



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63127

Entry Year 2019

Acreage: 3,096

County Wexford

Management Area: Manistee River Valley

Revision Date: 06/08/2017

Stand Examiner: Joe Ventimiglia

Legal Description:

T24N, R09W, Sec 5-8. T24N, R10W, Sec 1-3, 11-12.

Identified Planning Goals:

Vegetation management in the Manistee River Valley management area will provide timber products; maintain or enhance wildlife habitat; protect areas of unique character including the Manistee River and its tributaries, a designated natural river; threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period includes continuing aspen management to maintain early successional habitat for hunting and other wildlife-related recreational opportunities; increasing regeneration of oak; focusing on balancing the red pine age class structure through final harvests and re-planting; and on improving red pine quality through partial harvests. Expected trends within this 10-year planning period are increased recreational pressure, especially on the established trails and along the Manistee River and its tributaries; an increased wildland/urban interface and a need to restore barrens communities through prescribed fire; and invasive plant control.

Soil and topography:

Wide variety of sands including Au Gres, Croswell, Allendale, Manistee and Montcalms. Soils are Histosols near river.

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

Solid state ownership with a few parcels of private landowners. Consumers Power has timber rights to pieces along river.

Unique Natural Features:

High quality pine barrens* (Walton Marsh) occurs in compartment in T24N, R09W, section 5 (primarily in ne quarter).

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Red-shouldered hawk documented in the NE 1/4 of section 8. Bald eagle to the NE and S. Wood turtle documented to the SW. Historic ginseng record in section 9. Hill's thistle to the E in section 4, also to the N. Potential for rare plants of cedar swamp: limestone oak fern, ram's head lady's-slipper and calypso orchid. Potential for ginseng in mesic slopes along Manistee River. Potential for great blue heron rookery, osprey, eagle, goshawk, red-shouldered hawk. Potential for wood turtle, massasauga, and Blanding's turtle. Potential for ebony boghaunter and secretive locust. Potential for persius duskywing, frosted elfin, dusted skipper, grizzled skipper, and red legged spittlebug in grassy openings. Potential for pine tree cricket in white pine stands. Visual management techniques shall be considered with respect to the North Country Trail.

Watershed and Fisheries Considerations:

The Manistee River, Walton Creek, and a number of small, unnamed streams flow through Compartment 127. The Manistee River and Walton Creek are Designated Trout Streams. Both branches of Walton Creek host wild brook and rainbow trout. The Manistee River is stocked with brown trout, and also hosts natural reproduction for brown and rainbow trout. While the state Natural Rivers designation ends at the Missaukee/Wexford County line, Fisheries, Forest Management, and Wildlife Division entered into an agreement to adopt and utilize the Upper Manistee River state natural river zoning ordinance. The vegetative buffer on the mainstream is 175 feet, and 100 feet on the tributaries.

Wildlife Habitat Considerations:

Featured wildlife species include deer, bear, and ruffed grouse. Management objectives are to keep a variety of cover types and age class diversity as well as maintain and/or enhance habitat including work on openings and edges to preserve wildlife viewing and hunting opportunities. (A. Herban 6/07/17)

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 Michigan Formation, Marshall Sandstone and Coldwater Shale. The Michigan is quarried for gypsum in other areas of the State and the Marshall was used as a building stone. A gravel pit is located in Section 4 and there should be potential. This area is located six miles southeast of the prolific Silurian Niagaran reef trend. Oil and gas has limited potential in the Compartment and none of the State lands are leased for oil and gas exploration.

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:

Recreational Facilities and Opportunities:

There are a variety of recreational components within this compartment. The Old US-131 State Forest Campground is located in the southeast part of this compartment. Any proposed treatments impacting this campground should include discussions with local PRD staff that maintain this facility. The Michigan Cross Country Cycle Trail (MCCCT) dips slightly into the Northwest part of this compartment. The Mis-Kal snowmobile trail is located in Section 8. The non-motorized North Country Trail and Iron Belle Trail (same trail) run the length of this compartment, mostly near the Manistee River. The Policy and Procedure 32.22-01 (Best Management Practices for Forest and Wildlife Management Adjacent to Recreational Trails).should be considered if forest treatments impact these recreational trails.

Fire Protection:

There is potential for large fire growth within this compartment. Many areas of remote recreational activities could cause more ignition starts of wildfires. Much of this compartment is within the Zone 6 dispatch area, with Manton Field Office being some of the Initial Attack resources to this area. There are also some urban interface areas within the compartment.

Additional Compartment Information:

The following reports from the Inventory are attached:

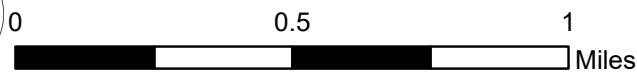
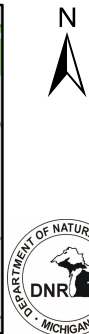
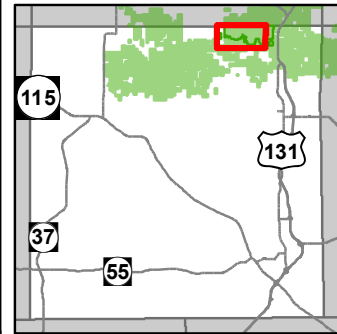
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

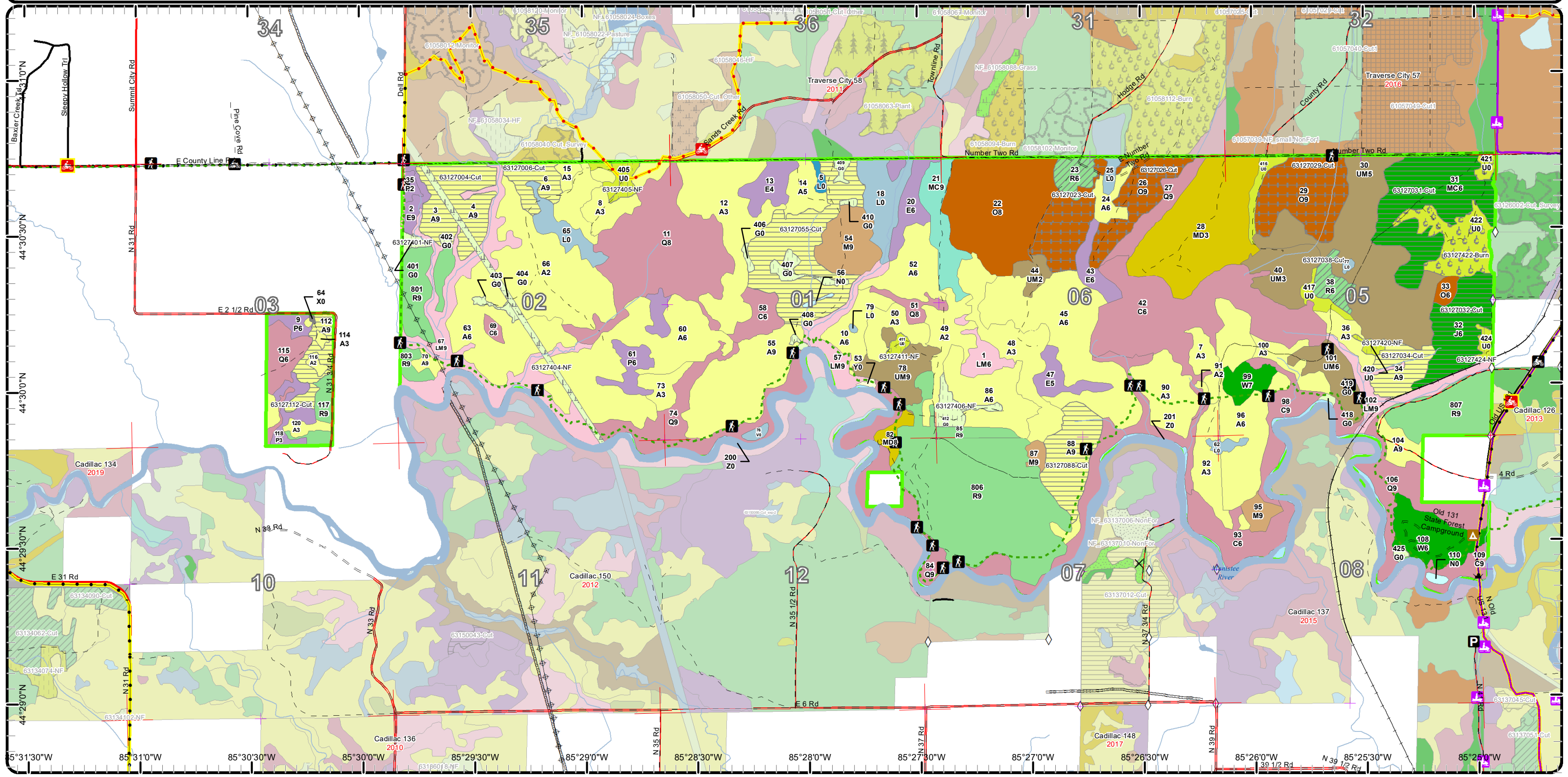
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

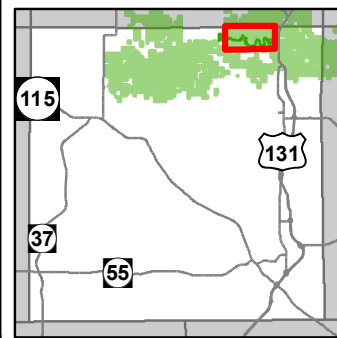
Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post



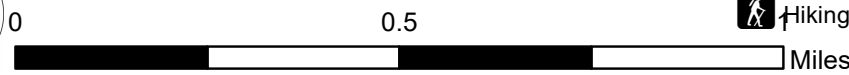
- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Counties
- ✕ Gate
- 🏍️ Motorcycle Trails (DNR License)
- 🚶 Hiking Trails
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- - - Closed
- Streams
- Lakes and Rivers All
- Pipeline
- ⊕ Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Other Treatment - See Comments
- Opening Maintenance
- Harvest, Overstory Removal
- Thinning (Crown, Low, Systematic)
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand/Soil
- Lakes



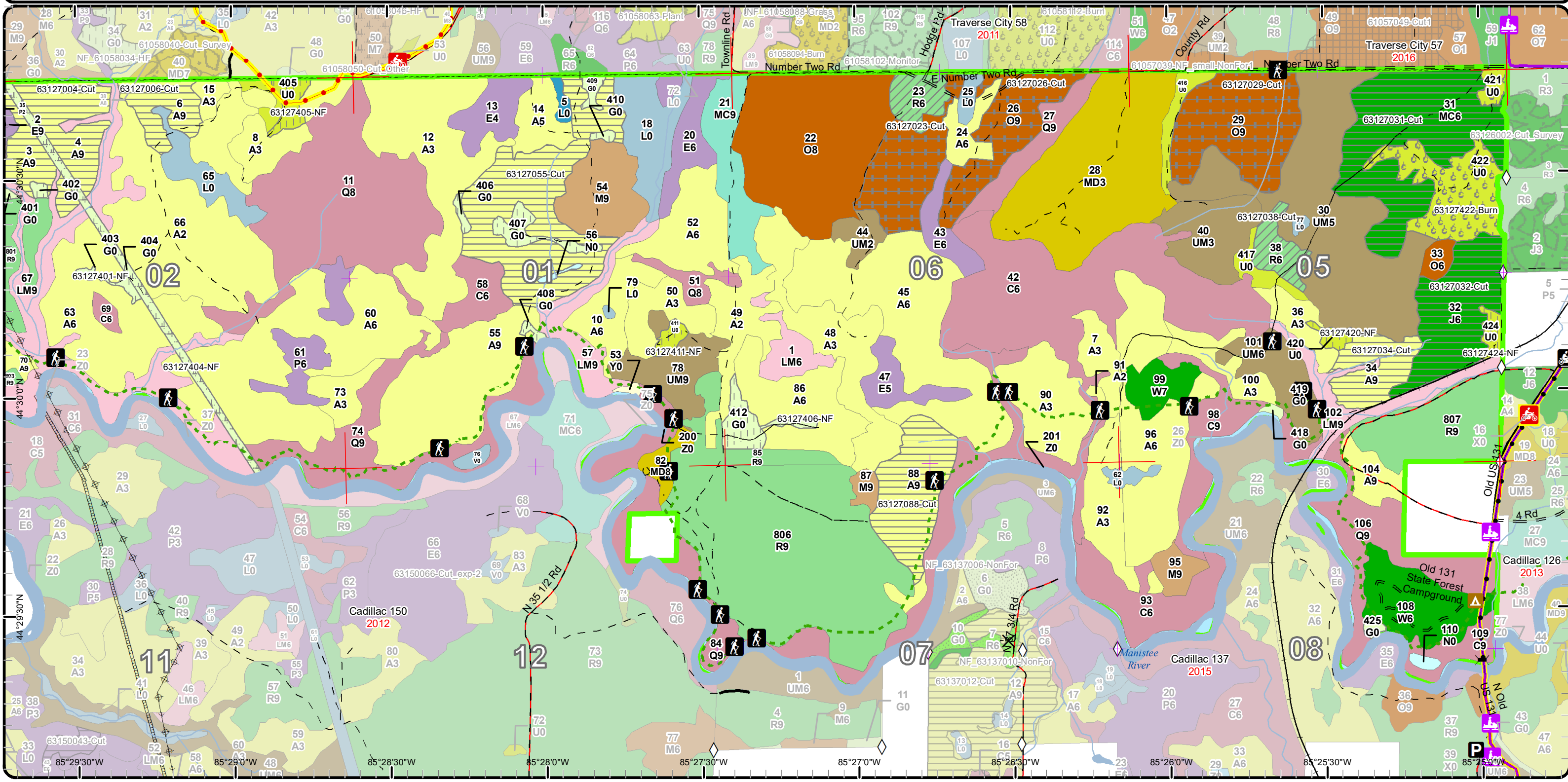
Cover Type & Treatments Map



Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post

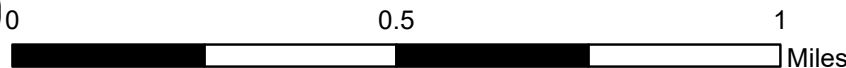
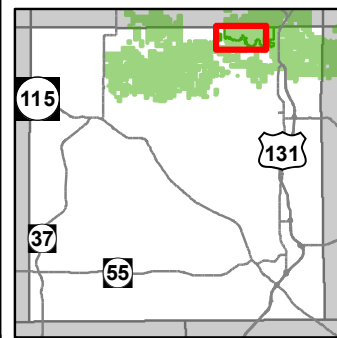


- Miris Corners
- Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Gate
- Bridge
- Campground
- Parking Lot
- Motorcycle Trails (SOS License)
- Motorcycle Trails (DNR License)
- Hiking Trails
- MCCCT Trails
- Snowmobile Trails
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Active Railroads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Other Treatment - See Comments
- Prescribed Burn
- Opening Maintenance
- Harvest, Overstory Removal
- Thinning (Crown, Low, Systematic)
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand/Soil
- Lakes

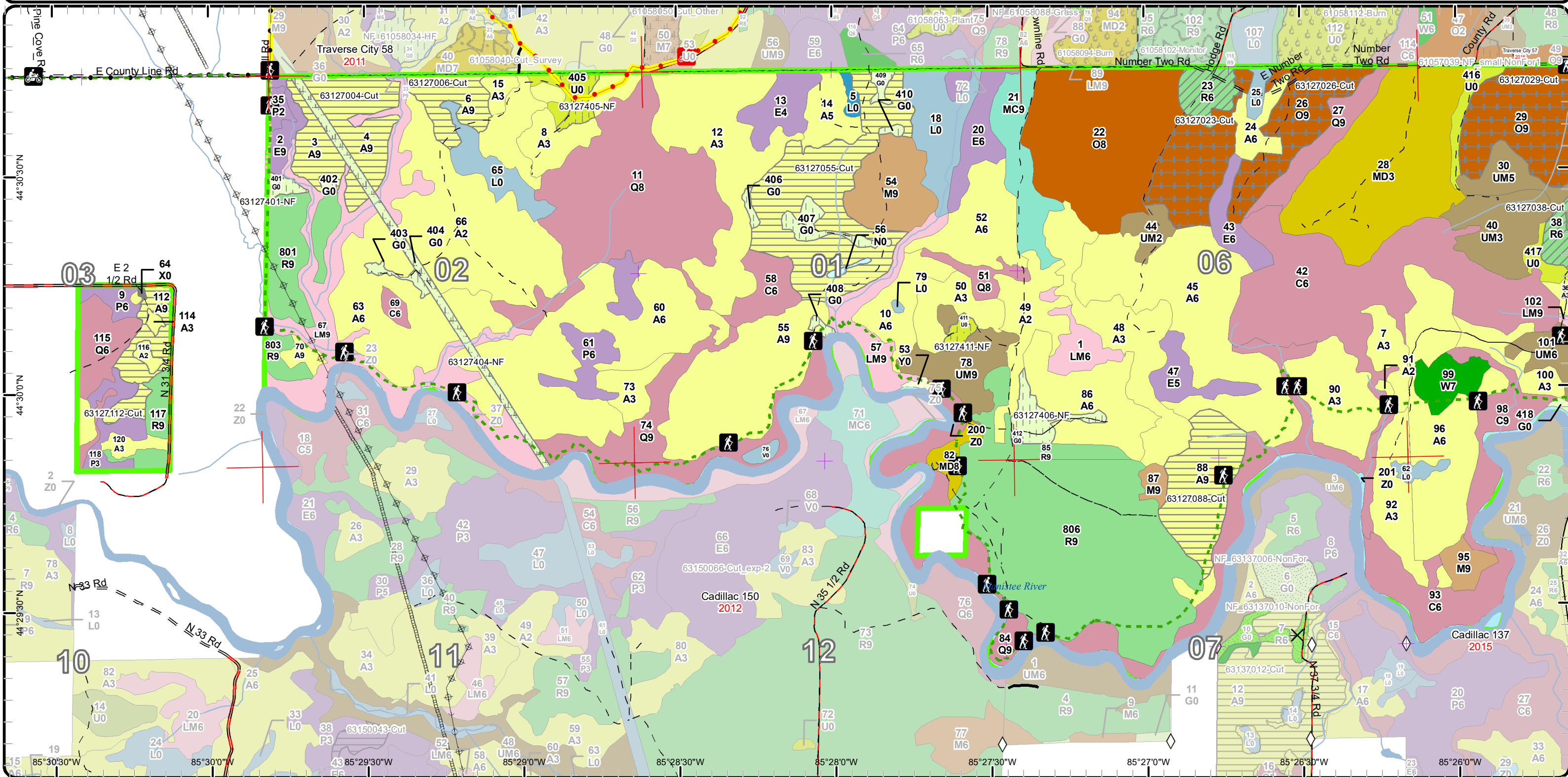


Cover Type & Treatments Map

Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post

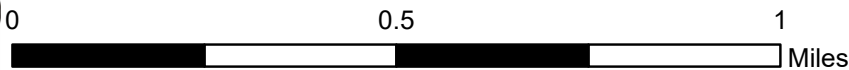
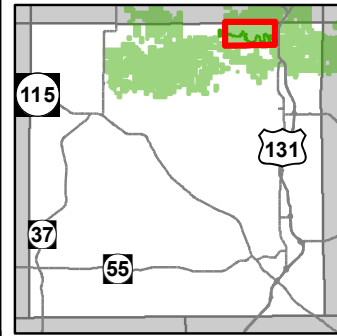


- | | | | |
|--|--|--|---|
| <ul style="list-style-type: none"> — Miris Corners + Remonumented Section Corners ◇ Field Grade GPS Corners □ Counties ✕ Gate 🏍 Motorcycle Trails (SOS License) 🏍 Motorcycle Trails (DNR License) 🚶 Hiking Trails — Designated Hiking Trails ● ORV License ● ORV License & Trail Permit | <ul style="list-style-type: none"> — Michigan Cross Country Cycle Trail (MCCCT) — Paved Roads — County Gravel Roads — Gravel Roads — County Poor Dirt Roads — Poor Dirt Roads — Closed — Active Railroads — Streams — Lakes and Rivers All — Pipeline — Powerline — Compartment Boundary — Clearcut (w/Reserves) | <ul style="list-style-type: none"> Other Treatment - See Comments Opening Maintenance Harvest, Overstory Removal Thinning (Crown, Low, Systematic) 411 - Northern Hardwood 412 - Oak Types 413 - Aspen Types 419 - Mixed Upland Deciduous 421 - Planted Pines 422 - Natural Pines 429 - Mixed Upland Conifers 430 - Upland Mixed Forest 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 613 - Lowland Mixed Forest | <ul style="list-style-type: none"> 122 - Roads/Parking Lot 310 - Herbaceous Openland 330 - Low Density Trees 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland 629 - Mixed non-forested wetland 710 - Sand/Soil Lakes |
|--|--|--|---|



Stand Boundary Map

Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post

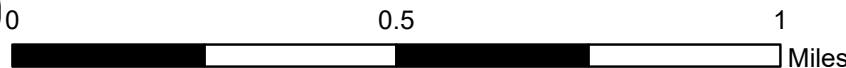
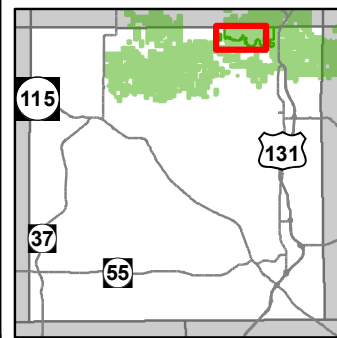


- Miris Corners
- Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Gate
- Bridge
- Campground
- Parking Lot
- Motorcycle Trails (SOS License)
- Motorcycle Trails (DNR License)
- Hiking Trails
- MCCCT Trails
- Snowmobile Trails
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Active Railroads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand/Soil



Stand Boundary Map

Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post



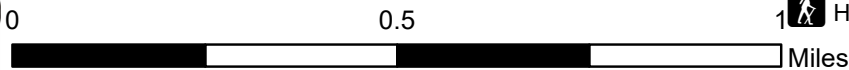
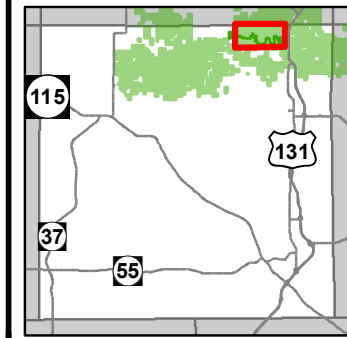
- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Counties
- X Gate
- 🏍️ Motorcycle Trails (SOS License)
- 🏍️ Motorcycle Trails (DNR License)
- 🚶 Hiking Trails
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Closed
- Active Railroads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Stand Boundaries

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand/Soil

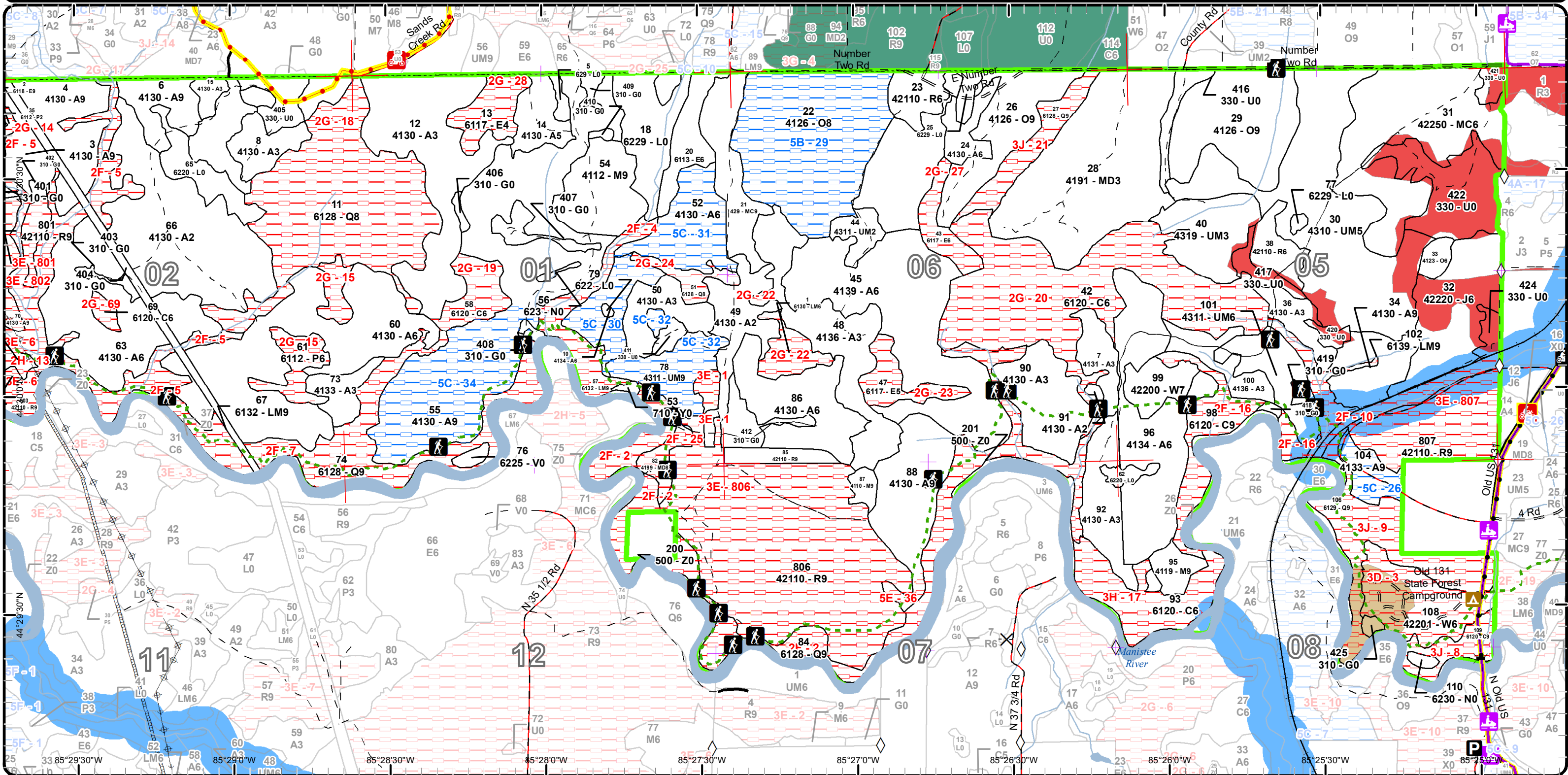


Special Conservation Areas & Site Conditions Map

Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post

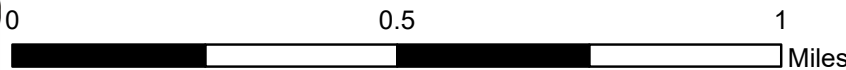
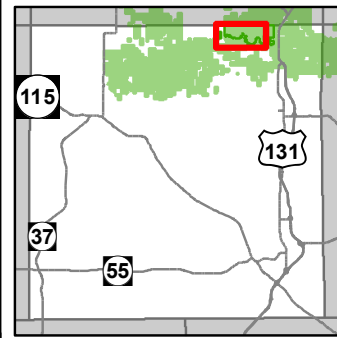


- Miris Corners
- + Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Gate
- Bridge
- Campground
- P Parking Lot
- Motorcycle Trails (SOS License)
- Motorcycle Trails (DNR License)
- Hiking Trails
- MCCCT Trails
- Snowmobile Trails
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- - Poor Dirt Roads
- Active Railroads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- State Forest Campground
- Habitat Corridor
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3D: Recreational / Scenic values
- 3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)

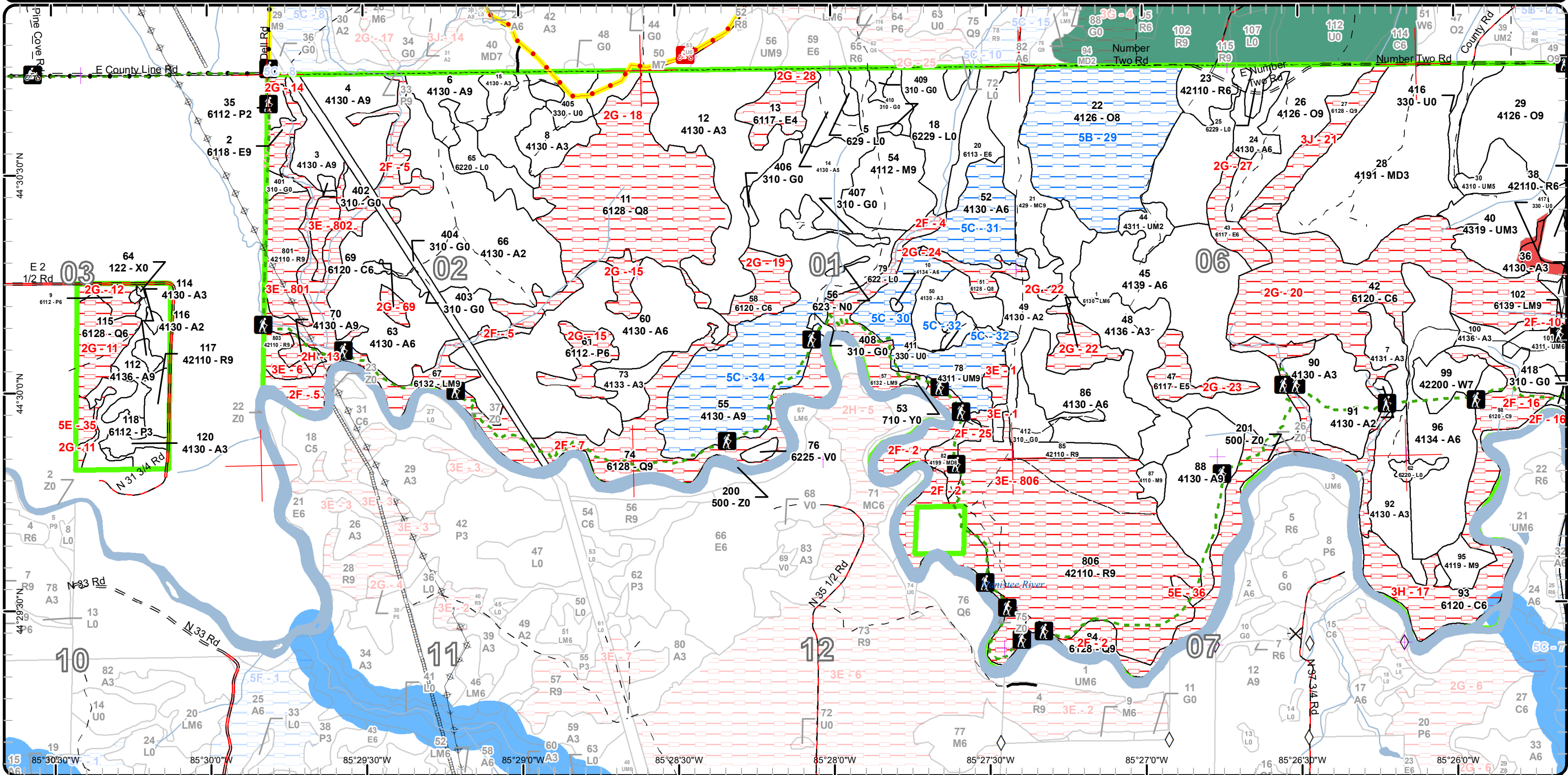


Special Conservation Areas & Site Conditions Map

Compartment: 127
 T24N R09W Sec. 5-8
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2019
 Acres: 3096 GIS Calculated
 Examiner: Joe Ventimiglia
 Map Revised: 7/14/2017
 Map Phase: Web-Post



- Miris Corners
- + Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Gate
- 🏍️ Motorcycle Trails (SOS License)
- 🏍️ Motorcycle Trails (DNR License)
- 🚶 Hiking Trails
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Closed
- Active Railroads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Habitat Corridor



Report 1 – Total Acres by Cover Type and Age Class

Cadillac Mgt. Unit

Compartment 127 Year of Entry 2019

Joe Ventimiglia : Examiner



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1087
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203
Herbaceous Openland	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Jack Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Low-Density Trees	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	321
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	66
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129
Lowland Shrub	151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	151
Marsh	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	41
Oak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
Red Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	188
Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Total	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204	3220



Report 2 – Treatment Summary

Cadillac Mgt. Unit

Year of Entry: 2019

Acres of Harvest

Compartment 127

Total Compartment Acres: 3,096

Commercial Harvest - 466
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	206	0	0	0	0	0	0	0	0	206
Jack Pine	42	0	0	0	0	0	0	0	0	42
Natural Mixed Pines	76	0	0	0	0	0	0	0	0	76
Oak	0	0	0	0	0	119	0	0	0	119
Red Pine	0	0	0	0	23	0	0	0	0	23
Total	324	0	0	0	23	119	0	0	0	466

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	466	0	0	0	38	0	0	0	64	567
Total	466	0	0	0	38	0	0	0	64	567



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
4	63127004-Cut	41.6	4130 - Aspen	Sawtimber Well	52	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Final harvest everything 2 inches and up. Leave all pine. Leave retention island 3 to 10 percent of acreage. (map and give site condition)

Specs:

Next Step

Treatments:

Acceptable Aspen with small mix of other species.

Regen:

Other Winter(Frozen harvest only) Need crane mat to forward wood across stream. Wood will all likely be forwarded to stand 402. Pipeline will also need to be crossed and pipeline will need to be notified. NCT trail is on road used for access. (protect trail and any trees marked with blue paint)

Proposed Start Date: 10/01/2018

6	63127006-Cut	16.9	4130 - Aspen	Sawtimber Well	53	111-140	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
---	--------------	------	--------------	----------------	----	---------	---------	----------	-------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final Harvest. Leave any hemlock and cedar. As well leave a few large white pine as future legacy trees.

Specs:

Next Step

Treatments:

Acceptable Aspen with minor mix of other species

Regen:

Other Winter or dry summer harvest. Grouse spec. No aspen retention as a result of relative small size.

Comment:

Proposed Start Date: 10/01/2018

23	63127023-Cut	12.0	42110 - Planted Red Pine	Poletimber Well	44	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
----	--------------	------	--------------------------	-----------------	----	---------	---------	---------------------	-------------------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Third Row thin red pine. Cut any hardwood if needed in designated rows.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

26	63127026-Cut	66.4	4126 - White, Black, N. Pin Oak	Sawtimber Well	85	51-80	Harvest	Overstory Removal	4122 - Oak, Pine	Even-Aged	Proposal
----	--------------	------	---------------------------------	----------------	----	-------	---------	-------------------	------------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Remove over story. Leave all red pine and pine and oak under 4 inches in diameter. Leave a few white oak scattered as few(green ring) This should be less than 10 BA.

Specs:

Next Step

Treatments:

Acceptable Oak and pine. Small percentage of maple and aspen may be accepted as well.

Regen:

Other Protect advanced oak and pine as much as possible during sale administration. This along with what sprouts from cut will be the future of this stand.

Comment: Apply OAK WILT spec.

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
29	63127029-Cut	52.2	4126 - White, Black, N. Pin Oak	Sawtimber Well	108	51-80	Harvest	Overstory Removal	4121 - Oak, Aspen	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Remove over story, leave all red pine and a few scattered white oak(Green Ring). Leave all oak and pine under 4 inches DBH. Dead oak should be
Specs: utilized if still sound. Green mark a few dead as snags.

Next Step
Treatments:

Acceptable oak along with red maple, and pine.
Regen:

Other Protect advanced understory as best as possible, this along with what sprouts from cut will be future of stand. Apply OAK WILT spec.
Comment:

Proposed Start Date: 10/01/2018

31	63127031-Cut	76.3	42250 - Pine, Oak	Poletimber Well	61	51-80	Harvest	Clearcut with Retention	4121 - Oak, Aspen	Two-Aged	Proposal
----	--------------	------	-------------------	--------------------	----	-------	---------	----------------------------	----------------------	----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final Harvest, leave all white oak and white pine. As well leave all oak under 4 inches dbh.
Specs:

Next Step
Treatments:

Acceptable Oak and mixed pine.
Regen:

Other Protect advanced oak regen as much as possible during sale administration. Apply OAK WILT spec.
Comment:

Proposed Start Date: 10/01/2018

32	63127032-Cut	42.2	42220 - Natural Jack Pine	Poletimber Well	54	81-110	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Proposal
----	--------------	------	------------------------------	--------------------	----	--------	---------	----------------------------	------------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final harvest. Leave one retention island in stand. Mark to cut red pine in stand.(concentrated in southwest end) Protect advanced oak regeneration
Specs: during harvest.

Next Step
Treatments:

Acceptable mix of jack and oak.
Regen:

Other Note pine barren ERA in opening adjacent.
Comment:

Proposed Start Date: 10/01/2018

34	63127034-Cut	20.8	4130 - Aspen	Sawtimber Well	54	81-110	Harvest	Clearcut	4130 - Aspen	Even-Aged	Proposal
----	--------------	------	--------------	-------------------	----	--------	---------	----------	--------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final harvest leave all red pine and "legacy" white pine.
Specs:

Next Step
Treatments:

Acceptable Aspen with minor mix of other species.
Regen:

Other Avoid drainage as stand lines show. Add grouse spec. No retention as a result of relative small size stand.
Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
38	63127038-Cut	11.1	42110 - Planted Red Pine	Poletimber Well	44	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Third row thin red pine plantation.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

55	63127055-Cut	72.7	4130 - Aspen	Sawtimber Well	48	51-80	Harvest	Clearcut with Retention	4136 - Aspen, Mixed Conifer	Even-Aged	Proposal
----	--------------	------	--------------	----------------	----	-------	---------	-------------------------	-----------------------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final Harvest northern portion of stand as treatment layer lays out. Leave all hemlock and cedar. Leave retention island as well as green ring a few

Specs: white pine future legacy trees.

Next Step

Treatments:

Acceptable Aspen with mix of conifer and hardwood accepted as well.

Regen:

Other Winter or dry condition harvest only. Break up age class, cut southern portion of stand next YOE.

Comment:

Proposed Start Date: 10/01/2018

88	63127088-Cut	37.3	4130 - Aspen	Sawtimber Well	55	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
----	--------------	------	--------------	----------------	----	-------	---------	-------------------------	-------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final harvest 2 inch spec. Leave any cedar, hemlock and pine. Also leave retention island, already mapped in site condition layer.

Specs:

Next Step

Treatments:

Acceptable Aspen with minor mix of other species.

Regen:

Other Buffer river bluff and NCT appropriately. Do not cross NCT with red line. (stay on west side of trail)

Comment:

Proposed Start Date: 10/01/2018

112	63127112-Cut	16.4	4136 - Aspen, Mixed Conifer	Sawtimber Well	64	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
-----	--------------	------	-----------------------------	----------------	----	--------	---------	-------------------------	-------------	-----------	----------

Habitat Cut: No**Site Condition:**

Prescription Final harvest leave all cedar. Retention island already identified in site condition layer.

Specs:

Next Step

Treatments:

Acceptable Aspen with minor mix of other species.

Regen:

Other No blue line needed with road. Winter or dry summer harvest recommended.

Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
401	63127401-NF	10.0	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Brush Cutting	310 - Herbaceous Openland		Proposal

Habitat Cut: No**Site Condition:**

Prescription Maintain in an open state. Brushing and cutting a few trees should accomplish this goal. In addition, native grasses and forbs as well as mast bearing shrubs and trees may be planted. Treatment of invasive species as needed.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

404	63127404-NF	15.9	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
-----	-------------	------	------------------------------	------------	--	-----------------	--------------	-----------------	---------------------------------	--	----------

Habitat Cut: No**Site Condition:**

Prescription Utility line maintained in an open state by utility company. May plant some appropriate grasses and forbs if approved by the utility company.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

405	63127405-NF	6.3	330 - Low-Density Trees	Nonstocked		Unspec ified	NonForestMgt	Brush Cutting	310 - Herbaceous Openland		Proposal
-----	-------------	-----	----------------------------	------------	--	-----------------	--------------	---------------	---------------------------------	--	----------

Habitat Cut: No**Site Condition:**

Prescription Maintain in an open state. Brushing and cutting a few trees should accomplish this goal. In addition, native grasses and forbs as well as mast bearing shrubs and trees may be planted. Treatment of invasive species as needed.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

412	63127406-NF	21.2	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal
-----	-------------	------	------------------------------	------------	--	-----------------	--------------	------------------------------------	---------------------------------	--	----------

Habitat Cut: No**Site Condition:**

Prescription Maintain in open state. Brushing, tree cutting, as well as annual or rotational tillage and planting of forage species. May convert to perennial mix or plant mast producing shrubs or trees. Treatment of invasive species as needed.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
411	63127411-NF	3.2	330 - Low-Density Trees	Nonstocked		Unspecified	NonForestMgt	Brush Cutting	310 - Herbaceous Openland		Proposal

Habitat Cut: No**Site Condition:**

Prescription Maintain in an open state. Brushing and cutting a few trees should accomplish this goal. In addition, native grasses and forbs as well as mast bearing shrubs and trees may be planted. Treatment of invasive species as needed.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

420	63127420-NF	2.9	330 - Low-Density Trees	Nonstocked		Unspecified	NonForestMgt	Brush Cutting	310 - Herbaceous Openland		Proposal
-----	-------------	-----	-------------------------	------------	--	-------------	--------------	---------------	---------------------------	--	----------

Habitat Cut: No**Site Condition:**

Prescription Maintain in an open state. Brushing and cutting a few trees should accomplish this goal. In addition, native grasses and forbs as well as mast bearing shrubs and trees may be planted. Treatment of invasive species as needed.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

422	63127422-Burn	37.7	330 - Low-Density Trees	Nonstocked		Unspecified	Burn	Understory	3302 - Low Density Conifer Trees		Proposal
-----	---------------	------	-------------------------	------------	--	-------------	------	------------	----------------------------------	--	----------

Habitat Cut: No**Site Condition:**

Prescription Pine Barrens ERA. Refer to ERA plan for future management possibilities and objectives.

Specs:

Next Step
Treatments:

Acceptable Pine Barrens composition.
Regen:

Other Fire will need to be coordinated though wildlife and fire supervisors. Date when burn is performed will be dependent on many factors from weather to funding. Burn plan will need to be written by fire supervisor.
Comment:

Proposed Start Date: 10/01/2018

424	63127424-NF	4.2	330 - Low-Density Trees	Nonstocked		Unspecified	NonForestMgt	Brush Cutting	310 - Herbaceous Openland		Proposal
-----	-------------	-----	-------------------------	------------	--	-------------	--------------	---------------	---------------------------	--	----------

Habitat Cut: No**Site Condition:**

Prescription Maintain in an open state. Brushing and cutting a few trees should accomplish this goal. In addition, native grasses and forbs as well as mast bearing shrubs and trees may be planted. Treatment of invasive species as needed.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

**Total Treatment
Acreage Proposed: 567.3**

Report 4 – Site Conditions

Cadillac Mgt. Unit

Compartment: 127

Joe Ventimiglia : Examiner

Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions											
		With Condition	Not Available		5B	5C	2F	2G	2H	3D	3E	3H	3J	5E		
1087	954	123	10	Aspen		123		0	4							7
2	2	0	0	Bog												
203	0	0	203	Cedar			26	133					31	12		
48	48	0	0	Herbaceous Openland												
42	42	0	0	Jack Pine												
71	71	0	0	Low-Density Trees												
41	16	0	24	Lowland Aspen/Balsam Poplar				24								
322	0	0	321	Lowland Conifers			127	137							58	
66	18	0	48	Lowland Deciduous				48								
129	0	0	129	Lowland Mixed Forest			118	12								
53	53	0	0	Lowland Shrub												
2	2	0	0	Marsh												
102	95	0	7	Mixed Upland Deciduous			7									
76	76	0	0	Natural Mixed Pines												
41	41	0	0	Northern Hardwood												
212	123	89	0	Oak	89											
280	41	0	239	Red Pine							239					
1	1	0	0	Sand, Soil												
26	26	0	0	Upland Conifers												
188	165	24	0	Upland Mixed Forest		24										
0	0	0	0	Urban												
57	57	0	0	Water												
46	13	0	33	White Pine						33						
3,096	1,846	235	1,015	Total Forested Acres	89	147	277	354	4	33	239	31	70	7		
	60%	8%	33%	Relative Percent												

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

Site No.	Dominant Site Cond	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable		3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:								

Report 4 – Site Conditions

Cadillac Mgt. Unit
 Joe Ventimiglia : Examiner

Compartment: 127
 Year of Entry: 2019

2	Unavailable	2F: Too steep	77	2G: Too wet (sensitive soils, does not include access issues)	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments:							
3	Unavailable	3D: Recreational / Scenic values	33	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 131 SF Campground							
4	Unavailable	2F: Too steep	20	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	2F: Too steep	76	3J: Water quality / BMPs (stream, river, or lake)	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
Comments:							
6	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Joe Ventimiglia : Examiner

Compartment: 127
Year of Entry: 2019

7	Unavailable	2F: Too steep	49	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	41	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Most of stand within buffer of Manistee river, far east end for the most part too wet. May be small opportunities for a sale but not much.							
10	Unavailable	2F: Too steep	22	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Combination of too steep and stream buffers and RR tracks.							
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Joe Ventimiglia : Examiner

Compartment: 127
Year of Entry: 2019

13	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: 3 acre stand surrounded by river ravine.</p>							
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Very small portion of stand may be operable but by in large too wet.</p>							
15	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	18	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
16	Unavailable	2F: Too steep	26	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
17	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	32	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Joe Ventimiglia : Examiner

Compartment: 127
Year of Entry: 2019

18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	110	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Between wet site and small streams in portions of stand not suitable .							
19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
20	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	116	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
21	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	18	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
23	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Joe Ventimiglia : Examiner

Compartment: 127
Year of Entry: 2019

24	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
25	Unavailable	2F: Too steep	7	3D: Recreational / Scenic values	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments: Combination of camp site along river and too steep of bank.							
26	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
27	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
28	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
29	Available	5B: Maintain for regeneration purposes	89	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand was just cut. Should not be entered to allow regeneration to grow.							

Report 4 – Site Conditions

Cadillac Mgt. Unit

Compartment: 127

Joe Ventimiglia : Examiner

Year of Entry: 2019

30	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Cut next YOE, unless really in need of acres.</p>							
31	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Cut next YOE, unless really in need of acres.</p>							
32	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Cut next YOE, unless really in need of acres.</p>							
34	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	64	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Age class diversity of large stand. If in need of acres to meet plan could cut.</p>							
35	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Long term retention for aspen cut to northeast.</p>							
36	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							

Report 4 – Site Conditions

Cadillac Mgt. Unit
 Joe Ventimiglia : Examiner

Compartment: 127
 Year of Entry: 2019

69	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
801	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	22	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
802	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
806	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	156	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
807	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	42	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
----------	--------------	-------------	----------------	-------

Comments



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6130 - Fir, Aspen, Maple	Poletimber Well	11.6	85	1-50	Swamp that has been cut all around in recent decades.
2	6118 - Lowland Deciduous with Cedar	Sawtimber Well	7.4	52	81-110	Transition area similar to stand 3 in southern pocket but wetter with conifer component. Wet Pockets throughout. Drainage running on East side of stand. NCT trail west border.
3	4130 - Aspen	Sawtimber Well	15.2	52	81-110	Wet Pockets throughout. Stand 4 is same stand only separated as a result of power line. Log aspen with very thick muscle wood understory. Upland although stand and access to stand will only work in a cold frozen winter or in usually dry summer. (Not solid ground.)
4	4130 - Aspen	Sawtimber Well	26.5	52	81-110	Understory HEAVY to Muscle wood. Wet pockets throughout, Drainage in middle of stand. Log quaking stand with significant access difficulties. Wood will likely need to be hauled to stand 401 and trucked from there. One drainage will need to be crossed and wood will need to come across power line.
6	4130 - Aspen	Sawtimber Well	17.0	53	111-140	Scattered WP, Cedar, Hemlock. Nice Aspen with lowland character
7	4131 - Aspen, Oak	Sapling Well	12.1	7	Immature	Stand was final harvested in 2010 all oak, cedar and hemlock were left. Aspen, maple and oak regenerated well although a lot of oak was left. Over story oak not worth going after and crunching regeneration.
8	4130 - Aspen	Sapling Well	15.4	15	Immature	Stand was final harvested in 2001. Cedar was left.
9	6112 - Lowland Aspen	Poletimber Well	5.9	45	81-110	For the most part a low wet paper birch and aspen pole stand, with a small sliver of upland on west end too small to map.
10	4134 - Aspen, Spruce/Fir	Poletimber Well	19.0	49	51-80	Aspen/fir stand. Thick fir understory, NCT borders stand in south end. Seasonally wet although overall upland stand.
11	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Medium	109.6	115	51-80	Majority is wet, streams and small seeps through stand. Small isolated pockets of high ground hold Aspen/Fir/Maple mix. Tag alder pockets throughout. Variable lowland stand pockets of fir/ Aspen Pockets of flooded dead ash.
12	4130 - Aspen	Sapling Well	66.8	15	Immature	Stand was final harvested in 2001. Some Cedars left throughout. Note 1.5ac habitat cut was performed around 2010 was included in this stand(southeast hump). Too small too map.
13	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Poor	15.7	75	Unspecified	Close to non forested, very wet heavy to tag alder.
14	4130 - Aspen	Poletimber Medium	13.8	26	Immature	Wet in east edge. Stand contains Residual Oaks, Cherry, and Balsam. Southeast portion flooded out and is heavier to tag alder.
15	4130 - Aspen	Sapling Well	4.3	15	Immature	Regenerating Aspen/Fir stand with residual Cedars.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6113 - Lowland Maple	Poletimber Well	18.2	65	81-110	Variable lowland hardwood stand, for the most part a small pole stand although there are a few pockets of more mature hardwood and one clone of mature aspen. Appears to be old cut but nothing we have records on. Wet, high water table.
21	429 - Mixed Upland Conifers	Sawtimber Well	26.2	65	81-110	Scattered large diameter Pines and Oaks. Underneath is a polestand of Aspen, Oak, Maple and Pine. Northwest end have a very nice grove of Hemlock with a couple very big hemlock.
22	4126 - White, Black, N. Pin Oak	Sawtimber Medium	88.6	97	1-50	Stand was marked to cut(oak), with all aspen, maple, and fir being cut by spec. Stand was cut in 2013. Heavy browse noted on some regeneration but overall good mix coming in following cut.
23	42110 - Planted Red Pine	Poletimber Well	12.0	44	171-200	Never before thinned pole red pine plantation.
24	4130 - Aspen	Poletimber Well	10.1	26	Immature	Stand was final harvested in 1990.
26	4126 - White, Black, N. Pin Oak	Sawtimber Well	66.4	85	51-80	Stand formed from stump sprouts. Larger diameter trees in South and West. WP and Oak in understory. Mostly white oak but also red/pin oak component.
27	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	17.5	119	81-110	Too wet to harvest commercially because of creek in middle of stand. Habitat Cut.
28	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	95.3	4	1-50	Stand was final harvested in 2012. All oak under 4 inches dbh was left along with scattered green marked white oak trees. As a result stand has a nice mix of oak/maple/aspen regenerated from 2012 cut and all the advanced oak under 4inches dbh that was worked around during that cut.
29	4126 - White, Black, N. Pin Oak	Sawtimber Well	52.2	108	51-80	Mostly white oak, red/black oak in rough shape some already dead standing. Good understory development.
30	4310 - Pine, Oak Mix	Poletimber Medium	107.8	16	1-50	Stand was cut in 2000. All oak less than 6 inches dbh was left. All red and white pine was left along with cherry. Some small islands were left as well. South end of stand was mostly jack pine at time of harvest.
31	42250 - Pine, Oak	Poletimber Well	76.3	61	51-80	Mixed oak and jack pine stand. Jack pine concentrated in east while oak is in the west. Jack pine on the decline and falling apart in areas. A good understory of oak formed above browse line.
32	42220 - Natural Jack Pine	Poletimber Well	42.2	54	81-110	Jack pine stand that is mostly intact with pocket of aspen and planted red pine in south end.
33	4123 - Red Oak	Poletimber Well	4.6	36	1-50	Young scrubby mix of oak, jack pine and white pine.
34	4130 - Aspen	Sawtimber Well	20.8	54	81-110	Mixed Pine and Aspen with a few scattered large WP and RPs. Some pockets of mature Aspen throughout.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6112 - Lowland Aspen	Sapling Medium	3.6	9	Immature	Was a habitat cut that occurred in 2007. A few Cedar were left, most of which have died, some balsam left in pockets as well. Appears it got too wet to cut all that was originally prescribed? Flooded to cattails in some spots.
36	4130 - Aspen	Sapling Well	11.2	6	Immature	Stand cut in 2010. Any oak were left.
38	42110 - Planted Red Pine	Poletimber Well	11.1	44	171-200	Planted red pine never before thinned plantation.
40	4319 - Mixed Upland Forest	Sapling Well	27.8	6	Immature	Stand was final harvested in 2010, all cedar, hemlock and oak was left. Came back to diverse mix. Small cedar pocket concentrated in center of stand. Mostly upland although hummocky seasonally wet in areas.
42	6120 - Lowland Cedar	Poletimber Well	115.7	107	81-110	Deer Yard area. Cedar/Aspen/Hemlock/Balsam along outer fringe. Center is a Black Spruce/Tamarack Bog with sphagnum for ground cover. Highly variable. Pockets of Cedar, Pine, and Swamp Hardwoods. Flowing creek runs through middle of stand.
43	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	11.6	75	51-80	Drainage from Riplow Marsh runs through middle of stand. No defined bed and bank, but very wet. Some scattered large diameter Pines.
44	4311 - Pine, Aspen Mix	Sapling Medium	8.0	5	1-50	.Stand was cut in 2012. Green ringed large pines were left. Cedar and hemlock along with oak under 4 inches were left. Will be mixed stand.
45	4139 - Aspen, Mixed Deciduous	Poletimber Well	89.6	47	81-110	Scattered large diameter White Pines mixed throughout. Some more mature Aspen clones, although most is just approaching log diameter. Mostly upland although some seasonally wet areas in stand.
47	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	13.2	65	1-50	Lightly wooded drainage. Heavy to Tag Alder.
48	4136 - Aspen, Mixed Conifer	Sapling Well	44.6	15	Immature	Stand was final harvested in 2001, all cedar was left. Better regen in South. Left some Oak and Cedar.
49	4130 - Aspen	Sapling Medium	24.1	3	Immature	Stand was final harvested in summer of 2014. All oak and cedar were left. Short wood operation.
50	4130 - Aspen	Sapling Well	16.7	16	Immature	Stand was final harvested in 2000. All oak was left.
51	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Medium	7.5	93	1-50	Mostly hemlock and cedar, although more lowland hardwood and tag alder in west sliver. .
52	4130 - Aspen	Poletimber Well	29.5	49	81-110	Mixed fir, aspen, and maple. Drainage through middle of stand. Beaver activity on West side. Wet Pockets throughout. Scattered large White Pines, hummocky lowland character in middle.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4112 - Maple, Beech, Cherry Association	Sawtimber Well	28.7	95	81-110	Stand was marked thinned in fall of 2012. All aspen and ironwood. Treated with sale #63-054-09-01. Sale comments road was in rough shape from logging operation. Stand was thinned before that in 1990. Currently stand in good shape, allow more time to respond to 2012 cut, seasonally wet hummocky ground.
55	4130 - Aspen	Sawtimber Well	136.3	48	51-80	Large Aspen stand with wet pockets and small depressions throughout. Southern half of stand appears to be wetter and has small pockets heavy to white pine. South contains more WP with an understory of Fir. NCT trail borders portions of stand.
57	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	20.2	113	81-110	OPIC - FMD: Steep banks to drainage area. Land too sensitive to harvest. Some large over-mature aspen growing on bank.
58	6120 - Lowland Cedar	Poletimber Well	14.2	114	171-200	Thick mix of Fir, Birch, Cedar. Too wet for management, small stream runs on south end of stand.
60	4130 - Aspen	Poletimber Well	92.5	22	Immature	Stand was final harvested in 1994. Wet spots with Tag Alder throughout.
61	6112 - Lowland Aspen	Poletimber Well	19.0	59	51-80	Wet aspen, cedar, ash, and alder pockets of stand that were too wet to cut with surrounding timber was cut. Standing water in spots.
63	4130 - Aspen	Poletimber Well	59.1	23	Immature	Stand was final harvested in 1993. Lowland nature in pockets it appears seasonally. Access came across power line. A few pockets flooded out to alder but mostly upland aspen.
66	4130 - Aspen	Sapling Medium	100.1	3	Immature	Stand was final harvested in summer of 2014. Short wood operation. All cedar and scattered oak were left. A few scattered green marked white pine were left as well. Regeneration is patchy. Some appears to have flooded out and others look to be heavy deer browse.
67	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	75.5	113	81-110	Large network of creek drainage down to Manistee river. Significant variability from side slopes of aspen and hardwood to conifers and floodplains of river.: Steep banks to drainage area. Land too sensitive to harvest. Conifer concentrated along stream while aspen and hardwood along the banks.
69	6120 - Lowland Cedar	Poletimber Well	3.0	114	111-140	Very wet small pocket of cedar and aspen that was too wet to cut when stand around was cut previously. Leave as thermal cover and some conifer component in area.
70	4130 - Aspen	Sawtimber Well	3.8	65	111-140	Small piece of aspen blocked from commercial access. Good piece to just left go and succeed naturally.
73	4133 - Aspen, Mixed Pine	Sapling Well	10.4	17	Immature	Left all white pine. Small section that was cut, seasonally wet ground.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
74	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	49.2	113	81-110	Steep banks to drainage area. Land too sensitive to harvest. Some large over-mature aspen growing on bank. Variable drainages to Manistee all of this timber is either too steep or too close to natural rivers for managing. Includes flooded river flats and side slopes of river drainages. NCT trail also runs through.
78	4311 - Pine, Aspen Mix	Sawtimber Well	23.7	64	51-80	Mixed pine stand with aspen, maple, and cherry mixed in. NCT borders edge of stand.
82	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	7.1	85	51-80	
84	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	77.4	119	111-140	Large area off the bluff of the Manistee river and associated drainages. All land too sensitive and within natural rivers buffer. Side slopes include aspen and maple and pine, while bottoms hold cedar, hemlock and lowland hardwood along river flats.
85	42110 - Planted Red Pine	Sawtimber Well	7.4	70	111-140	Stand was treated with sale # 63-017-12-02. Third thinned in 2014. Stand was picked up by sale producer that cut the consumers red pine to south. Stand is a portion of a larger stand owned by Consumers Energy. Stand was thinned before that in 2003. Stand was row thinned before that in 1990.
86	4130 - Aspen	Poletimber Well	38.2	26	Immature	Stand was final harvested in 1990.
87	4110 - Sugar Maple Association	Sawtimber Well	4.0	101	81-110	Large diameter Ash, Maple, and Basswood. Wait for regeneration to become established to harvest.
88	4130 - Aspen	Sawtimber Well	40.4	55	51-80	Seasonally wet aspen stand with seeps and some wet pockets in stand. Understory Muscledwood/Fir. Scattered Pine and Oak. NCT trail on east end.
90	4130 - Aspen	Sapling Well	31.5	4	Immature	Cut in summer of 2012. All cedar, hemlock and oak were left. Also all conifers were left on ten feet of either side of the NCT.
91	4130 - Aspen	Sapling Medium	1.0	15	Immature	Residual Cedar and Oak. Not fully stocked because of deer browsing. Very small old habitat cut.
92	4130 - Aspen	Sapling Well	23.3	16	Immature	Stand was final harvested in 2000. Residual Cedars left. Came back well to aspen and balsam fir. Approaching small pole.
93	6120 - Lowland Cedar	Poletimber Well	31.5	106	141-170	Large cedar stand with limited to no understory. Excellent deer yarding area. Includes small river flat of dead and dying ash along east border.
95	4119 - Mixed Northern Hardwoods	Sawtimber Well	7.9	115	51-80	Stand was last thinned in 1993. Poor quality Harwood stand. Scattered Hemlock. Aspen in decline.
96	4134 - Aspen, Spruce/Fir	Poletimber Well	60.6	23	Immature	Stand was final harvested in 1993. Came back well to aspen with heavy balsam component.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
98	6120 - Lowland Cedar	Sawtimber Well	26.1	119	81-110	Steep banks to drainage area. Land too sensitive to harvest. Some large over-mature aspen growing on bank. Variable stand mostly lowland conifer but some aspen on banks and lowland hardwood/alder along flats.
99	42200 - Natural White Pine	Sawtimber Poor	12.9	69	1-50	Stand cut in 2010, all aspen and maple was cut with pine being marked to cut with orange paint.
100	4136 - Aspen, Mixed Conifer	Sapling Well	13.8	16	Immature	Stand was final harvested in 2000. Came back mostly to aspen although area north of two track came back more to pine and maple.
101	4311 - Pine, Aspen Mix	Poletimber Well	21.0	42	111-140	Pole stand of Pine and Aspen with a few scattered large WP and RPs in over story. Some pockets of mature Aspen throughout. Harvest when all Aspen is ready.
102	6139 - Mixed Lowland Forest	Sawtimber Well	22.1	75	81-110	Steep banks to Walton Creek. Land too sensitive to harvest. Lowland at the bottom of ravine although upland along the banks. Railroad tracks run through this corridor as well. Super canopy pine located mostly in one grove, but found throughout this network of ravines.
104	4133 - Aspen, Mixed Pine	Sawtimber Well	11.2	60	81-110	Mixed aspen, red maple, mixed pine with balsam understory. Upland with shelves down topo. . Aspen falling apart. More Pine and Balsam in the South, while most of north of stand in where the aspen is. NCT borders stand.
106	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	40.5	110	141-170	Mixed lowland of red maple, balsam, ash, hemlock, cedar, white pine. Variability in stand, some pockets along river are flooded hardwood flats while interior pockets are almost all hemlock and cedar with balsam understory. Scattered large diameter legacy pine.
108	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	33.3	65	141-170	Old 131 campground. Scattered large diameter White Pines. Variable stand of mostly aspen and white pine thick balsam understory in most areas. Campground infrastructure through majority of stand. Heavily used campground in summer.
109	6120 - Lowland Cedar	Sawtimber Well	12.1	107	81-110	River flat mostly conifer swamp, with some lowland flooded hardwood pockets along river edge.
112	4136 - Aspen, Mixed Conifer	Sawtimber Well	19.8	64	81-110	Mixed aspen stand with low pockets and one drainage in the far southwest end. Some cedar pockets mostly in for northeast corner.
114	4130 - Aspen	Sapling Well	1.7	14	Immature	Stand was final harvested in 2002. Came back well for most part to aspen.
115	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	19.9	116	51-80	Mix of Cedar, BAM, Fir and Swamp Hardwoods. Some scattered large WP. Drainage through middle. Some evidence of what appears to be illegal cutting of trees along road. Posted as private road although just a state two track.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
116	4130 - Aspen	Sapling Medium	2.2	5	Immature	Stand was final harvested in 2011. Came back a little sparse although still forested.
117	42110 - Planted Red Pine	Sawtimber Well	10.7	58	111-140	Stand was row thinned in 2000. Stand was marked second thinning cut in 2011.
118	6112 - Lowland Aspen	Sapling Well	12.2	14	Immature	Stand was final harvested in 2002, all cedar was left. Wet pockets throughout.
120	4130 - Aspen	Sapling Well	4.6	5	Immature	Stand was final harvested in 2011. Small drainage in middle of stand. Mature aspen left along drainage.
801	42110 - Planted Red Pine	Sawtimber Well	28.4	66	141-170	Consumer's Energy Pine Plantation. Third row thinned some time in the early 2000's and set up to be second thinned in 2017. Very difficult access needs to be very dry or frozen.
803	42110 - Planted Red Pine	Sawtimber Well	6.0	66	171-200	Consumer's Energy Pine Plantation. Never thinned. Not reasonable access. Consumers has never been able to reach stand.
806	42110 - Planted Red Pine	Sawtimber Well	162.1	70	141-170	Large consumer's energy pine plantation. Was recently thinned in 2014 by consumers forester. Consumers actively has managed this stand over the years.
807	42110 - Planted Red Pine	Sawtimber Well	42.1	61	111-140	Consumer's Energy Pine Plantation. Actively managed by Consumers. Appears the stand was thinned recently. Plantation has a mix of hardwood as well mostly on west end.



Stand	Cover Type	Acres	Managed Site	General Comments:
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.



Stand	Cover Type	Acres	Managed Site	General Comments:
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
5	629 - Mixed non-forested wetland	2.5	No	Tag alder with mixed maple, fir and other lowland hardwood. Very wet ground which will likely no support forested stand. Close to being considered E type stand.
18	6229 - Mixed lowland shrub	26.3	No	Bog with Tag Alder and scattered BAM and lowland hardwood, just not enough to be forested stand.
25	6229 - Mixed lowland shrub	3.9	No	South end of Ripplow Marsh.
53	710 - Sand, Soil	1.0	No	
56	623 - Emergent Wetland	0.9	No	Vernal pond/ low spot.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.



Stand	Cover Type	Acres	Managed Site	General Comments:
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
62	6220 - Alder/willow	3.3	No	Stand was final harvested in 2000. Flooded out mostly alder.
64	122 - Road/Parking Lot	0.4	No	County truck turnaround. Gravel. Also site where residence put trash for pick-up.
65	6220 - Alder/willow	15.0	No	Old beaver pond flooding. Reclaiming to Willow brush and Tag Alder. A few trees scattered but by in large alder willow flooded ground.
76	6225 - Bog	2.3	No	Bog with Tag Alder and scattered BAM.
77	6229 - Mixed lowland shrub	1.2	No	Tag alder and willow brush.
79	622 - Lowland Shrub	0.5	No	Tag Alder.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.



Stand	Cover Type	Acres	Managed Site	General Comments:
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
110	6230 - Cattail	1.6	No	Old wet ash stand, all ash is long dead and stand is mostly lowland shrub and cattails at this time.
200	500 - Water	21.7	No	Manistee River
201	500 - Water	35.0	No	Manistee River



Stand	Cover Type	Acres	Managed Site	General Comments:
401	310 - Herbaceous Openland	2.9	No	
402	310 - Herbaceous Openland	1.0	No	
403	310 - Herbaceous Openland	2.3	No	
404	310 - Herbaceous Openland	15.9	No	Power Line Underground and above.
405	330 - Low-Density Trees	9.9	No	Party/Dumping spot. Scattered Aspen clones.
406	310 - Herbaceous Openland	1.3	No	
407	310 - Herbaceous Openland	6.8	No	Planted Rye Field with scattered trees.
408	310 - Herbaceous Openland	1.2	No	
409	310 - Herbaceous Openland	2.4	No	Planted Rye Field
410	310 - Herbaceous Openland	0.9	No	Planted Rye Field
411	330 - Low-Density Trees	3.2	No	
412	310 - Herbaceous Openland	9.8	No	Planted Rye Field, with scattered trees.
416	330 - Low-Density Trees	7.2	No	
417	330 - Low-Density Trees	5.8	No	Pine Barrens ERA area.
418	310 - Herbaceous Openland	0.9	No	Open bluff to river.
419	310 - Herbaceous Openland	1.2	No	
420	330 - Low-Density Trees	2.9	No	Scattered scrub pine and cherry.
421	330 - Low-Density Trees	4.0	No	Pine Barrens ERA area.



Stand	Cover Type	Acres	Managed Site	General Comments:
422	330 - Low-Density Trees	33.7	No	Pine Barrens ERA area. Scattered open grown jack pine and cherry for the most part.
424	330 - Low-Density Trees	4.2	No	Pine Barrens ERA area. Scattered open grown jack pine and cherry.
425	310 - Herbaceous Openland	1.4	No	Used for picnic area and canoe launch. Managed by parks division.