



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63149

Entry Year 2020

Acreage: 2,109

County Wexford

Management Area: Manistee River Valley

Revision Date: 2018-06-14

Stand Examiner: Blair Tweedale

Legal Description:

T24N.,R11W.,Sections 22,27,28,29,32,33,34 & 35.

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. The management plan for this forest area focuses on balancing aspen and red pine age classes and maintaining oak species and associated cover types. 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:

Kalkaska, Rubicon and Montcalm sands.

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

The Northern compartment boundary follows the Manistee River, and is bordered by private land on the entire southern edge. The Western portion of the compartment is fragmented and landlocked by private land, posing a access problem for management.

Unique Natural Features:

Manistee River with associated bluffs. Small steams and seasonal flows leading to the Manistee river.

Archeological, Historical, and Cultural Features:

Possible historic Native American trail and other archaeological sites are located in this compartment.

Special Management Designations or Considerations:

Maintain integrity and health of streams and the Manistee River. Use BMP's and buffers near streams and river.

Watershed and Fisheries Considerations:

The Manistee River, Adams Creek, Cole Creek, and a number of unnamed tributaries flow through Compartment 149. All are Designated Trout Streams. The Manistee River in this area is stocked with brown trout by Fisheries Division and supports a good brown trout fishery, in addition to good fishing for walleye. Adams Creek supports naturally reproducing populations of brown, brook, and rainbow trout, while Cole Creek supports naturally reproducing population of brown and brook trout. Both streams are very popular with trout anglers. Both streams also provide valuable spawning and rearing habitat for trout from the Manistee River. The unnamed tributaries in Compartment 149 likely support trout populations as well. For the aspen clearcuts proposed for Stands 18, 32, and 66 reasonable buffers should be left along the streams. This buffer should be sufficient so that beavers do not colonize the streams after the clearcut area begins to regenerate. Beavers can have major negative impacts on a small trout streams like those in Compartment 149.

Wildlife Habitat Considerations:

Featured wildlife species in this Management Area are diverse reflecting the wide range of habitat types present. Featured Species of wildlife include american bittern, american woodcock, beaver, black bear, eastern massasuga rattlesnake, golden-winged warbler, mallard, pileated woodpecker, ruffed grouse, snowshoe hare, white-tailed deer, and wood duck. 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.

Mineral Resource and Development Concerns and/or Restrictions

Active sand/gravel pits are located several miles to the west, but there is sand & gravel potential within the compartment. There is no known oil & gas potential from known producing formations in this area. There is no known metallic mineral potential in this part of the state. There is currently no active mineral leasing in the area. The state does not own most of

the mineral rights within the compartment. Private mineral rights owners must be allowed reasonable access to the land should they choose to explore and/or develop the minerals.

Vehicle Access:

Vehicle access in this compartment include County and State Forest Roads. Illegal road access is an issue in portions of the compartment and pose a threat to the resources.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

The Manistee River is heavily used for canoeing and fishing as well as dispersed camping. The feeder streams are also used for fishing, trapping and hunting. Indian Crossings Campground is closed. Recreation Division has an access site to river on SE side of Harvey Bridge.

Fire Protection:

Due to the heavy recreational use in this compartment, human caused fires could be high. Many areas of recreational users in remote areas by the river and streams could limit the access to fire equipment.

Additional Compartment Information:

Western portions of compartment are land locked by private land and lack foot/road access for public.

The following reports from the Inventory are attached:

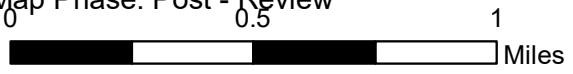
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

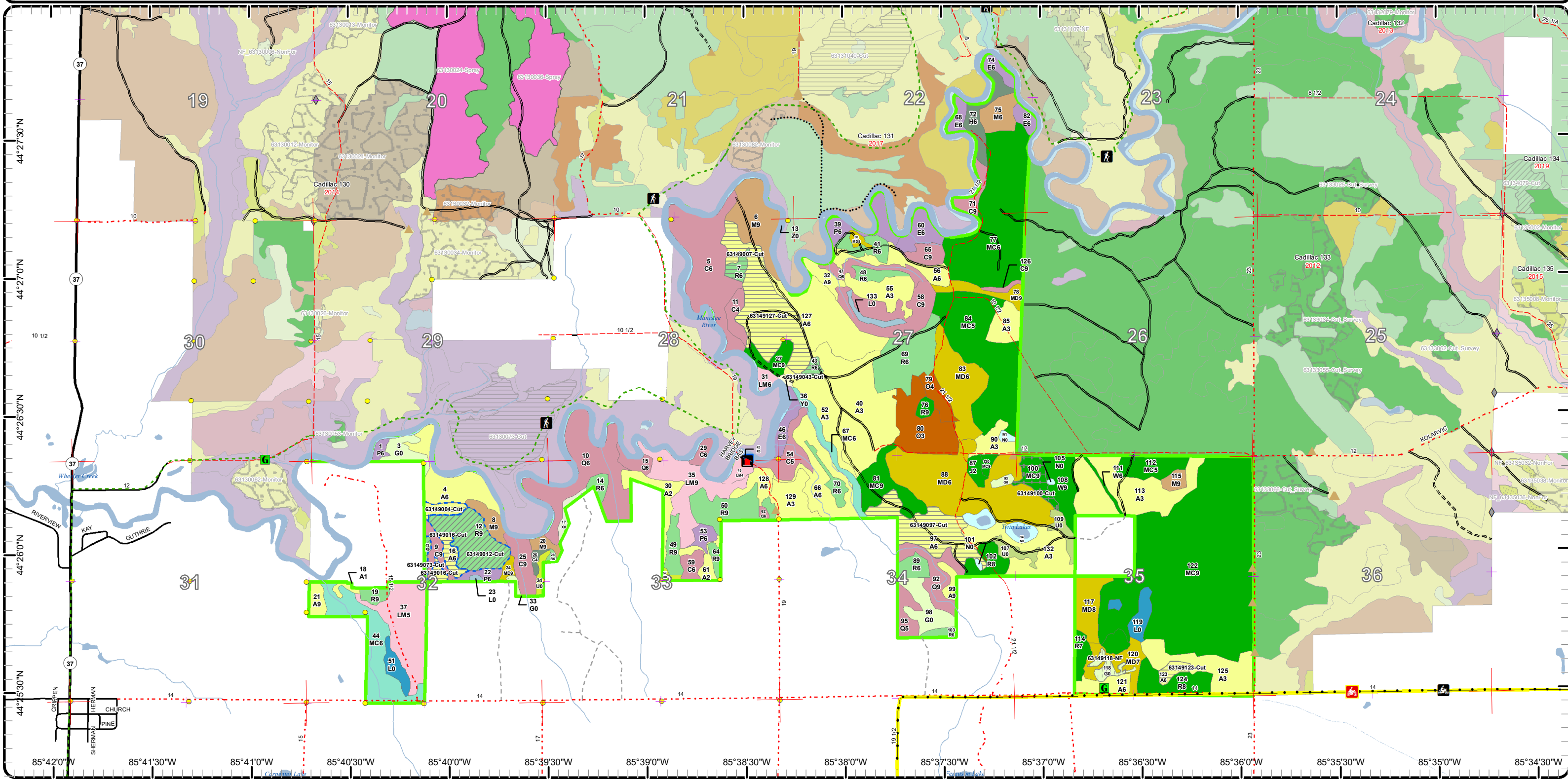
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 149
 T24N - R11W Sec. 22, 27, 28, 32-35
 County: Wexford
 Unit: Cadillac
 Mgmt Area: Manistee River Valley
 YOE: 2020
 Acres: 2,109 GIS Calculated
 Examiner: Blair Tweedale
 Map Revised: 10/23/2018
 Map Phase: Post - Review

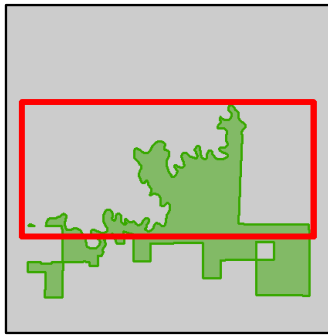
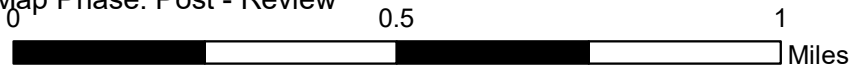


- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- ▭ Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
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- Michigan Cross Country Cycle Trail (MCCCT)
- Toilet
- ▲ Berms
- Gate
- Boating Access Site
- Structures
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Harvest, Overstory Removal
- Thinning (Crown, Low, Systematic)
- Opening Maintenance
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
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- 429 - Mixed Upland Conifers
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- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand/Soil
- 790 - Other Bare/Sparse Vegetated
- Lakes

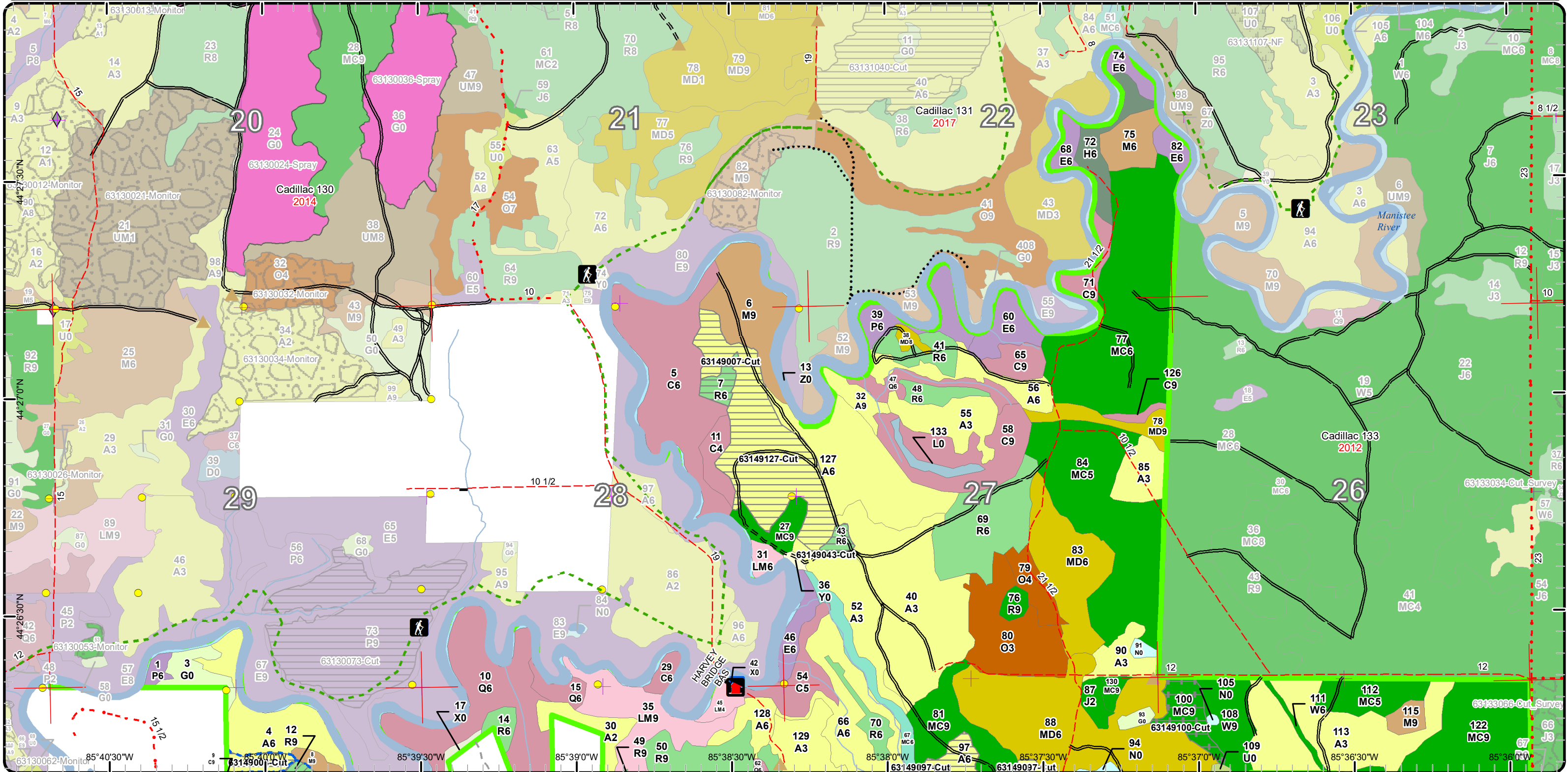


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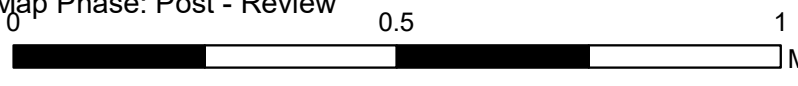


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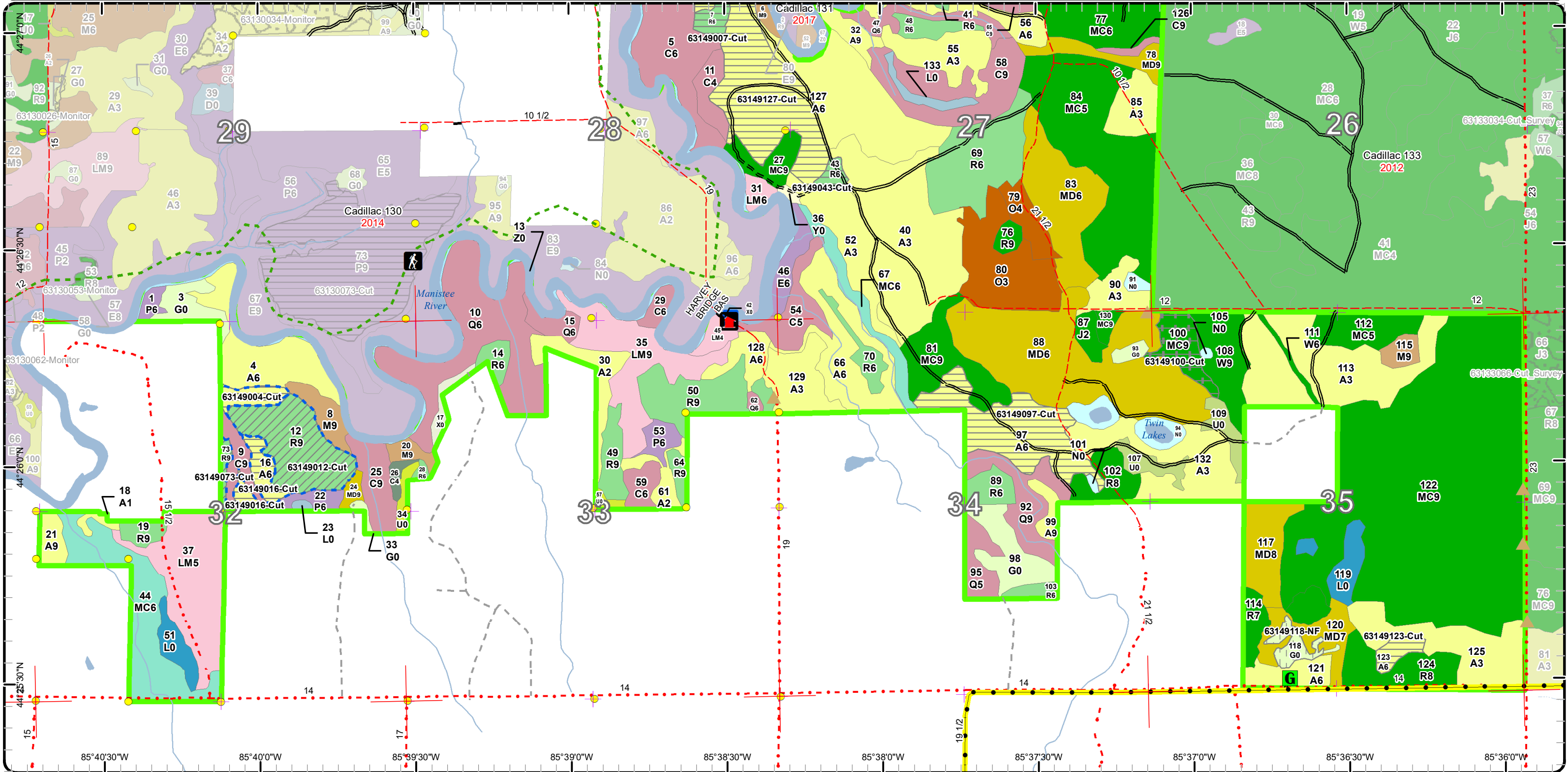


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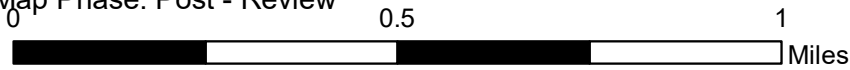


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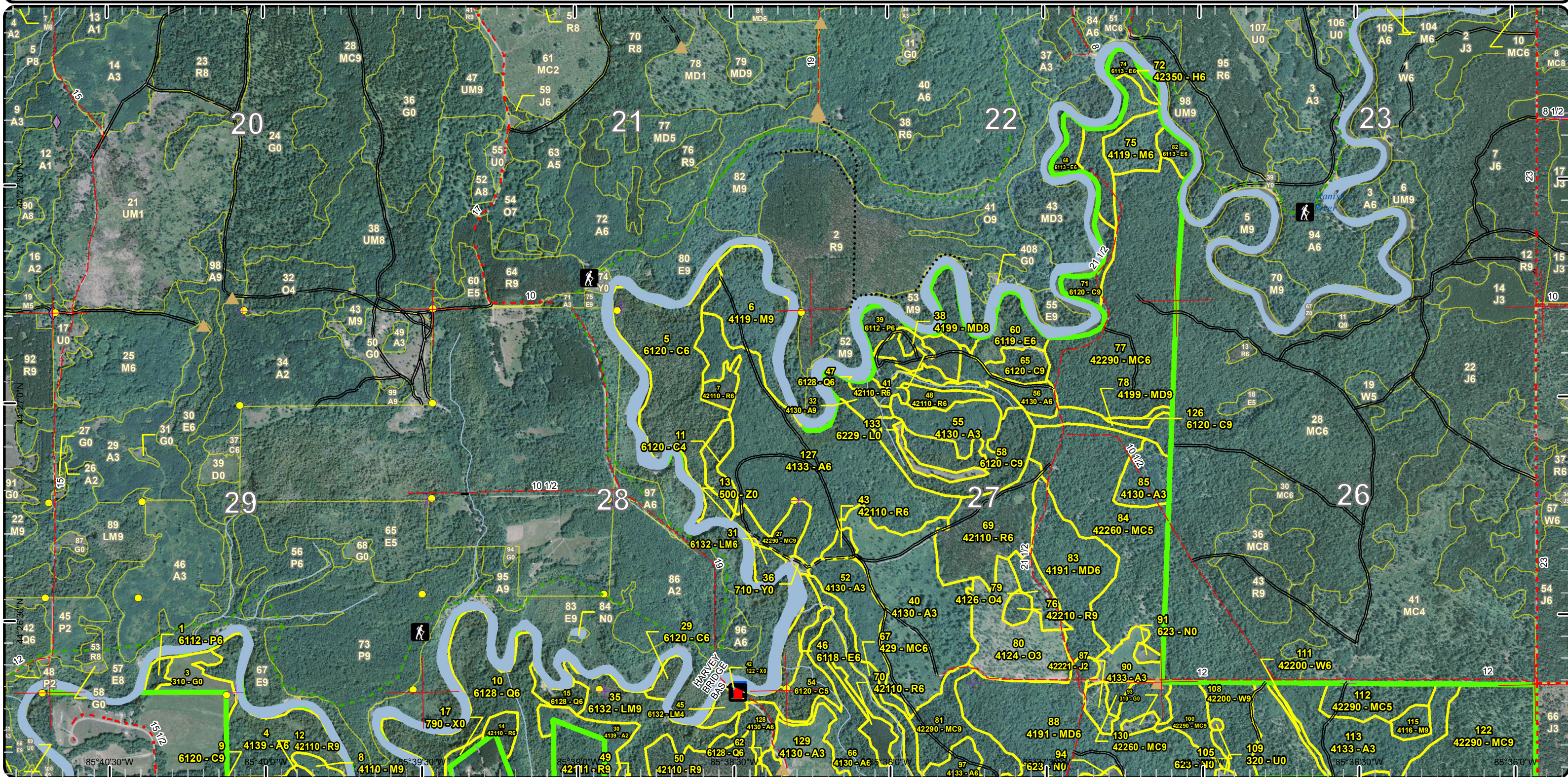


Stand Boundary Map

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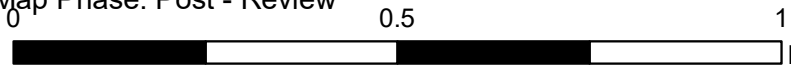


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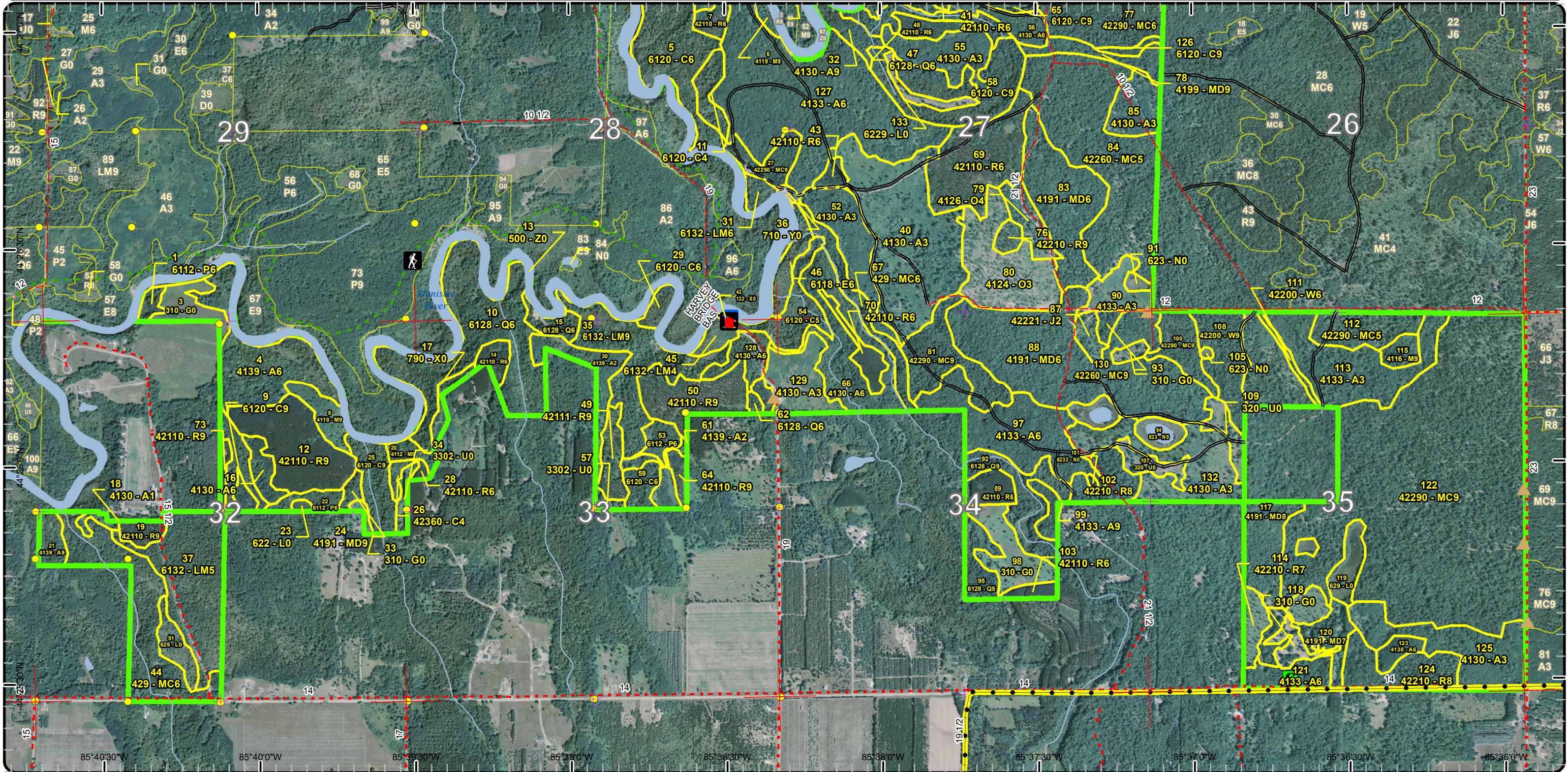
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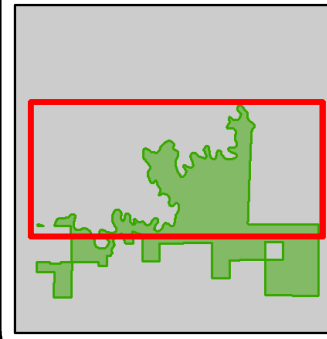
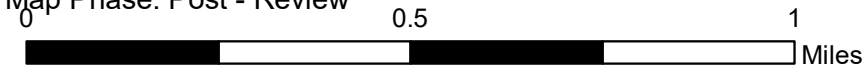
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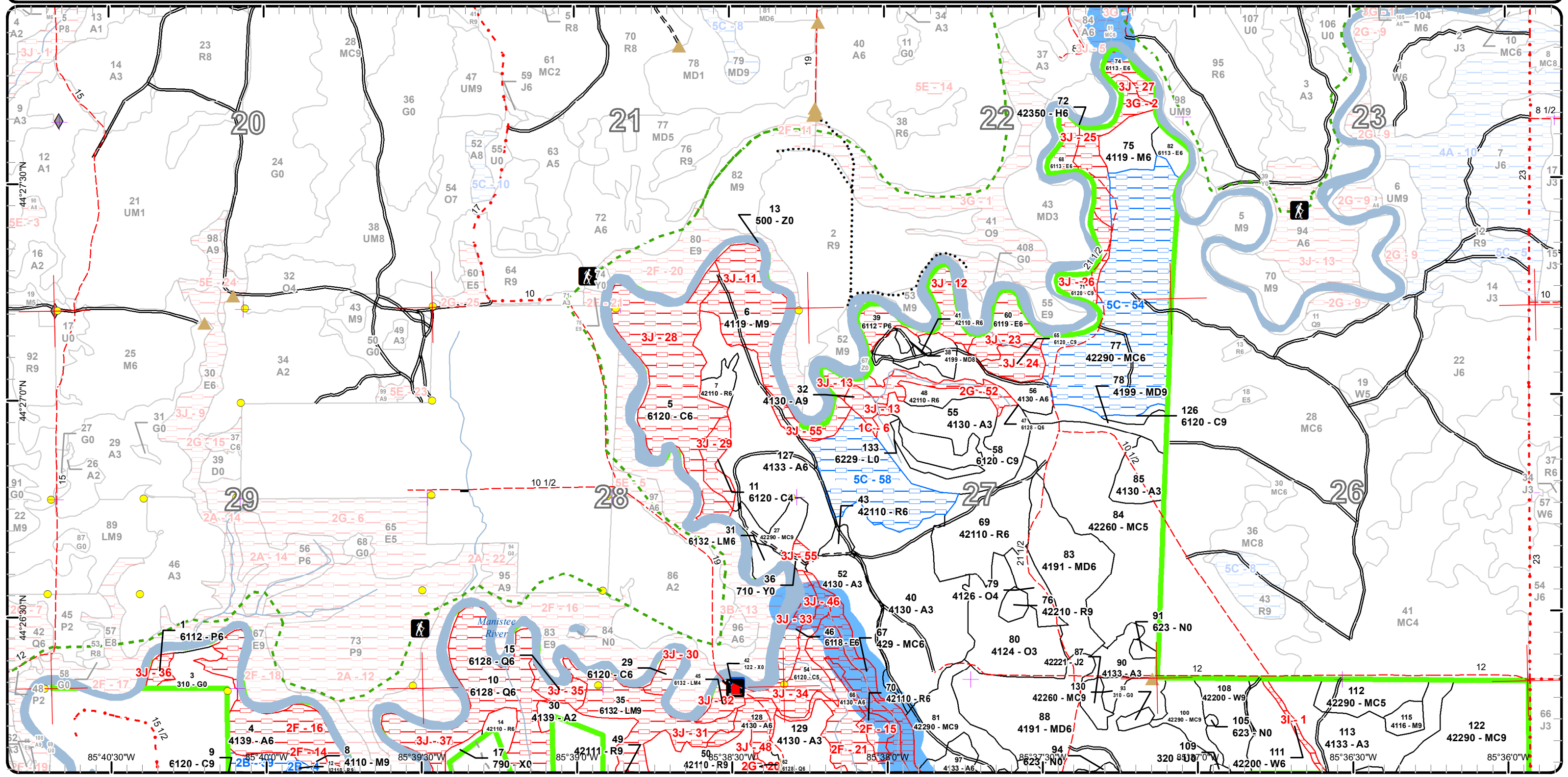


Special Conservation Areas & Site Conditions Map

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- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 1C: Other dept or div proc/practices
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 3G: Other Influence zones - See comments
- 3I: Historical / archeological (add locked comments)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer

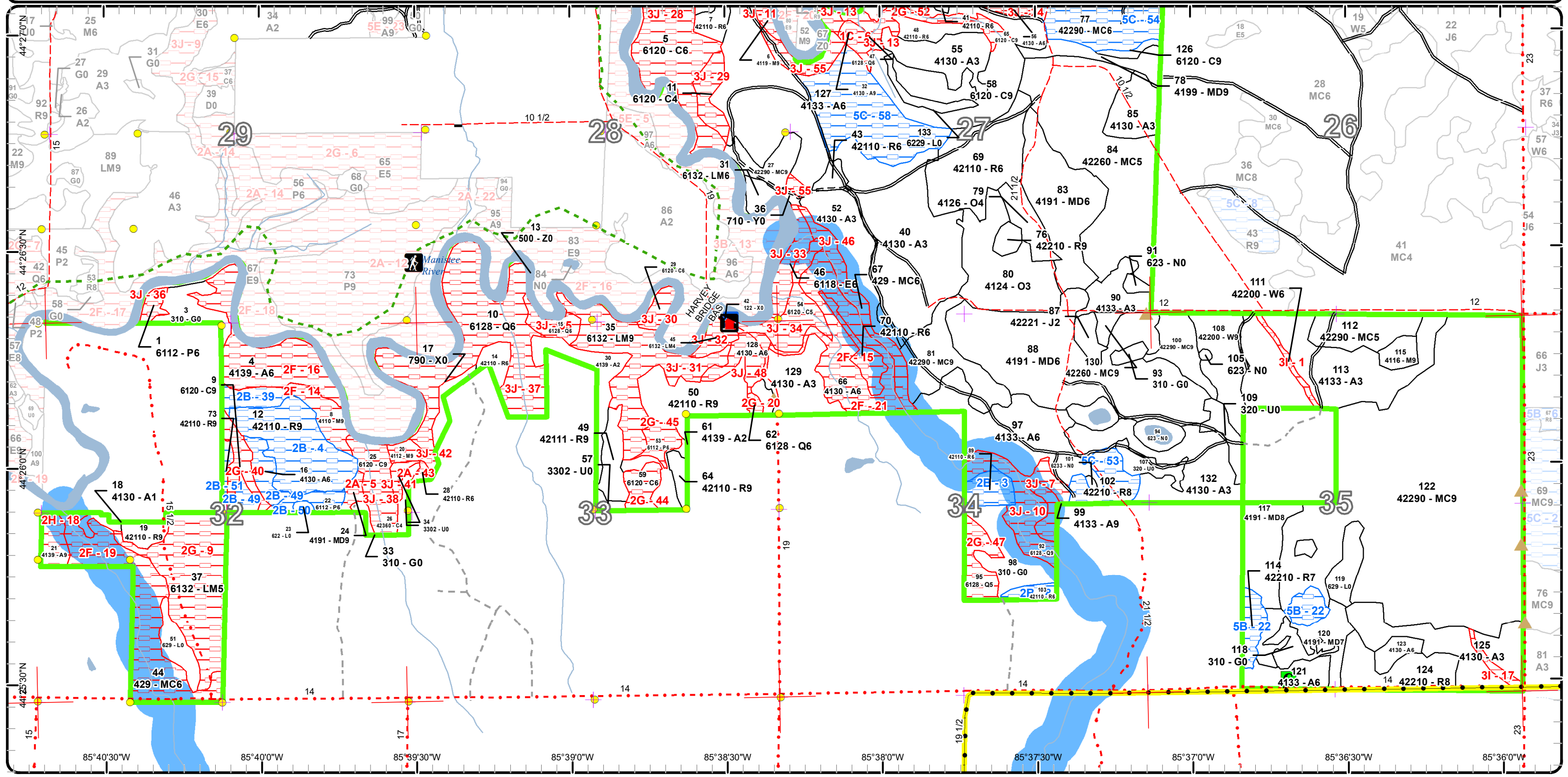


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- Available w/ Constraints
- Unavailable
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 1C: Other dept or div proc/practices
- 2A: Adjacent landowner denied access
- 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)
- 3I: Historical / archeological (add locked comments)
- 3J: Water quality / BMPs (stream, river, or lake)



Report 1 – Total Acres by Cover Type and Age Class

Cadillac Mgt. Unit

Compartment 149 Year of Entry 2020

Blair Tweedale : 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	126	69	85	0	129	50	13	73	4	0	0	0	0	0	0	0	0	549
Bare/Sparsely Vegetated	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Cedar	0	0	0	0	0	0	0	0	0	0	57	88	0	2	0	0	0	13	159
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14
Herbaceous Openland	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Jack Pine	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Aspen/Balsam Poplar	0	0	0	0	5	3	5	15	0	0	0	0	0	0	0	0	0	0	28
Lowland Conifers	0	0	0	0	0	0	0	0	1	65	35	0	0	0	0	0	0	0	100
Lowland Deciduous	0	0	0	0	0	0	0	0	28	0	8	0	0	0	0	0	0	0	36
Lowland Mixed Forest	0	0	0	0	0	0	0	0	41	42	0	0	0	0	0	0	0	0	82
Lowland Shrub	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Marsh	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Mixed Upland Deciduous	0	0	0	0	0	9	0	53	84	0	6	0	0	0	0	0	0	14	165
Natural Mixed Pines	0	0	0	0	0	9	0	0	250	98	0	11	0	0	0	0	0	94	462
Northern Hardwood	0	0	0	0	0	0	0	0	5	0	24	30	0	0	0	0	0	0	59
Oak	0	0	0	0	33	0	0	9	0	0	0	0	0	0	0	0	0	0	42
Red Pine	0	0	0	0	0	0	0	152	0	11	3	12	0	0	0	0	0	19	197
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	39	12	0	0	0	0	0	0	50
Upland Shrub	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
White Pine	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20
Total	139	126	74	85	38	150	55	242	412	183	256	196	0	16	0	0	0	140	2107



Report 2 – Treatment Summary

Cadillac Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 149

Total Compartment Acres: 2,109

Commercial Harvest - 119
 Harvests with Site Condition - 47
 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	114	0	0	0	0	0	0	0	0	114
Natural Mixed Pines	0	0	0	0	0	0	11	0	0	11
Red Pine	8	0	0	0	0	33	0	0	0	41
Total	122	0	0	0	0	33	11	0	0	167

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	167	0	0	0	0	0	0	5	0	172
Next Step	0	0	0	0	0	0	133	0	0	133
Total	167	0	0	0	0	0	133	5	0	306



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	63149004-Cut	5.5	4139 - Aspen, Mixed Deciduous	Poletimber Well	75	51-80	Harvest	Clearcut	4131 - Aspen, Oak	Even-Aged	Approved Proposal

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Final Harvest. Leave large oak where applicable.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mixed deciduous and mixed pine

Regen:

Other

Comment:

Proposed Start Date: 5 /9 /2018

7	63149007-Cut	4.8	42110 - Planted Red Pine	Poletimber Well	69	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	Approved Proposal
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Habitat Cut: No **Site Condition:**

Prescription Final harvest. No retention due to small size.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, maple, oak and mixed pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

12	63149012-Cut	31.1	42110 - Planted Red Pine	Sawtimber Well	63	171- 200	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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Habitat Cut: No **Site Condition: Unknown Access**

Prescription Thin pine to a residual BA between 110-120.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

16	63149016-Cut	8.5	4130 - Aspen	Poletimber Well	54	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Approved Proposal
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Habitat Cut: No **Site Condition: Unknown Access**

Prescription Final harvest. leave large oak where applicable. DO NOT cut cedar. buffer wet edge.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, mixed deciduous and conifer

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
43	63149043-Cut	3.1	42110 - Planted Red Pine	Poletimber Well	63	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	Approved Proposal

Habitat Cut: No**Site Condition:**

Prescription Final harvest. No retention due to small size.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, maple, oak and pine.

Regen:

Other Maybe leave a wind firm red pine clump.

Comment:

Proposed Start Date: 10/1 /2019

73	63149073-Cut	2.3	42110 - Planted Red Pine	Sawtimber Well	63	171-200	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition: Unknown Access**

Prescription Thin to a residual BA of 110.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

97	63149097-Cut	37.1	4133 - Aspen, Mixed Pine	Poletimber Well	53	81-110	Harvest	Clearcut with Retention	4133 - Aspen, Mixed Pine	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition:**

Prescription Final harvest. Leave retention in pocket(s), focusing on areas with higher density of oak.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable deciduous mix and pine.

Regen:

Other Grouse spec.- down logs

Comment:

Proposed Start Date: 10/1 /2019

100	63149100-Cut	11.3	42290 - Natural Mixed Pine	Sawtimber Well	104	81-110	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition:**

Prescription Seed tree harvest. Leave a few large white and red pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mixed pine and some deciduous

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
118	63149118-NF	5.4	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal

Habitat Cut: No**Site Condition:**

Prescription Plant forage and brood rearing herbaceous species. Till, fertilize, and plant annually.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2009

123	63149123-Cut	4.6	4130 - Aspen	Poletimber Well	57	111- 140	Harvest	Clearcut	413 - Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition:**

Prescription Final Harvest. No retention do to small acreage.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, mixed deciduous and mixed pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

127	63149127-Cut	58.5	4133 - Aspen, Mixed Pine	Poletimber Well	48	51-80	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	Approved Proposal
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Habitat Cut: No**Site Condition:**

Prescription Final harvest. leave island(s) with high component of pine and oak where applicable.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, mixed pine and mixed deciduous

Regen:

Other Grouse drumming log spec. HARE SPEC!!

Comment:

Proposed Start Date: 10/1 /2019

**Total Treatment
Acreage Proposed: 172.2**

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale : Examiner

Compartment: 149
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions											
		With Condition	Not Available		2B	5B	5C	1C	2A	2F	2G	2H	3G	3I	3J	ed
550	403	52	95	Aspen	14		38	4		59		6		3	24	0
4	4	0	0	Bare/Sparsely Vegetated												
160	33	0	127	Cedar							14				113	
14	0	0	14	Hemlock								14				
35	35	0	0	Herbaceous Openland												
5	5	0	0	Jack Pine												
5	5	0	0	Low-Density Trees												
28	0	5	23	Lowland Aspen/Balsam Poplar	5						5				18	
100	0	0	100	Lowland Conifers							21				79	
36	5	0	31	Lowland Deciduous											31	
82	4	0	79	Lowland Mixed Forest							41				38	
22	22	0	0	Lowland Shrub												
13	13	0	0	Marsh												
165	163	0	3	Mixed Upland Deciduous					3							
462	369	94	0	Natural Mixed Pines			94									
59	17	0	42	Northern Hardwood						8					34	
42	42	0	0	Oak												
197	123	66	7	Red Pine	44	12	11		1	6						
1	1	0	0	Sand, Soil												
50	0	0	50	Upland Conifers						38					12	
12	12	0	0	Upland Shrub												
0	0	0	0	Urban												
46	46	0	0	Water												
20	18	0	2	White Pine										2		
2,108	1,319	217	572	Total Forested Acres	63	12	143	4	4	111	81	6	14	5	348	0
	63%	10%	27%	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		3I: Historical / archeological (add locked comments)	2	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Report 4 – Site Conditions

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2	Unavailable	3G: Other Influence zones - See comments	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Unique upland Hemlock/Cedar stand. SCA- Mesic Conifer Forest.							
3	Available	2B: Unknown if access through adjacent landowner(s) is possible	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access difficult. May be factor limited.							
4	Available	2B: Unknown if access through adjacent landowner(s) is possible	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access through private.							
5	Unavailable	2A: Adjacent landowner denied access	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access from the West through Private only.							
6	Unavailable	1C: Other dept or div proc/practices	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Close to Manistee River.							
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Harvest							

Report 4 – Site Conditions

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8	Available	2B: Unknown if access through adjacent landowner(s) is possible	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Harvest is access is possible.							
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	41	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
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14	Unavailable	2F: Too steep	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
16	Unavailable	2F: Too steep	28	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
17	Unavailable	3I: Historical / archeological (add locked comments)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access through Private.							
19	Unavailable	2F: Too steep	39	2G: Too wet (sensitive soils, does not include access issues)	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified
Comments: Stand has very limited areas accessible by equipment for harvest, also within the Cole creek watershed.							

Report 4 – Site Conditions

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20	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
21	Unavailable	2F: Too steep	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
22	Available	5B: Maintain for regeneration purposes	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
23	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
24	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
25	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

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26	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
27	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
28	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	57	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
29	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
30	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
31	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	33	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

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Blair Tweedale : Examiner

Compartment: 149
Year of Entry: 2020

32	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
33	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
34	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
35	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
36	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
37	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	55	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale : Examiner

Compartment: 149
Year of Entry: 2020

38	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
39	Available	2B: Unknown if access through adjacent landowner(s) is possible	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
40	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
41	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
42	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
43	Unavailable	2A: Adjacent landowner denied access	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale : Examiner

Compartment: 149
Year of Entry: 2020

44	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
45	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
46	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
47	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
48	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments:							
49	Available	2B: Unknown if access through adjacent landowner(s) is possible	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale : Examiner

Compartment: 149
Year of Entry: 2020

50	Available	2B: Unknown if access through adjacent landowner(s) is possible	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
51	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access may be difficult.							
52	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
53	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
54	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	94	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
55	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Manistee river							

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale : Examiner

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57	Unspecified	Unspecified	0				
Comments:							
58	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	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.



Stand	Cadillac Mgt. Unit		Report 7 – Forested Stands			Compartment: 149 Year of Entry: 2020	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	6112 - Lowland Aspen	Poletimber Well	2.7	45	81-110	No access.	
4	4139 - Aspen, Mixed Deciduous	Poletimber Well	33.7	75	51-80	Stand is on a large North slope. Area too sensitive for harvest due to erosion concerns. Stand has many scattered small drainages armored with Tag Alder. Some areas within stand are heavier to Aspen, and some heavier to Sugar Maple.	
5	6120 - Lowland Cedar	Poletimber Well	56.7	105	141-170		
6	4119 - Mixed Northern Hardwoods	Sawtimber Well	30.0	108	111-140	Uneven aged stand. The topography is shelf-like with plateau.	
7	42110 - Planted Red Pine	Poletimber Well	4.8	69	81-110	Stand was thinned in 2013 JV	
8	4110 - Sugar Maple Association	Sawtimber Well	8.0	95	111-140	Located on steep North slope. Trees have excellent height, but are of poor form and many defects. Too sensitive to harvest due to erosion concerns. Several hillside drainages.	
9	6120 - Lowland Cedar	Sawtimber Well	8.1	95	141-170	Seepage or drainage throughout stand. Very dense Cedar stand.	
10	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	54.9	97	111-140		
11	6120 - Lowland Cedar	Poletimber Poor	7.5	105	1-50	Harvested 2002.	
12	42110 - Planted Red Pine	Sawtimber Well	31.1	63	171-200	Nice red pine. Last thinned in 1988.	
14	42110 - Planted Red Pine	Poletimber Well	4.4	63	81-110	3rd row thinned 2008.	
15	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	5.4	108	81-110	Steep hillside. Aspen is over-mature.	
16	4130 - Aspen	Poletimber Well	8.5	54	81-110	Upland Aspen with small lowland pockets.	
18	4130 - Aspen	Sapling Poor	2.1	5	Immature	This is a benchtop towards Cole creek. Final Harvested in winter 2013. Couple large maple were left which were too big for the processor to cut down. Sale 630341001	
19	42110 - Planted Red Pine	Sawtimber Well	4.5	63	81-110		
20	4112 - Maple, Beech, Cherry Association	Sawtimber Well	3.8	92	51-80	Located on North facing slope. Not able to be harvested due to erosion concerns.	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4139 - Aspen, Mixed Deciduous	Sawtimber Well	5.9	66	51-80	This stand has drainages throughout protected by Cedar and Hemlock trees. Access only through private landowner.
22	6112 - Lowland Aspen	Poletimber Well	4.9	38	51-80	Low aspen
24	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	2.6	95	111-140	East side of stand is the top of the bank to creek. Heavily deer browsed. Many large Red Maple clumps. The Aspen is starting to fall apart. Access will be through private only.
25	6120 - Lowland Cedar	Sawtimber Well	12.9	105	141-170	Steep ravine with creek on bottom. Steep banks impossible to harvest. Hillsides have large Aspen, and Hemlock. Cedar/Black Ash on the bottomlands.
26	42360 - Upland Cedar	Poletimber Poor	2.2	105	1-50	Harvested 2008. Left all Cedar and Hemlock. Will come back to Aspen soon.
27	42290 - Natural Mixed Pine	Sawtimber Well	9.1	48	81-110	Recreational/camping site on West side of stand.
28	42110 - Planted Red Pine	Poletimber Well	1.0	63	81-110	3rd row thinned in 2008.
29	6120 - Lowland Cedar	Poletimber Well	4.0	97	141-170	Intermittant stream running through middle.
30	4139 - Aspen, Mixed Deciduous	Sapling Medium	12.8	16	Unspecified	
31	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	3.8	97	51-80	Wet, hummocky ground. Manistee river along North standline.
32	4130 - Aspen	Sawtimber Well	6.9	64	81-110	A. Church= Cored 2 Aspen trees: 54 and 91 years old. Tall trees, but lacking quality. Aspen is falling apart. Some lowland pockets. Topography is a hillside with an East aspect. Approxiametly 30 foot drop. Small Creek on East side of stand.
35	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	33.2	98	81-110	Large bank to Manistee River on Southern Standline. Creek through stand. Swamp conifers with pockets of Swamp hardwoods.
37	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	41.0	89	51-80	Slow drainage to Cole Creek. Ash has fallen out of stand and fallen over. Dominate species varies throughout stand.
38	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	2.5	90	51-80	BA on low end of range.
39	6112 - Lowland Aspen	Poletimber Well	15.1	65	81-110	
40	4130 - Aspen	Sapling Well	65.3	7	Immature	Sale complete 63-010-10-01



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	42110 - Planted Red Pine	Poletimber Well	9.3	68	81-110	Stand was thinned in 2013.
43	42110 - Planted Red Pine	Poletimber Well	3.1	63	81-110	Thinned 2002.
44	429 - Mixed Upland Conifers	Poletimber Well	38.5	96	81-110	Steep bank to Cole Creek. Cedar, Hemlock, Quaking Aspen growing on hillside. Some large supercanopy White Pine tree mixed throughout, especially in the Southern portion of stand.
45	6132 - Mixed Lowland Forest with Cedar	Poletimber Poor	4.5	92	1-50	Mostly Tag Alder, and Willow lowland brush with some overstory Ash, Elm, and Cedar.
46	6118 - Lowland Deciduous with Cedar	Poletimber Well	7.9	103	51-80	Swamp hardwoods with scattered Cedar. This stand is located next to River.
47	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	9.8	95	81-110	Lowland Conifer strip.
48	42110 - Planted Red Pine	Poletimber Well	5.7	68	81-110	Stand was thinned in 2013.
49	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	8.4	63	81-110	Second thinned in august 2013. Sale 630341001
50	42110 - Planted Red Pine	Sawtimber Well	23.5	63	81-110	Second thinned in winter 2013.
52	4130 - Aspen	Sapling Well	20.2	16	Unspecified	Some supercanopy Oaks and Pines.
53	6112 - Lowland Aspen	Poletimber Well	5.0	56	81-110	Small slow drainage with scattered Hemlock and Cedars.
54	6120 - Lowland Cedar	Poletimber Medium	14.4	107	1-50	Located between steep bank, and the Manistee River.
55	4130 - Aspen	Sapling Well	17.5	16	Unspecified	Some scattered White Oak, Cherry, and Cedars in supercanopy. Wetter ground to East.
56	4130 - Aspen	Poletimber Well	15.0	44	81-110	Some older Aspen clones. Will hold when all of Aspen is mature. Some supercanopy Red Pines, White Pines, and White Oaks scattered throughout stand.
58	6120 - Lowland Cedar	Sawtimber Well	30.5	94	141-170	
59	6120 - Lowland Cedar	Poletimber Well	6.2	98	111-140	Cedar/Hemlock stand mixed with Swamp Hardwoods. Swamp Hardwoods growing on drier humps.
60	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	12.2	86	51-80	Stand was dominated by black ash in previous inventory, which has fallen out of stand.



Stand	Cadillac Mgt. Unit		Report 7 – Forested Stands			Compartment: 149 Year of Entry: 2020	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
61	4139 - Aspen, Mixed Deciduous	Sapling Medium	6.2	16	Unspecified		
62	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	1.3	85	81-110		
64	42110 - Planted Red Pine	Sawtimber Well	3.4	63	81-110	Second thinned in winter 2013. Sale 630341001	
65	6120 - Lowland Cedar	Sawtimber Well	7.7	108	141-170	Stand has wide drainage on North side.	
66	4130 - Aspen	Poletimber Well	30.9	77	51-80	Small Pockets of lowland Aspen mixed with the majority of upland Aspen. Some Sugar Maple mixed throughout. STEEP ravines running N-S with intermittent streams in bottoms running into Manistee River. Aspen is of poor quality, and older on the East side of steep ravine. No access to East side of ravine. Hardwood understory heavily browsed.	
67	429 - Mixed Upland Conifers	Poletimber Well	11.7	108	111-140	Adams creek on bottom of ravine. Very steep banks to creek.	
68	6113 - Lowland Maple	Poletimber Well	5.4	84	51-80		
69	42110 - Planted Red Pine	Poletimber Well	33.7	68	111-140	Site Index of 58. Stand was thinned in 2013. BA is around 110 mostly.	
70	42110 - Planted Red Pine	Poletimber Well	6.1	63	171-200	VERY difficult to access. Only through private. Plantation on top of large hill. Steep banks on East and West side.	
71	6120 - Lowland Cedar	Sawtimber Well	7.7	94	111-140	Cedar stand with scattered pockets of lowland hardwoods.	
72	42350 - Upland Hemlock	Poletimber Well	13.7	120	141-170		
73	42110 - Planted Red Pine	Sawtimber Well	2.3	63	171-200	Pocket mortality in Northern portion of stand.	
74	6113 - Lowland Maple	Poletimber Well	5.5	85	51-80		
75	4119 - Mixed Northern Hardwoods	Poletimber Well	12.2	95	81-110	Scattered pockets of Hemlock throughout stand. Stand looks like it will be wet in the spring.	
76	42210 - Natural Red Pine	Sawtimber Well	3.3	92	81-110	Red Pine stand with some oak saplings in understory. Stand was burned by a wildfire in 2006. Stand was then thinned in 2012. 630321001.	
77	42290 - Natural Mixed Pine	Poletimber Well	93.9	65	111-140	Densities and heights of trees vary greatly throughout stand. The pole sized Pine is self-pruning well, but needs more height. Majority of stand is dominated by white pine, with scattered areas dominated by other species (red pine).	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
78	4199 - Other Mixed Upland Deciduous	Sawtimber Well	9.4	47	81-110	Small drainage through middle of stand. Stand is on a North facing slope. Large Red Pine on East side of stand.
79	4126 - White, Black, N. Pin Oak	Poletimber Poor	8.9	65	1-50	Low density trees
80	4124 - Red with White Oak	Sapling Well	32.6	30	1-50	Stand was final harvested in Fall 2013, all oak under 8 inches dbh were left. Majority of oak are under 4 inches dbh. Advanced oak regen. present.
81	42290 - Natural Mixed Pine	Sawtimber Well	22.3	89	81-110	More Red Pine to NW, more White Pine to SE. Many different canopy stories: Supercanopy, Canopy, Intermediate, Sapling. BA varies throughout, but averages around 110. Some areas are higher.
82	6113 - Lowland Maple	Poletimber Well	5.2	85	51-80	
83	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	34.7	68	51-80	Low volume stand. Aspen clone to the south could potentially be harvested. DBH is small elsewhere.
84	42260 - Natural Pine, Mixed Deciduous	Poletimber Medium	73.4	80	81-110	Overstory of Red Pine, Jack Pine, White Pine. Densities vary.
85	4130 - Aspen	Sapling Well	12.3	17	Unspecified	Some overstory white and red oak.
87	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Medium	4.6	18	Immature	Some overstory White Oak, and Red Pines. Sapling stand is browsed heavily.
88	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	83.8	75	51-80	Scattered pockets of: Oak, Aspen, Red Pine scattered throughout stand. Aspen not mature yet. Excellent quantity of White Oak saplings. Overstory trees spaced far apart. Many saplings of White Pine, and oak in gaps between overstory trees. Tops of saplings not suppressed. More mature Oaks East of two track bisecting stand.
89	42110 - Planted Red Pine	Poletimber Well	7.1	65	171-200	
90	4133 - Aspen, Mixed Pine	Sapling Well	9.8	7	Immature	Sale complete 63-010-10-01. Regenerating well
92	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	19.1	106	81-110	Steep banks down to Adams Creek. Pine, Aspen, Cedar, Hemlock growing on hillside.
95	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	9.5	103	51-80	Tag Alder/Willow pocket in the Northern part of stand.
97	4133 - Aspen, Mixed Pine	Poletimber Well	37.1	53	81-110	Scattered supercanopy White Pines, and Red Pines. Some small wet pockets mixed throughout stand mostly located on the West side. Some mature clumps of Red Maple in the far East side of stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
99	4133 - Aspen, Mixed Pine	Sawtimber Well	4.2	84	81-110	Access is through a small Hemlock/Cedar stand on East side. Large Aspen falling apart. Stand is converting to White Pine.
100	42290 - Natural Mixed Pine	Sawtimber Well	11.3	104	81-110	Varying densities. High component of sapling (1-2" DBH) White Pine in the understory.
102	42210 - Natural Red Pine	Sawtimber Medium	11.0	89	81-110	Stand harvested in 2002. Understory is 16 years old.
103	42110 - Planted Red Pine	Poletimber Well	3.2	65	171-200	
108	42200 - Natural White Pine	Sawtimber Well	18.1	91	81-110	Harvested 2002. Varying size, age and densities.
111	42200 - Natural White Pine	Poletimber Well	2.4	95	111-140	Buffer for Native American trail.
112	42290 - Natural Mixed Pine	Poletimber Medium	15.2	70	1-50	Thinned in 2003. Understory filling in with White Pine.
113	4133 - Aspen, Mixed Pine	Sapling Well	53.7	24	Immature	
114	42210 - Natural Red Pine	Sawtimber Poor	11.7	103	1-50	
115	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	4.6	74	81-110	
117	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	17.9	68	81-110	More Red Maple and Aspen to the North. Scattered large diameter Oak and Pines throughout. Major component of 5-6 inch diameter oak that are not quiet at the canopy height.
120	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Poor	14.2	41	51-80	Opening being reclaimed by Aspen, White Pine, and Cherry. BA is higher in areas, especially around wildlife openings.
121	4133 - Aspen, Mixed Pine	Poletimber Well	10.3	41	51-80	Many White Oak saplings. Red Pine pocket located on the East side of stand. SE area of stand heavier to red oak.
122	42290 - Natural Mixed Pine	Sawtimber Well	234.7	76	51-80	Thinned in 2002. Stand is heavier to W. Pine in the south. BA lower in the North end. White pine understory fully stocked. in areas. Areas of stand are multi-aged.
123	4130 - Aspen	Poletimber Well	4.6	57	111-140	Nice aspen.
124	42210 - Natural Red Pine	Sawtimber Medium	19.0	84	81-110	Harvested 2002. Thinned Pine/Oak overstory, harvested all Aspen, Maple, Jack Pine. Mostly Red Maple/Aspen coming back in understory.
125	4130 - Aspen	Sapling Well	31.3	26	Unspecified	Old Indian trail bisects stand. A buffer strip is in place along trail.

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Cadillac Mgt. Unit

Report 7 – Forested Stands

Compartment: 149
Year of Entry: 2020

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
126	6120 - Lowland Cedar	Sawtimber Well	2.2	121	141-170	Small drainage through middle of stand.
127	4133 - Aspen, Mixed Pine	Poletimber Well	104.3	48	51-80	Aspen stand with scattered large oak and pine. Aspen diameter varies throughout the stand, with the majority of it on the small side. Poor quality aspen for the most part.
128	4130 - Aspen	Poletimber Well	8.4	77	51-80	Small Pockets of lowland Aspen mixed with the majority of upland Aspen. Some Sugar Maple mixed throughout. STEEP ravines running N-S with intermittent streams in bottoms running into Manistee River. Aspen is of poor quality, and older on the East side of steep ravine. No access to East side of ravine. Hardwood understory heavily browsed.
129	4130 - Aspen	Sapling Well	17.1	8	Immature	Sale complete 63-010-10-01
130	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	2.6	80	51-80	Mix of Pine/Aspen. More Aspen to the North and West in stand.
132	4130 - Aspen	Sapling Well	32.4	7	Immature	Sale complete 63-010-10-01



Stand	Cover Type	Acres	Managed Site	General Comments:
3	310 - Herbaceous Openland	9.5	No	
13	500 - Water	46.3	No	Manistee River
17	790 - Other Bare/Sparsely Vegetate	3.9	No	
23	622 - Lowland Shrub	1.0	No	
33	310 - Herbaceous Openland	1.3	No	
34	3302 - Low Density Conifer Trees	3.3	No	
36	710 - Sand, Soil	1.1	No	
42	122 - Road/Parking Lot	0.4	No	
51	629 - Mixed non-forested wetland	7.2	No	wet plateau draining to the west to cole creek.
57	3302 - Low Density Conifer Trees	1.7	No	
91	623 - Emergent Wetland	1.7	No	
93	310 - Herbaceous Openland	2.3	No	appears to be an old wildlife opening. Illegal trail from the north.
94	623 - Emergent Wetland	10.7	No	
98	310 - Herbaceous Openland	15.8	No	
101	6233 - Wet Meadow	0.6	No	
105	623 - Emergent Wetland	0.5	No	
107	320 - Upland Shrub	5.7	No	
109	320 - Upland Shrub	6.3	No	



Stand	Cover Type	Acres	Managed Site	General Comments:
118	310 - Herbaceous Openland	5.7	No	Managed wildlife opening.
119	629 - Mixed non-forested wetland	9.5	No	
133	6229 - Mixed lowland shrub	4.3		STAND WAS FINAL HARVESTED IN 2013- monitor regeneration. Rubus present. Cedar that was harvested is a jack-strawed mess. This should help keep deer away from any Cedar regeneration that may show up.