



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63009

Entry Year 2020

Acreage: 1,736

County Lake

Management Area: Lake County Outwash

Revision Date: 2018-06-14

Stand Examiner: Cheryl Nelson

Legal Description:

T19N R12W, Section 5

T20N R12W, Sections 20, 29, and 3

Identified Planning Goals:

Vegetation management in the Lake County Outwash Management Area will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period will focus on harvesting older jack pine and balancing the age-class distribution of aspen. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation; maintaining soft and hard mast sources including oak; and preserving related recreational opportunity.

Expected trends within this 10-year planning period are the need to minimize jack pine budworm damage by reducing the amount of more susceptible older jack pine; the need to regenerate oak and red pine; the need to target some accessible aspen in older age-classes for harvest; and increased recreational pressure.

Soil and topography:

Croswell, Lupton, Grayling-Graycalm loamy soils.

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

State Land with Private holdings interspersed throughout. State land to the north, south, and west of this compartment. Private land to the east.

Unique Natural Features:

The Michigan Natural Features Inventory lists the Eastern Massasauga Rattlesnake, Loon, Wood Turtle, Bald Eagle, and Dusted Skipper, Hills Thistle, and poor conifer swamp as having occurred in this compartment. This compartment has the potential for the Eastern Massasauga Rattlesnake, Box Turtle, Wood Turtle, Blanding's Turtle, Hill's Thistle, and Bog Bluegrass. Pine martens were released in the Voss swamp in 1986.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

This is a major deer yarding area. Regeneration of timber can be a problem. The area is isolated and rather inaccessible; therefore, visual management is not much of a constraint. The streams and their headwaters will be protected and their integrity maintained.

Watershed and Fisheries Considerations:

The East and West Branches of Twin Creek, flow through Compartment 9. Both are Designated Trout Streams. The two branches combine just south of Compartment 9 to form Twin Creek, which is the highest quality tributary to the Little Manistee River. The West Branch of Twin Creek supports naturally reproducing populations of brown trout, brook trout, and likely steelhead as well. In the summer of 2007, a major fish cover habitat project was completed in both branches of Twin Creek just downstream from Compartment 9.

Wildlife Habitat Considerations:

Featured wildlife species in this Management Area are diverse reflecting the wide range of habitat types present. Featured Species for the MA include two which are not much of a focus in this compartment, Mallard and Woodduck. More applicable are American Martin, American Woodcock, Beaver, Black Bear, Eastern Massauga rattlesnake, Golden-winged warbler, Pileated woodpecker, Red-headed woodpecker, Ruffed Grouse, Snowshoe Hare, Wild Turkey, and White Tailed deer. Most of these species benefit from young forest and open types while some require some old trees for foraging and nest/den sites. Maintaining the opening types and balancing harvests with a diverse assortment of age classes in the timber types will meet the goals for these species. This compartment is part of an Eastern Massasuga rattlesnake

management area which will require consideration when forest treatments are considered as well as other management actions.

Mineral Resource and Development Concerns and/or Restrictions

The nearest active sand/gravel pit is located more than three miles to the southeast. There appears to be some good sand & gravel potential within the compartment on the uplands. The nearest oil and gas production, past or present, is located more than three miles away. The area around the compartment has previously been explored for Devonian oil & gas reservoirs. There is no current leasing activity in the area and oil & gas potential is considered low at this time. There is no known metallic mineral potential in this part of the state.

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.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

The Little Manistee ORV Trail and Route run through the southern two sections of this compartment. The ORV Trail and Route are each approximately 3 miles in length. The ORV Route is also used as a snowmobile trail. The area is mainly used for hunting and fishing.

Fire Protection:

Much of the compartment is very wet and would limit the use of fire equipment. There is some areas that fire equipment would have good access, these areas could have larger quick moving fires. There is areas of recreational use and urban interface buildup which could make for more human caused fires. BET 6-4-18

Additional Compartment Information:

None at this time.

The following reports from the Inventory are attached:

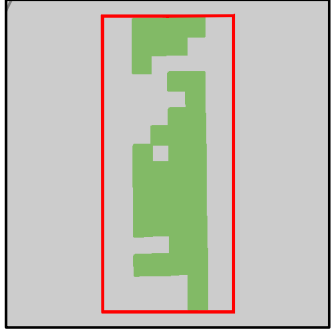
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

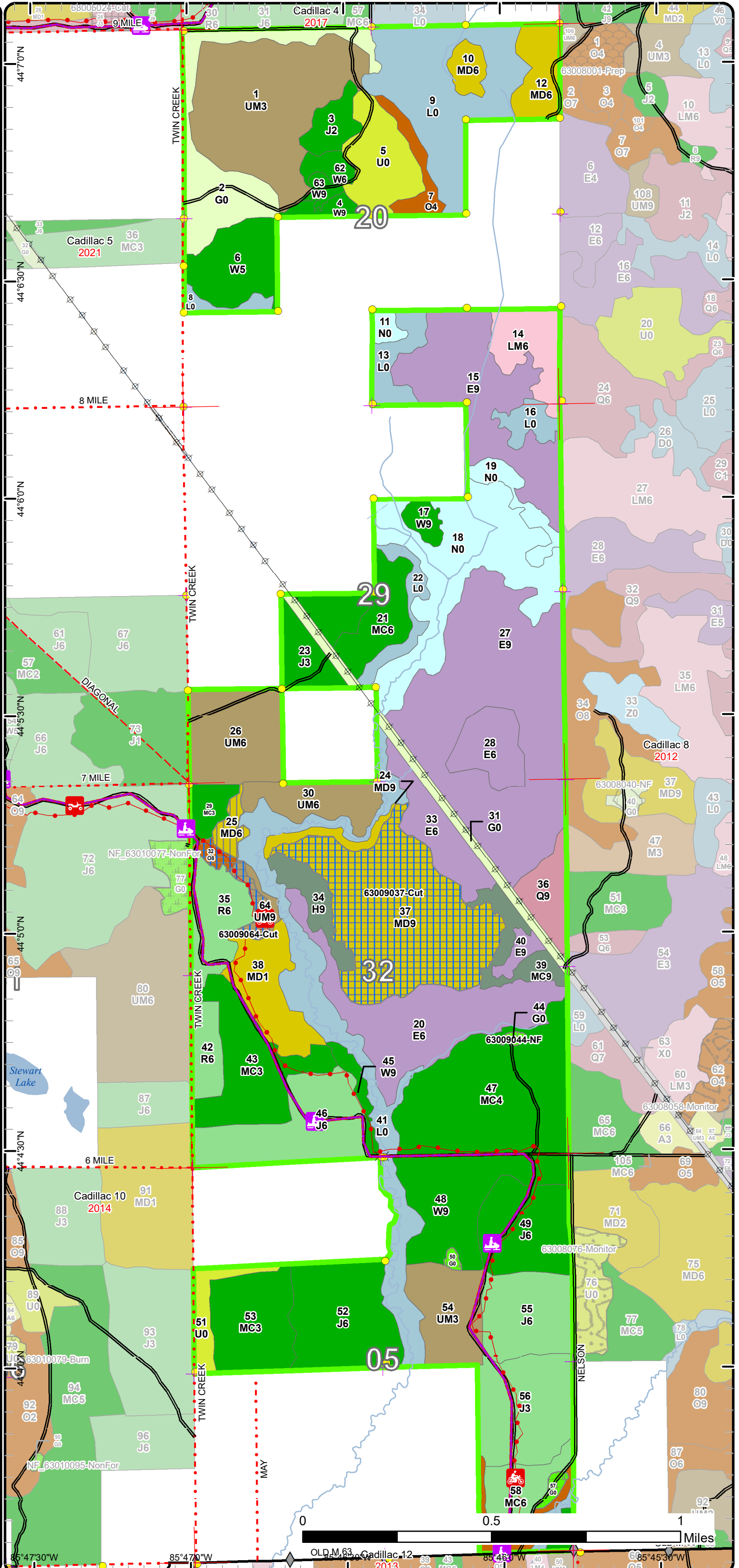
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 9
 T19N - R12W Sec. 05
 T20N - R12W Sec. 20, 29, 03
 County: Lake
 Unit: Cadillac
 Mgmt Area: Lake County Outwash
 YOE: 2020
 Acres: 1,737 GIS Calculated
 Examiner: Cheryl Nelson
 Map Revised: 9/24/2018
 Map Phase: Post - Maps

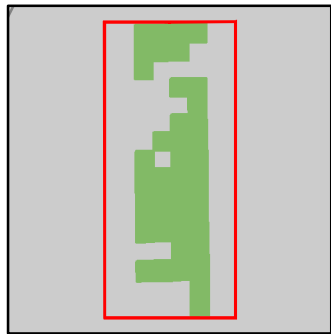


- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- DNR - Secondary Forest Road
- 🏍 Motorcycle Trails (DNR License)
- 🛵 ORV Routes
- 🏂 Snowmobile Trails
- ORV License & Trail Permit
- Designated ORV Route
- Designated Snowmobile Trails
- Drain
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Bridges
- Pipeline
- Powerline
- Compartment Boundary
- Other Treatment - See Comments
- Seed Tree (w/Reserves)
- Shelter Wood (w/Reserves)
- 412 - Oak Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 211 - Cropland
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes

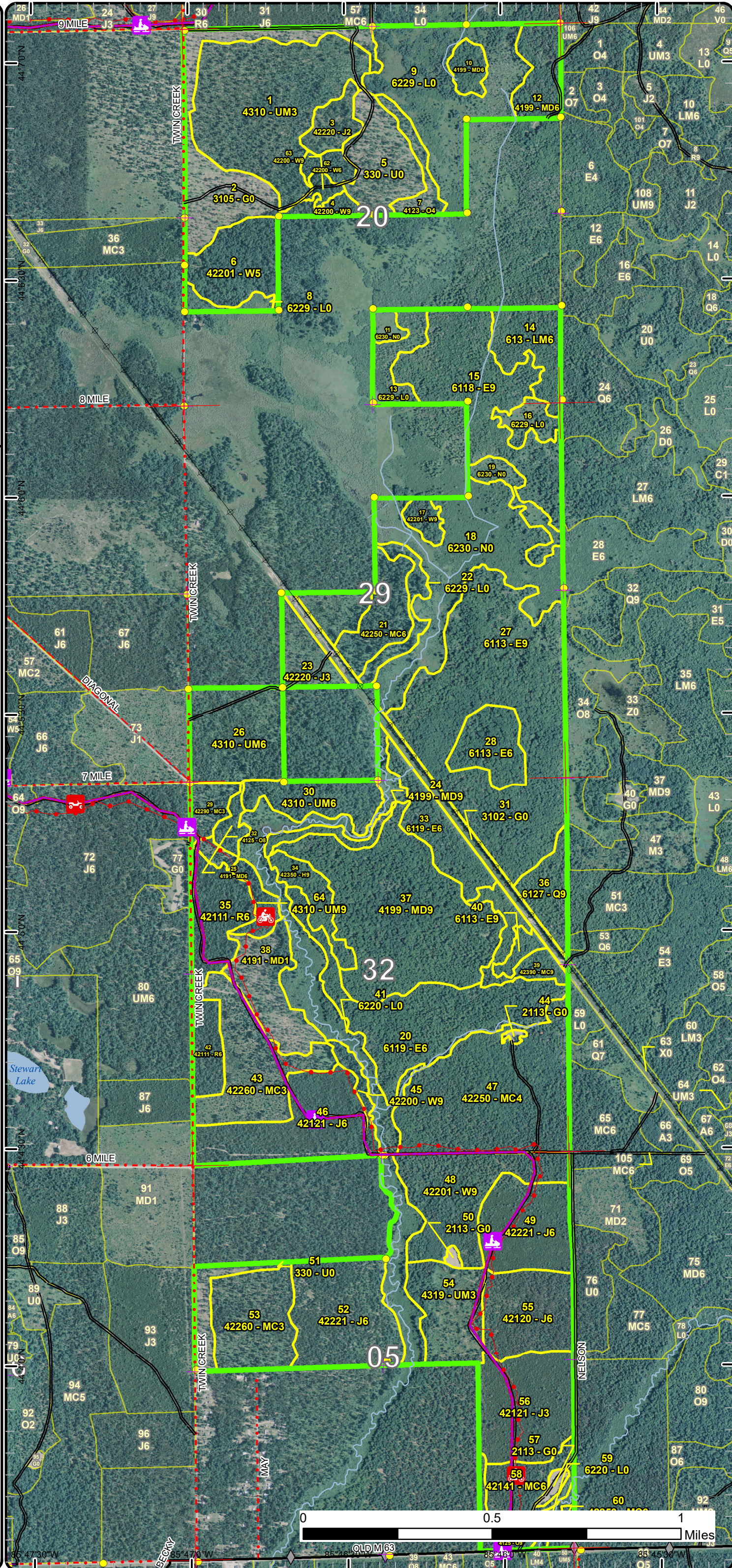


Stand Boundary Map

Compartment: 9
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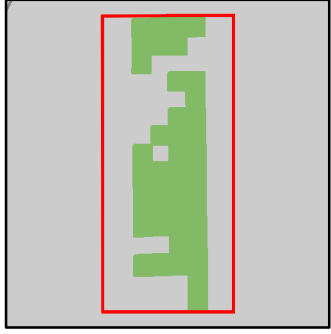


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- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
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- - - County - Gravel Road
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- DNR - Secondary Forest Road
- Motorcycle Trails (DNR License)
- ORV Routes
- Snowmobile Trails
- ORV License & Trail Permit
- - - Designated ORV Route
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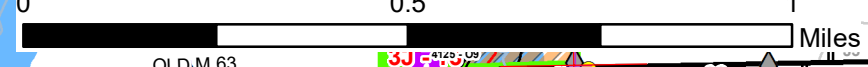
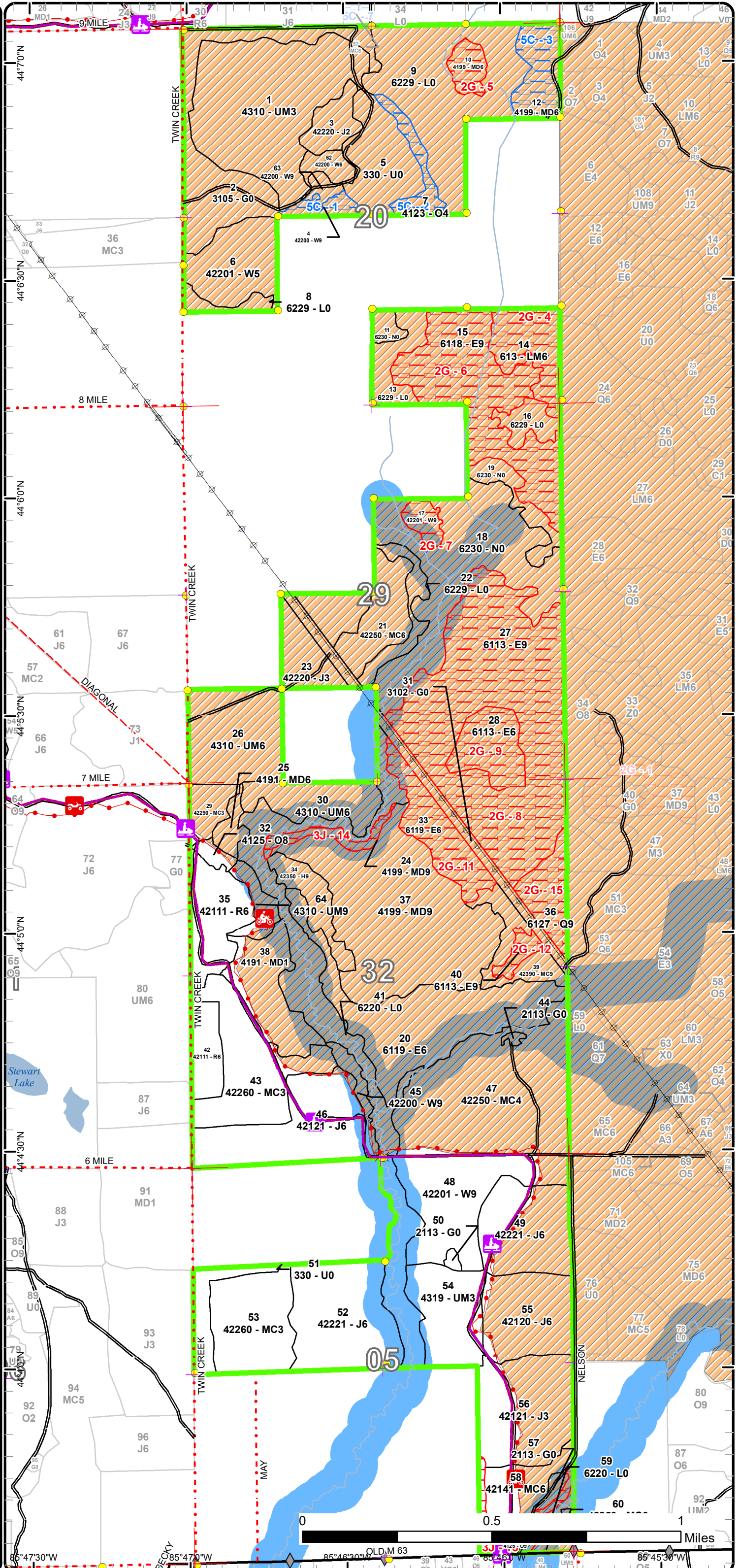


Special Conservation Areas & Site Conditions Map

Compartment: 9
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 T20N - R12W Sec. 20, 29, 03
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- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Eastern Massasauga Managed Land
- Cold Water Streams
- High Priority Trout Stream Buffer



85°47'30"W 85°46'30"W 85°45'30"W
 44°47'0"N 44°46'0"N 44°45'0"N 44°44'30"N 44°43'0"N
 05 20 29 32 05

Report 1 – Total Acres by Cover Type and Age Class

Cadillac Mgt. Unit

Compartment 9

Year of Entry 2020

Cheryl Nelson : 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
Cropland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hemlock	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14
Herbaceous Openland	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Jack Pine	0	0	36	80	128	0	0	0	0	0	0	0	0	0	0	0	0	0	244
Low-Density Trees	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Lowland Conifers	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	16
Lowland Deciduous	0	0	0	0	0	0	64	0	157	95	0	0	0	0	0	0	0	0	316
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	22
Lowland Shrub	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181
Marsh	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
Mixed Upland Deciduous	0	28	0	0	0	7	0	0	107	0	24	0	0	0	0	0	0	0	166
Natural Mixed Pines	0	0	9	79	87	0	22	4	0	0	0	0	0	0	0	0	0	0	201
Oak	0	0	0	0	0	0	0	0	0	20	0	3	0	0	0	0	0	0	23
Planted Mixed Pines	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Red Pine	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Upland Conifers	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	15
Upland Mixed Forest	0	0	114	0	40	0	22	0	0	0	8	0	0	0	0	0	0	0	184
White Pine	0	0	0	29	0	6	6	47	0	0	0	14	0	0	0	0	0	0	102
Total	379	28	159	188	312	13	50	115	0	280	166	32	17	0	0	0	0	0	1738



Report 2 – Treatment Summary

Cadillac Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 9

Total Compartment Acres: 1,736

Commercial Harvest - 116
 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
Mixed Upland Deciduous	0	0	0	101	6	0	0	0	0	107
Oak	0	0	0	3	0	0	0	0	0	3
Upland Mixed Forest	0	0	0	6	0	0	0	0	0	6
Total	0	0	0	110	6	0	0	0	0	116

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	116	0	0	0	0	0	0	5		120
Next Step	0	0	0	0	0	0	116	0	0	116
Total	116	0	0	0	0	0	116	0	5	236



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
25	63009025-Cut	5.6	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	100	1-50	Harvest	Shelterwood	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Approved Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all black oak and aspen. Retention in the form of an island on east side of sale adjacent to lowland.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Mix of upland deciduous and coniferous species.

Regen:

Other The "Candidate Conservation Agreement with Assurances for the Eastern Massasauga Rattlesnake in Michigan" reads: "Conduct timber harvesting operations when substrate is firm and dry in mid to late summer or when the ground is adequately frozen so that rutting and compaction is minimized."

Comment:

Use the Eastern Massasauga Rattlesnake, Red shoulder hawk, understory shrub protection, and grouse specs in timber sale.

Proposed Start Date: 10/1 /2019

32	63009032-Cut	3.4	4125 - Black, N. Pin Oak	Sawtimber Medium	110	1-50	Harvest	Seed Tree with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all black oak. Focus retention along the ORV Route and Trail.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Mix of upland deciduous with coniferous species.

Regen:

Other The "Candidate Conservation Agreement with Assurances for the Eastern Massasauga Rattlesnake in Michigan" reads: "Conduct timber harvesting operations when substrate is firm and dry in mid to late summer or when the ground is adequately frozen so that rutting and compaction is minimized."

Comment:

Use the Eastern Massasauga Rattlesnake, Red shoulder hawk, understory shrub protection, grouse, and ORV Route and Trail protection specs in timber sale.

Proposed Start Date: 10/1 /2019

37	63009037-Cut	101.0	4199 - Other Mixed Upland Deciduous	Sawtimber Well	80	51-80	Harvest	Seed Tree with Retention	4319 - Mixed Upland Forest	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all red maple, aspen, and black oak. Retention in the form of islands to include higher quality black oak.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of upland forest species such as oak, maple, white pine, and red pine

Regen:

Other The "Candidate Conservation Agreement with Assurances for the Eastern Massasauga Rattlesnake in Michigan" reads: "Conduct timber harvesting operations when substrate is firm and dry in mid to late summer or when the ground is adequately frozen so that rutting and compaction is minimized."

Comment:

Use the Eastern Massasauga Rattlesnake, Red shoulder hawk, understory shrub protection, and grouse specs in timber sale.

Treatment boundary is set back 150' from the North Branch of Twin Creek. Crane mats or portable bridge will be necessary to access the stand.

Consumers Energy ingress license will be necessary for equipment to access the sale via the right-of-way. The logger will need to obtain the license.

Proposed Start Date: 10/1 /2019



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
44	63009044-NF	1.0	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Approved 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: 10/1 /2019

50	63009050-NF	1.2	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Approved Proposal
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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: 10/1 /2019

57	63009057-NF	2.3	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Approved Proposal
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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: 10/1 /2019



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
64	63009064-Cut	5.6	4310 - Pine, Oak Mix	Sawtimber Well	105	81-110	Harvest	Seed Tree with Retention	42260 - Natural Pine, Mixed Deciduous	Even-Aged	Approved Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all black oak, jack pine, and red maple. Mark an occasional cut species to keep for retention purposes. Focus retention along ORV Trail.
Specs:

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Mix of upland coniferous and deciduous species.
Regen:

Other The "Candidate Conservation Agreement with Assurances for the Eastern Massasauga Rattlesnake in Michigan" reads: "Conduct timber
Comment: harvesting operations when substrate is firm and dry in mid to late summer or when the ground is adequately frozen so that rutting and compaction is minimized."

Use the Eastern Massasauga Rattlesnake, Red shoulder hawk, understory shrub protection, grouse, and ORV Route and Trail protection specs in timber sale.

Proposed Start Date: 10/1 /2019

**Total Treatment
 Acreage Proposed: 120.1**

Report 4 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson : Examiner

Compartment: 9
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions		
		With Condition	Not Available		5C	2G	3J
5	5	0	0	Cropland			
14	14	0	0	Hemlock			
63	63	0	0	Herbaceous Openland			
244	244	0	0	Jack Pine			
40	40	0	0	Low-Density Trees			
16	0	0	16	Lowland Conifers		16	
317	64	0	253	Lowland Deciduous		253	
22	0	0	22	Lowland Mixed Forest		22	
181	181	0	0	Lowland Shrub			
90	90	0	0	Marsh			
166	134	18	14	Mixed Upland Deciduous	18	7	6
201	201	0	0	Natural Mixed Pines			
23	3	10	10	Oak	10		10
18	18	0	0	Planted Mixed Pines			
39	39	0	0	Red Pine			
15	15	0	0	Upland Conifers			
183	183	0	0	Upland Mixed Forest			
102	91	5	6	White Pine	5	6	
1,736	1,384	32	320	Total Forested Acres	32	303	16
	80%	2%	18%	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 Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson : Examiner

Compartment: 9
Year of Entry: 2020

2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand treated timber sale #63-049-11-01, "Agent 009".							
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	18	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand was treated in 1980, overstory pine and oak were left.							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	22	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Remote call, too wet, no access.							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	67	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Remote call, too wet, no access.							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson : Examiner

Compartment: 9
Year of Entry: 2020

7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Remote call, too wet, no access.							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	138	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	24	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Large portion of stand is within the 300' buffer for the South Branch of Twin Creek.							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson : Examiner

Compartment: 9
Year of Entry: 2020

14	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	16	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
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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 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.

Report 7 – Forested Stands

Compartment: 9
Year of Entry: 2020



Stand	Cadillac Mgt. Unit		Acres	Stand Age	BA Range	General Comments:
	Level 4 Cover Type	Size Density				
1	4310 - Pine, Oak Mix	Sapling Well	84.1	16	1-50	Few overstory log sized oak with decline, small amount of overstory log sized jack pine. Stand treated timber sale #63-006-00-01 "Shotgun Jack Pine". Treated 2002.
3	42220 - Natural Jack Pine	Sapling Medium	10.9	15	Immature	Few overstory pole to log sized jack pine, white pine, and black oak. Appears to have been the landing for stand 1 when it was cut in 2002.
4	42200 - Natural White Pine	Sawtimber Well	5.3	115	51-80	
6	42201 - Natural White Pine, Mixed Deciduous	Poletimber Medium	28.8	26	1-50	Stand treated timber sale #63-049-11-01, "Agent 009".
7	4123 - Red Oak	Poletimber Poor	9.5	93	51-80	Stand treated timber sale #63-049-11-01, "Agent 009".
10	4199 - Other Mixed Upland Deciduous	Poletimber Well	7.4	45	51-80	
12	4199 - Other Mixed Upland Deciduous	Poletimber Well	17.6	100	81-110	Stand is a mix of species, ages, and densities. Stand cut in 1980.
14	613 - Lowland Mixed Forest	Poletimber Well	22.1	90	Unspecified	Appears to be a mixed lowland forest with overstory pine.
15	6118 - Lowland Deciduous with Cedar	Sawtimber Well	66.5	98	Unspecified	Appears to be the same stand type as the southern portion of stand 27. Would consist of red maple, quaking aspen, black ash, and conifers.
17	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	5.7	110	51-80	
20	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	64.0	65	51-80	This stand was part of timber sale #630140001, "Twin Creek Lowlands", but could not be cut due to a high water table.
21	42250 - Pine, Oak	Poletimber Well	21.5	55	1-50	Occasional jack pine. Stand treated timber sale 16-68. Aspen, elm, oak and red maple were cut.
23	42220 - Natural Jack Pine	Sapling Well	25.0	12	Immature	Occasional overstory white pine and oak. Cannot find timber sale proposal, however, treatment recommended in 1998 has been completed.
24	4199 - Other Mixed Upland Deciduous	Sawtimber Well	6.2	80	51-80	Some decline in oak. Stand treated timber sale #63-014-00-01, "Twin Creek Lowlands", however, areas of sale went uncut due to warm weather.
25	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	5.6	100	1-50	
26	4310 - Pine, Oak Mix	Poletimber Well	39.7	36	1-50	Overstory white and red pine in the southeast of stand. Stand treated timber sale #63-008-90-01, "Twin Creek Pine".

Report 7 – Forested Stands

Compartment: 9
Year of Entry: 2020



Stand	Cadillac Mgt. Unit		Report 7 – Forested Stands			Compartment: 9 Year of Entry: 2020
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	6113 - Lowland Maple	Sawtimber Well	137.5	88	81-110	Lowland complex. Appears water levels fluctuate somewhat with some upland to eastern edge.
28	6113 - Lowland Maple	Poletimber Well	19.9	88	81-110	Appears to be the same timber type as the surrounding stand but with a higher elevation.
29	42290 - Natural Mixed Pine	Sapling Well	9.2	15	Immature	Occasional overstory white pine, oak, and jack pine. Stand treated timber sale #63-008-00-01, "Mixed Traffic Oak & Pine".
30	4310 - Pine, Oak Mix	Poletimber Well	22.0	55	1-50	
32	4125 - Black, N. Pin Oak	Sawtimber Medium	3.4	110	1-50	Old landing from timbersale for stand 35.
33	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	23.8	95	51-80	Occasional yellow birch, hemlock, American elm, and white pine.
34	42350 - Upland Hemlock	Sawtimber Well	13.5	95	51-80	Occasional elm.
35	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	25.8	36	81-110	Planted FTP #C63-212, both red and jack pine. Furrowed with trencher then hand planted using inmate labor.
36	6127 - Lowland Pine	Sawtimber Well	15.6	85	51-80	
37	4199 - Other Mixed Upland Deciduous	Sawtimber Well	101.1	80	51-80	Some decline in oak. Stand treated timber sale #63-014-00-01, "Twin Creek Lowlands", however, areas of sale went uncut due to warm weather.
38	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	27.8	5	Immature	Stand treated timber sale "Coon Doom". Small area in the northeast part of stand was not able to be cut because of wetness during harvesting period.
39	42390 - Mixed Non- Pine Upland Conifers	Sawtimber Well	14.6	95	51-80	Occasional yellow birch and beech.
40	6113 - Lowland Maple	Sawtimber Well	4.7	95	51-80	Occasional northern white cedar, yellow birch.
42	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	12.8	35	51-80	Stand is a plantation, but FTP can not be found.
43	42260 - Natural Pine, Mixed Deciduous	Sapling Well	43.0	25	Immature	Stand treated timber sale #63-008-00-01 "Mixed Traffic Oak and Pine".
45	42200 - Natural White Pine	Sawtimber Well	6.2	58	81-110	Occasional yellow and white birch.
46	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	46.2	35	1-50	Planted FTP #C63-233. Hand planted jack pine.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	42250 - Pine, Oak	Poletimber Poor	86.9	38	1-50	Stand treated timber sale #63-030-11-01, "Coon Doom".
48	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	46.6	60	81-110	Occasional pulp to log red pine. Stand treated in 1985.
49	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	35.9	25	Immature	Stand treated timber sale #630089001, "Twin Creek Pine". Rows from previous planting can still be seen.
52	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	48.2	32	1-50	Stand treated timber sale #63-008-86-01, "West Twin Creek Jack Pine".
53	42260 - Natural Pine, Mixed Deciduous	Sapling Well	35.6	25	Immature	Stand treated timber sale #63-011-00-01, "Half Gone Jack Pine".
54	4319 - Mixed Upland Forest	Sapling Well	29.6	11	Immature	Some L-XL white pine, oak, and jack pine in stand. Stand treated timber sale #630120501, "Twin Creek East Jack". Stand treated out of YOE due to jack pine budworm damage.
55	42120 - Planted Jack Pine	Poletimber Well	33.4	30	1-50	Areas of both planted and natural seed jack pine. Occasional overstory white and red pine. Can't locate FTP.
56	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	44.3	22	Unspecified	Stand treated sale #630089001 "Twin Creek Pine". Green jack pine slash treated with roller chopper & chains 1991, seeding was unsuccessful so handplanted jp 1996. Previous comment: Green Jack Pine slash treated with roller chopper & chains 1991. Seeding was unsuccessful so hand planted jack pine 1996.
58	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Well	18.4	35	81-110	Stand cut timber cutting contract 18/80A, closed 2-15-83. Red pine looks planted, cannot find FTP.
60	42250 - Pine, Oak	Poletimber Well	4.2	60	51-80	
61	4125 - Black, N. Pin Oak	Sawtimber Well	10.2	95	51-80	Stand cut timber cutting contract 18/80A, closed 2-15-83.
62	42200 - Natural White Pine	Poletimber Well	5.8	45	1-50	Stand treated timber sale #63-006-00-01 "Shotgun Jack Pine". Treated 2002.
63	42200 - Natural White Pine	Sawtimber Well	3.4	115	51-80	
64	4310 - Pine, Oak Mix	Sawtimber Well	8.0	105	81-110	Hybrid oak in decline.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	3105 - Mixed Upland Herbaceous	44.1		There are some pulp to log oak, jack pine, and white pine in the overstory. Stand treated timber sale #63-049-11-01, "Agent 009".
5	330 - Low-Density Trees	28.8		Overstory Consists of white pine pulp to small log, occ. black oak logs, jack pine logs, and black cherry pulp. Medium amount of jack pine seedlings, small amount of black oak seedlings and stump sprouts. Stand treated timber sale #63-049-11-01, "Agent 009". Previous specs: Clearcut with reserves. Cut all jack pine, aspen, oak and black cherry. Cut all white pine over 10" DBH. Mark oak to leave average 20-30 BA.
8	6229 - Mixed lowland shrub	5.0	No	Mixed lowland shrub.
9	6229 - Mixed lowland shrub	67.7	No	Large areas of either northern or southern blue flag iris.
11	6230 - Cattail	3.8	No	
13	6229 - Mixed lowland shrub	13.2	No	Tag alder with quaking aspen and cattails.
16	6229 - Mixed lowland shrub	8.5	No	Cattails with conifers. Stand did not regenerate after treatment in 1986.
18	6230 - Cattail	75.8	No	Cattails, tag alders, occasional quaking aspen, red maple.
19	6230 - Cattail	10.7	No	Cattails, tag alder.
22	6229 - Mixed lowland shrub	10.4	No	Tag alder with occasional red maple, quaking aspen, elm, and white pine trees.
31	3102 - Grass	18.6	Yes	Transmission Line
41	6220 - Alder/willow	72.5	No	
44	2113 - Forage Crops	1.0	Yes	Maintained wildlife opening.
50	2113 - Forage Crops	1.2	Yes	Maintained wildlife opening.
51	330 - Low-Density Trees	11.3		Stand treated timber sale #63-049-11-01, "Agent 009".
57	2113 - Forage Crops	2.3	Yes	
59	6220 - Alder/willow	3.7	No	