.8	Uneven Age	111-140	Buffer zone along Buttermilk Creek. Trees located on sidehills and drainages.
49	42100 - Planted White Pine	Medium Density Pole	20.1	Uneven Age	81-110	Center of stand thinned last rotation. South and North portion still in unthinned planted rows of White Pine and White Spruce. The cut portion has thick understory of Aspen. White Pine is very poor quality.
51	6132 - Mixed Lowland Forest with Cedar	High Density Pole	6.3	Uneven Age	81-110	Wet. Mostly Cedar with Swamp Hardwoods mixed throughout.
52	6130 - Fir, Aspen, Maple	High Density Pole	23.2	39	81-110	mix of aspen, maple, fir. Scattered cedar pockets found throughout stand. north south drainage through middle of stand. Stand is extremely variable.
54	6120 - Lowland Cedar	High Density Pole	10.6	Uneven Age	51-80	Thick Red Maple regen. Wet.

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Cadillac Mgt. Unit

5 – Forested Stands

Compartment: 150
Year of Entry: 2012

Data updated yesterday after 6:00 PM

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	6112 - Lowland Aspen	High Density Sapling	5.6	13		Regenerating well. Wetter areas have Tag Alder.
56	42110 - Planted Red Pine	High Density Log	10.2	55	171-200	Consumer's Red Pine stand.
57	42110 - Planted Red Pine	High Density Log	31.7	55	171-200	Consumer's Red Pine Stand.
58	4136 - Aspen, Mixed Conifer	High Density Pole	24.6	36	81-110	nice aspen stand. Difficult to access. wait one more rotation till harvest.
59	4130 - Aspen	High Density Sapling	15.6	6		Regenerating well. Mostly Aspen.
60	4130 - Aspen	High Density Sapling	6.3	7		great regen
62	6112 - Lowland Aspen	High Density Sapling	16.7	6		Mostly Aspen.
66	6119 - Mixed Lowland Deciduous Forest	High Density Pole	125.1	50	81-110	Mostly lowland with areas of high ground. Pockets of Cedar, and pockets of Swamp Hardwoods throughout. Wait one more rotation to harvest for age class diversity. Many drainages throughout. Two small planted WP fingers in stand south of st#71.
67	6132 - Mixed Lowland Forest with Cedar	High Density Pole	45.4	Uneven Age	81-110	Mix of Swamp Conifers and Swamp Hardwoods along Manistee River. Some nice Cedar pockets.
70	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	16.7	52	51-80	Wet hummocky ground. Scattered Cedar and Swamp Hardwoods throughout. Good maple regen.
71	429 - Mixed Upland Conifers	High Density Pole	29.5	58	171-200	Planted White Spruce, White Pine and Red Pine stand growing on steps down to Manistee River. WP very poor quality. Setup for harvest last rotation but never cut. Is RP growing in this stand ours?
73	42110 - Planted Red Pine	High Density Log	307.8	55	171-200	Consumer's Red Pine stand.
76	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	17.1	Uneven Age	111-140	Cedar/Fir stand along Manistee River. Sidehill growing Northern Hardwoods.
77	4110 - Sugar Maple Association	High Density Pole	16.4	56	51-80	Young Hard Maple stand.



Stand	Cover Type	Acres	Gen Cmts:
2	50 - Water	3.3	Manistee River
3	3105 - Mixed Upland Herbaceous	25.3	Hawthorns planted throughout.
8	6220 - Alder/willow	1.7	tag alder along tributary to manistee river.
10	3105 - Mixed Upland Herbaceous	9.6	Planted Hawthorn in field.
11	6220 - Alder/willow	1.8	Tag Alder along Silver Creek.
13	6220 - Alder/willow	1.5	tag alder drainage leading to buttermilk creek.
14	3205 - Mixed Upland Shrub	10.9	Autumn Olive was planted.
17	6220 - Alder/willow	6.1	
22	50 - Water	8.7	Manistee River
23	50 - Water	1.5	Manistee River
24	6220 - Alder/willow	15.3	Tag Alder pocket with scattered Swamp Hardwoods throughout. Some sapling Firs on islands.
27	6220 - Alder/willow	4.4	Tag Alder pockets along Manistee River.
32	6220 - Alder/willow	1.6	Tag alder armoring drainage.
33	6220 - Alder/willow	12.4	mostly tag alder. scattered aspen fir and maples.
35	3205 - Mixed Upland Shrub	3.1	Aspen starting to creep in fron edges.
36	6220 - Alder/willow	4.7	Mostly Tag Alder with Willow and Cattails.
37	50 - Water	3.5	Manistee River
41	6220 - Alder/willow	7.1	tag alder and grass along buttermilk creek.



Stand	Cover Type	Acres	Gen Cmts:
44	6220 - Alder/willow	1.0	
45	6220 - Alder/willow	1.2	tag alder pocket
47	6220 - Alder/willow	17.9	Wet. Sapling Birch and Tamarack present.
50	6220 - Alder/willow	3.7	Tag Alder and Willow.
53	6220 - Alder/willow	3.4	Wet. Tag Alder with occasional Tamarack and Birch sapling.
61	6229 - Mixed lowland shrub	18.4	Powerline. Is a mix of upland and lowland. Mostly lowland.
63	6220 - Alder/willow	3.0	Tag Alder and grass along Buttermilk Creek.
64	3205 - Mixed Upland Shrub	3.3	Trees starting to fill in. Mix of pine and cherry trees.
65	3205 - Mixed Upland Shrub	1.1	Pine and Cherry starting to creep in from sides.
68	6225 - Bog	0.7	
69	6225 - Bog	2.7	Bog
72	3302 - Low Density Conifer Trees	0.9	Landing for Red Pine stand. Red Pine regen.
74	3205 - Mixed Upland Shrub	2.8	
75	50 - Water	9.9	Manistee River.



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 yesterday after 6:00 PM

Stand	SCA Type	SCA Name	Acres	Comments
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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 yesterday after 6:00 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.