



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41061

Entry Year 2020

Acreage: 2,045

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 2018-07-16

Stand Examiner: Thomas Burnis

Legal Description:

T43N 415W Sections 27,34,35 & 36

Identified Planning Goals:

The goals in this compartment include conducting multiple resource management for current and future generations. Forest Health, Recreation, Biodiversity Stewardship, Wildlife and Timber Management are some of the key management components within this compartment.

Soil and topography:

Soils in the compartment are mainly mucky organics on the lowlands which make up most of the compartment and poor sands on the uplands. Topography is relatively flat with some subtle ridges.

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

The compartment is largely contiguous State land. There is little development within the compartment with only a few camps mainly used for hunting. Due to the seasonal flooding in the area and minimal amount of private land there is little potential for development or land use.

Unique Natural Features:

Currently under review by Michigan Natural Features Inventory (MNFI).

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

: Several stands along the West Branch of the Manistique River often flood in the spring. They have large tree characteristics and offer excellent wildlife habitat with their species composition.

Watershed and Fisheries Considerations:

A northwestern sub-section of this compartment contains Stutts Creek and is adjacent to Brace Creek. This reach of Stutts Creek is a non-designated stream reach less than 50' width. 100' plus 5' per 1% increase in slope; buffers are recommended to protect Stutts Creek riparian areas in accordance with Best Management Practices. Brace Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Brace Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

The northwest region of the southern subsection of this compartment borders Stutts Creek and contains the West Branch of the Manistique River. These reaches of Stutts Creek and the West Branch of the Manistique River are non-designated streams. 100' plus 5' per 1% increase in slope; buffers are recommended to protect Stutts Creek and the West Branch of the Manistique River riparian areas in accordance with Best Management Practices (specifically stands 041.12 and 006). The central region of this compartment contains an unnamed waterbody and an unnamed stream, both of which serve as tributaries to the West Branch of the Manistique River. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to the unnamed waterbody in accordance with Best Management Practices. The unnamed stream is a non-designated stream reach less than 50' width. 100' plus 5' per 1% increase in slope; buffers are recommended for the unnamed stream riparian areas in accordance with Best Management Practices.

The southeast region of this compartment contains Clemons Lake and Clemons Creek. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to this Clemons Lake in accordance with Best Management Practices (specifically stands 014.9 and 012.2). Clemons Creek is a non-designated stream reach less than 50' width. 100' plus 5' per 1% increase in slope; buffers are recommended to protect Clemons Creek riparian areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

This compartment lies on northeast of the High Rollways complex on the south end of the Seney Sandy Lake Plain ecological sub-subsection. The area is dominated by upland and lowland coniferous cover. The confluence of Stutts Creek and West Branch Manistique River is contained within this compartment. Wildlife management considerations include maintaining river corridors for species associated with riverine and floodplain habitats through incorporation of no-cut buffers, promoting early successional young conifer stands and allowing young stands to continue growing for age class diversity across the landscape, maintaining cedar stands, and leaving mature pine through shelterwood seed cut.

Mineral Resource and Development Concerns and/or Restrictions

: Surface sediments consist of lacustrine (lake) sand & gravel and peat & muck. There is insufficient data to determine the glacial drift thickness. The Silurian Manitoulin Dolomite and Ordovician Queenston Shale subcrop below the glacial drift. The Manitoulin could be used for stone. Gravel pits are located four miles to the west but potential appears to be limited. There is no commercial oil and gas production in the UP.

Section 31, T43N-R14W and sections 27 & 34-36, T43N-R15W, Schoolcraft County

Active sand/gravel and some bedrock limestone/dolostone production is located less than three miles to the southeast, but there may only be minor sand potential within the compartment. There is no known metallic mineral potential in this area, and there is no history of mineral leasing. There is no commercial oil and gas production in the UP.

Vehicle Access:

Due to terrain and the amount of creeks access into the compartment is very broken. The eastern portion is accessed off the Old Camp Manistique Road, the middle portion is accessed from Cal's Drive and the eastern portion is accessed from the Letson Road. All of the roads are poor dirt roads.

Survey Needs:

None at the present time.

Recreational Facilities and Opportunities:

The compartment has one recreational facility which is a snowmobile trail. Roads within the compartment see a good amount of use from ORV enthusiasts. The remaining recreational opportunities include hunting, fishing, trapping and berry picking.

Fire Protection:

Response times to fires within the compartment will be relatively slow due to its location. Fire operations will be challenging in some areas due to the lack of roads and the number of creeks present as well as the organic soils in these areas. The compartment is comprised mainly of jack pine in varying age classes which could potentially lead to some larger fires due response times, location and this volatile fuel type given the proper weather conditions.

Additional Compartment Information:

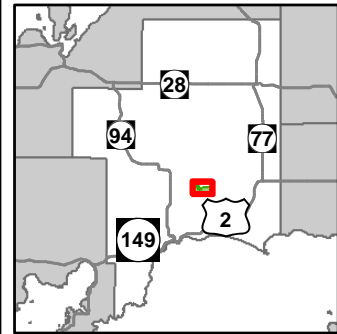
The following reports from the Inventory are attached:

- 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:

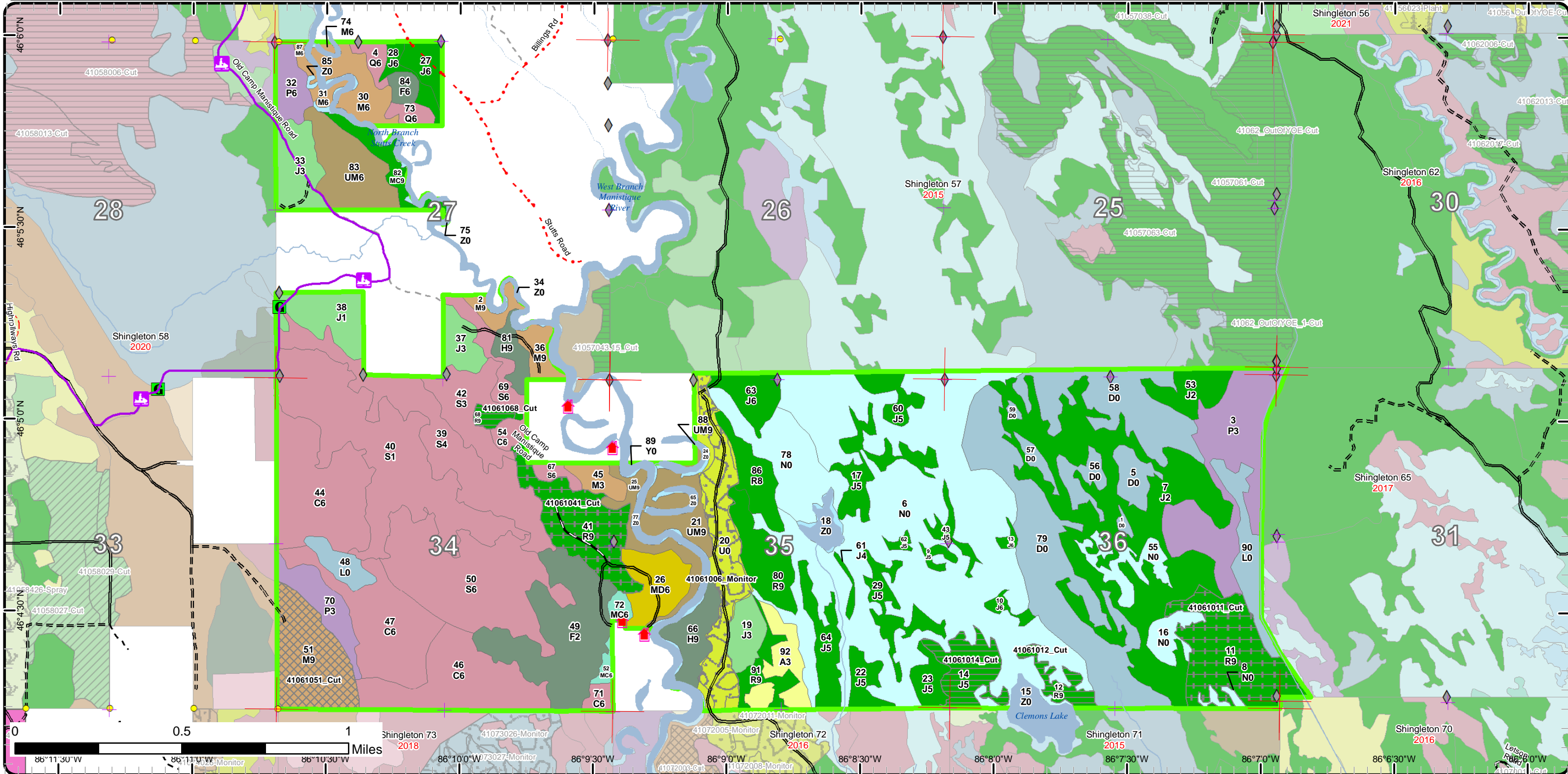
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

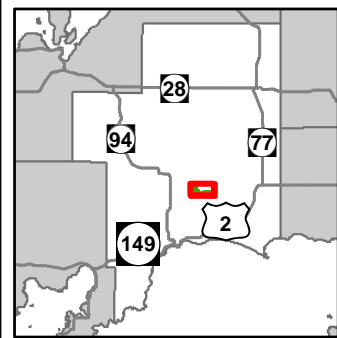


Compartment: 61
 T43N, R15W, Sec: 21, 27, 28, 33-36
 T43N, R14W, Sec: 31
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique Swamp
 YOE: 2020
 Acres: 2,045 GIS Calculated
 Examiner: Thomas Burnis
 Map Revised: 12/17/2018
 Map Phase: Post Review

- | | | |
|--------------------------------|----------------------------------|-----------------------------------|
| — Miris Corners | ⬆ Gate | ■ 422 - Natural Pines |
| ⊕ Remonumented Section Corners | 🏠 Structures | ■ 423 - Other Upland Conifers |
| ● Survey Grade Corners | ⋯ Intermittent Stream | ■ 429 - Mixed Upland Conifers |
| ◆ Field Grade Corners | 🌊 Lake/Pond | ■ 430 - Upland Mixed Forest |
| ⬜ Counties | 🌊 Perennial River | ■ 611 - Lowland Deciduous Forest |
| — DNR - Primary Forest Road | 🌊 Lakes and Rivers All | ■ 612 - Lowland Coniferous Forest |
| — DNR - Secondary Forest Road | 🟩 Compartment Boundary | ■ 330 - Low Density Trees |
| — DNR - Forest Access Route | 🌳 Selection (Group, Single Tree) | ■ 500 - Water |
| — County - Gravel Road | 🌳 Clearcut (w/Reserves) | ■ 622 - Lowland Shrub |
| — Private - Dirt / Gravel Road | 🌳 Harvest, Overstory Removal | ■ 623 - Emergent Wetland |
| 🛷 Snowmobile Trails | 📊 Regeneration Survey | ■ 710 - Sand/Soil |
| 🛤 Designated Snowmobile Trails | 🌳 411 - Northern Hardwood | ■ Lakes |
| 🏠 Unspecified Structure | 🌳 413 - Aspen | |
| | 🌳 419 - Mixed Upland Deciduous | |
| | 🌳 421 - Planted Pines | |

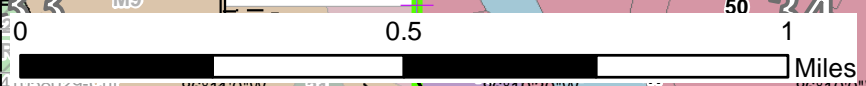
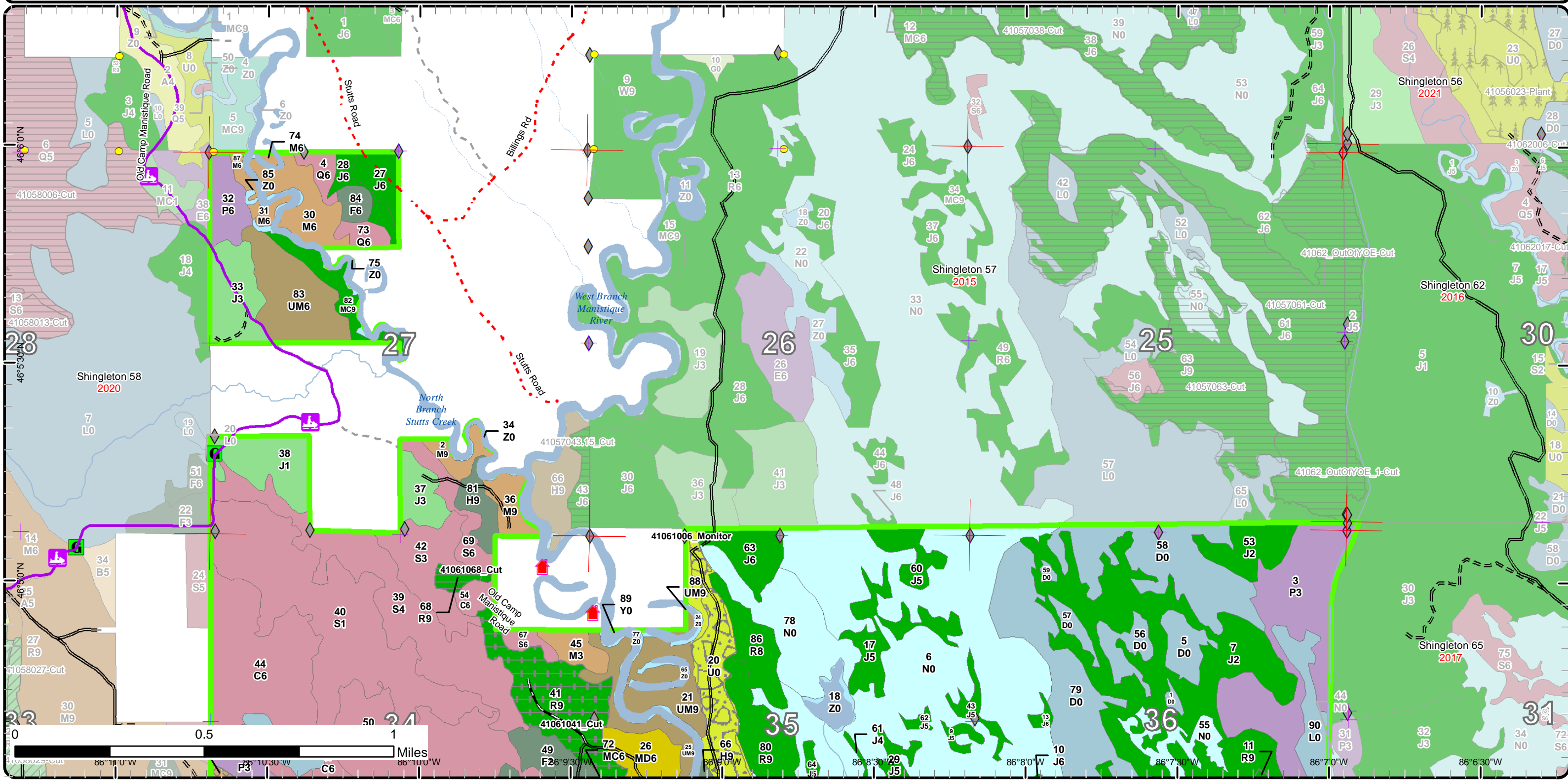


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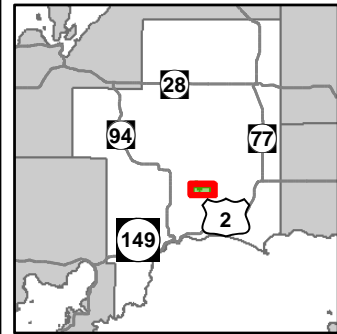
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| — Remonumented Section Corners | — Structures | ■ 430 - Upland Mixed Forest |
| ● Survey Grade Corners | — Intermittent Stream | ■ 611 - Lowland Deciduous Forest |
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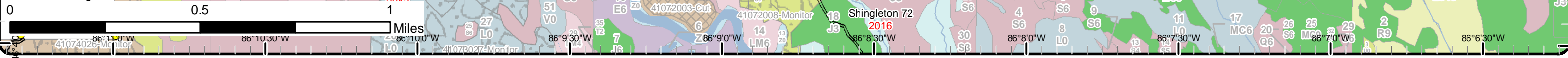
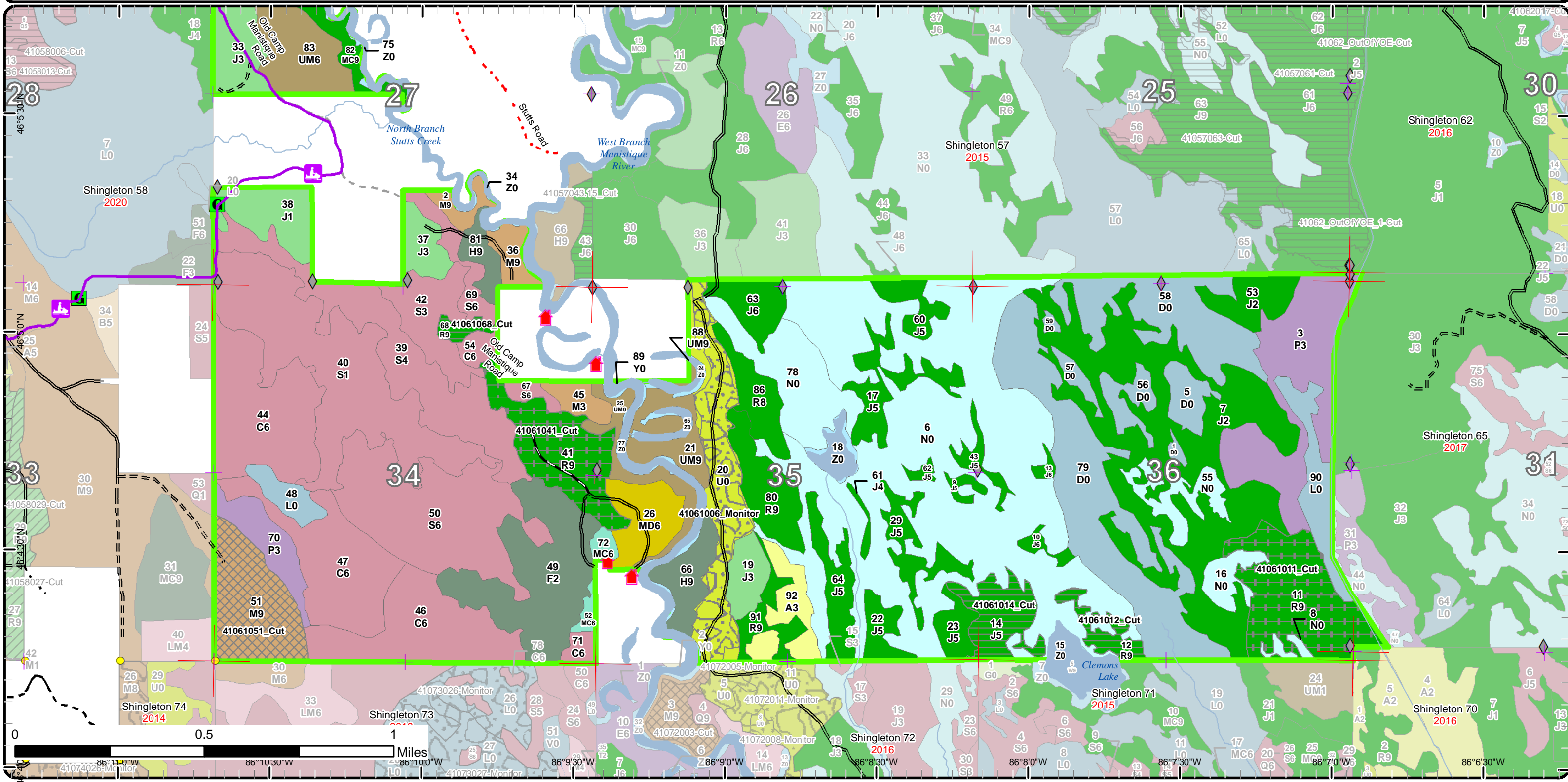
86°14'0"W 86°10'30"W 86°10'0"W 86°8'0"W 86°7'30"W 86°7'0"W 86°6'30"W

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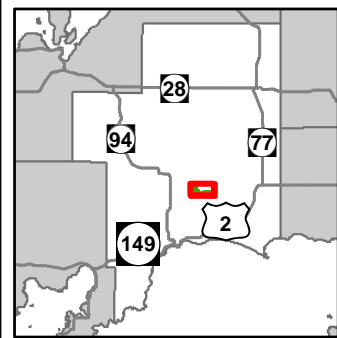


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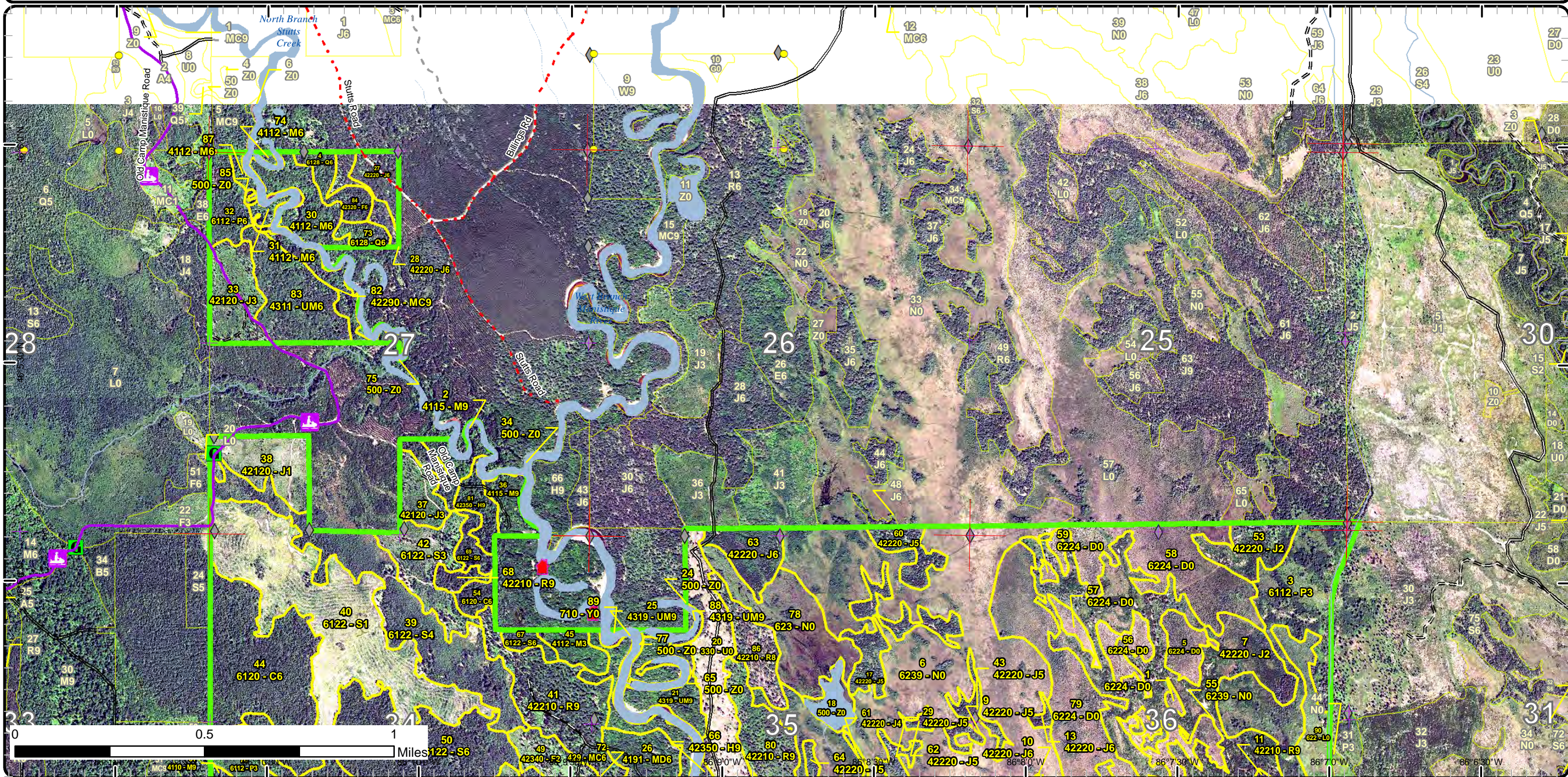


Stand Boundary Map



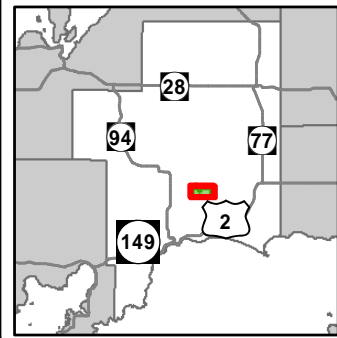
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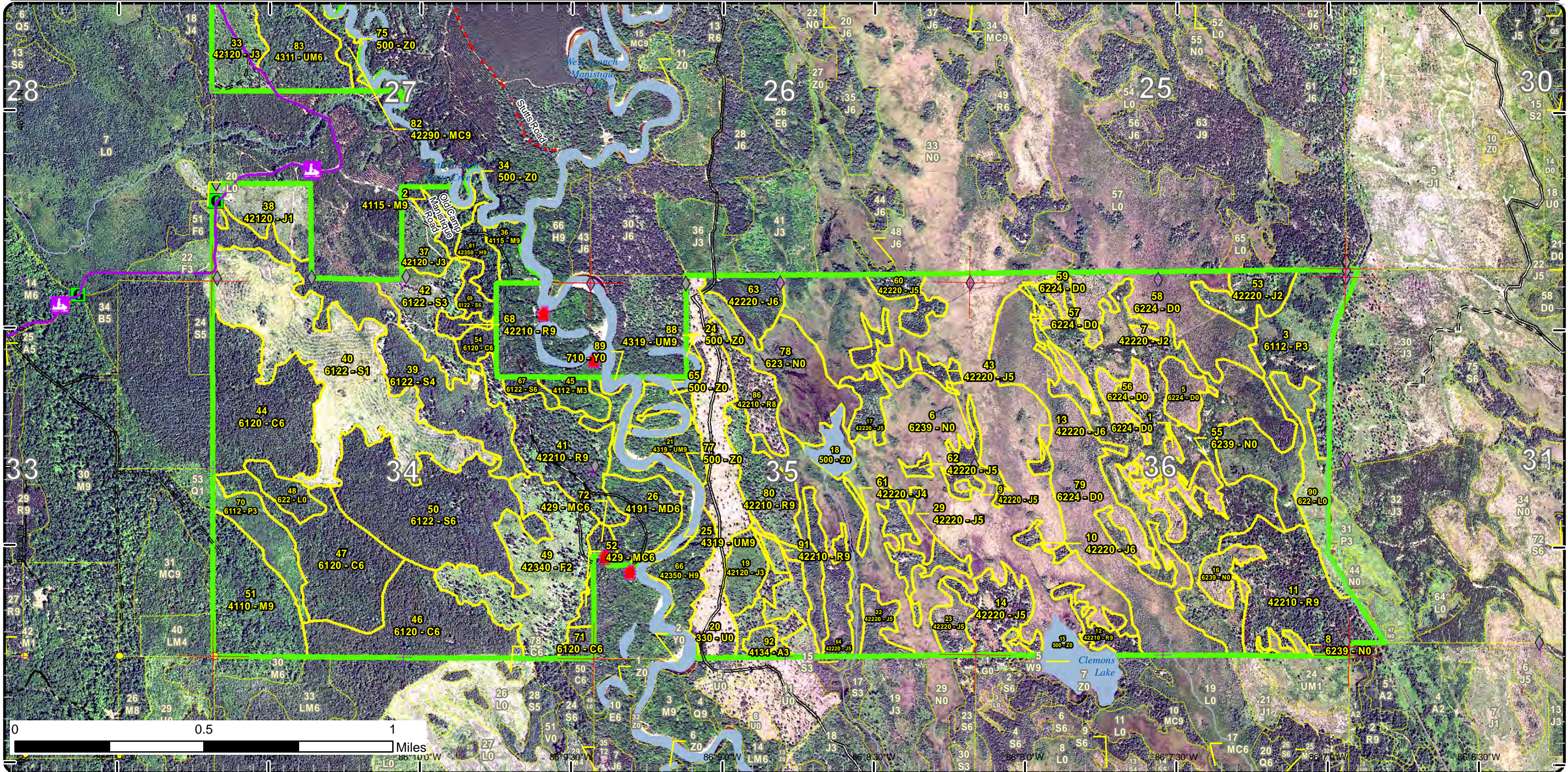


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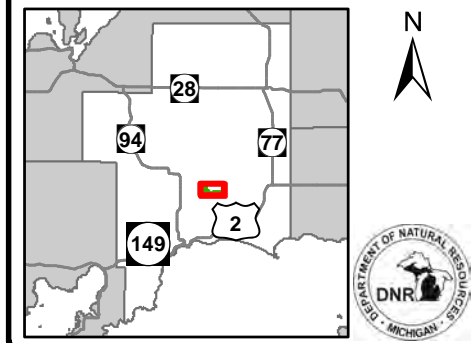


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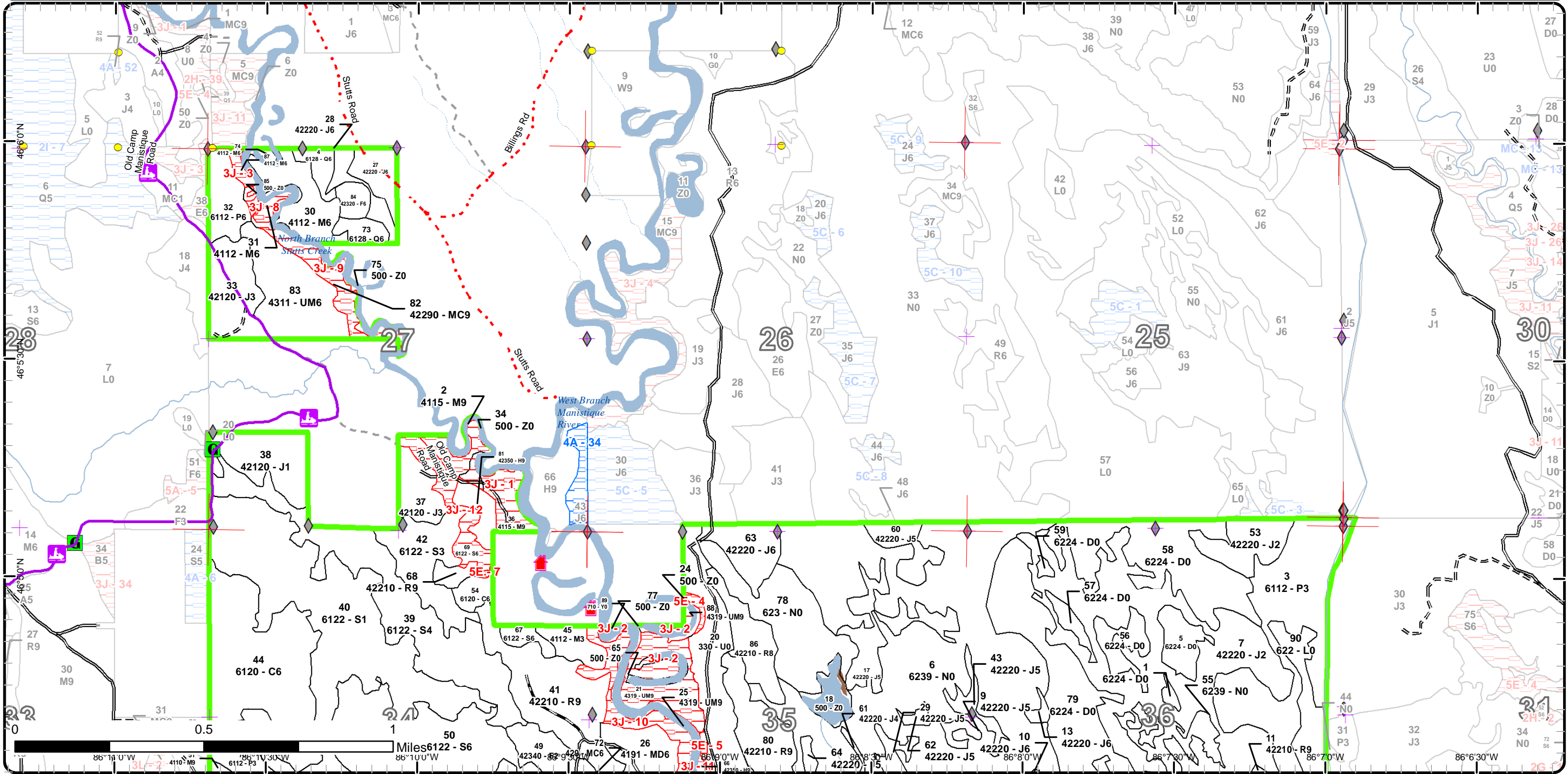


Special Conservation Areas & Site Conditions Map

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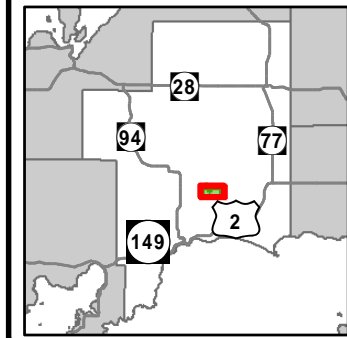


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- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 4A: No Markets Available for these Forest Products
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Deer Winter Range

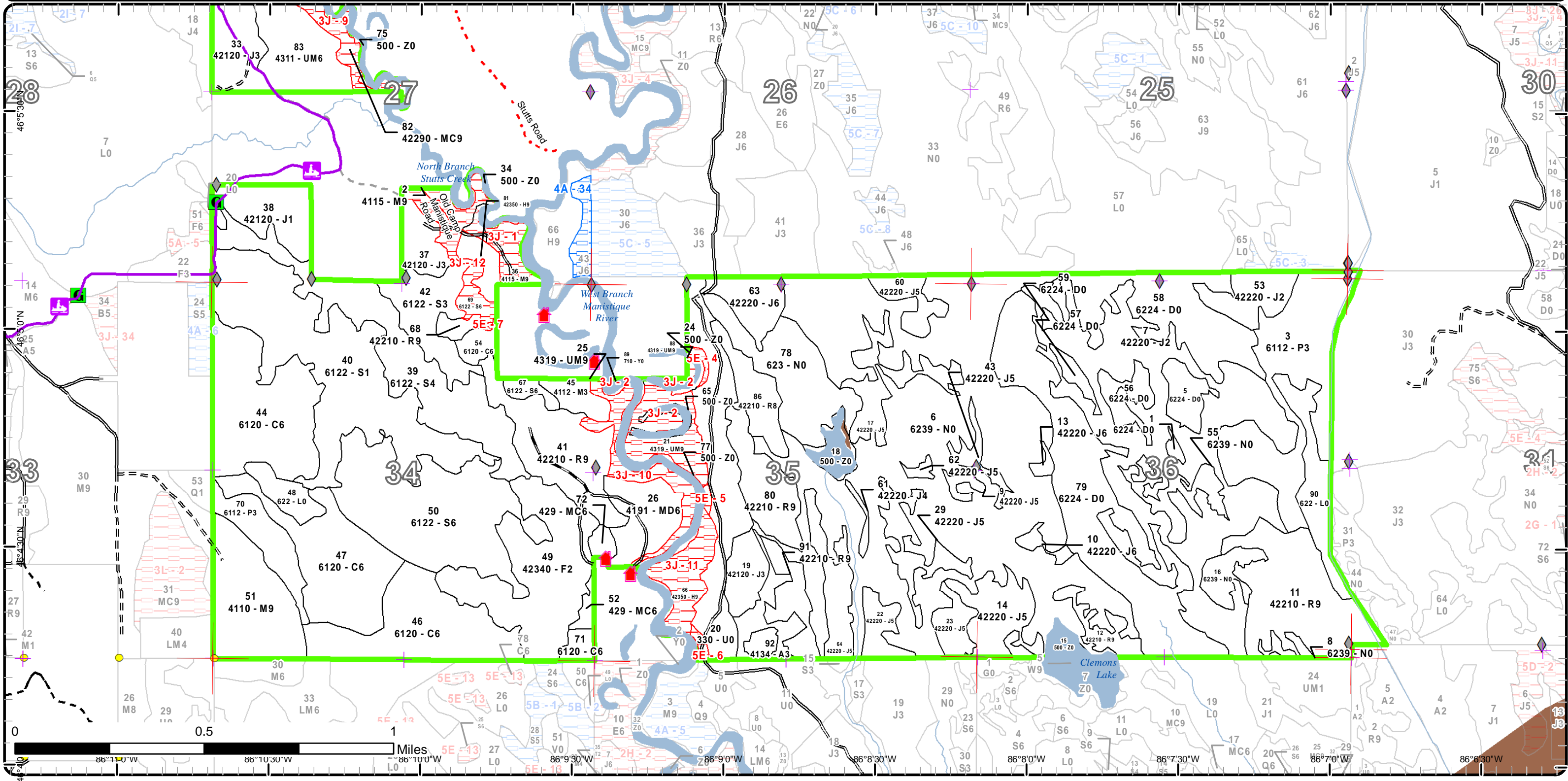


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- Unavailable
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Deer Winter Range





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	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Cedar	0	0	0	0	0	0	0	0	55	58	0	49	0	5	0	0	0	0	167
Hemlock	0	0	0	0	0	0	0	0	0	0	0	17	9	0	0	0	0	0	26
Jack Pine	0	23	204	0	117	0	7	0	24	0	0	0	0	0	0	0	0	0	374
Low-Density Trees	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Lowland Aspen/Balsam Poplar	0	0	83	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	96
Lowland Conifers	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	10
Lowland Shrub	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Lowland Spruce/Fir	0	101	25	0	4	0	0	141	0	12	0	0	0	0	0	0	0	0	283
Marsh	355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	355
Mixed Upland Deciduous	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Natural Mixed Pines	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Northern Hardwood	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	82	90
Red Pine	0	0	0	0	0	0	0	75	43	41	0	0	0	0	0	0	0	0	157
Sand, Soil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Treed Bog	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164
Upland Conifers	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Upland Mixed Forest	0	0	0	0	32	0	0	0	0	0	0	20	0	0	0	0	0	15	67
Upland Spruce/Fir	0	0	64	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	69
Water	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Total	648	124	394	0	196	0	12	93	219	96	70	20	66	9	5	0	0	97	2045



Report 2 – Treatment Summary

Shingleton Mgt. Unit
Year of Entry: 2020

Acres of Harvest

Compartment 61
Total Compartment Acres: 2,045

Commercial Harvest - 171
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	Oversory Removal	Salvage	Other	Total Acres
Jack Pine	21	0	0	0	0	0	0	0	0	21
Northern Hardwood	0	42	0	0	0	0	0	0	0	42
Red Pine	13	0	0	0	0	95	0	0	0	108
Total	34	42	0	0	0	95	0	0	0	171

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	171	0	0	0	0	43	0	0	0	214
Next Step	0	30	43	0	0	162	0	0	0	234
Total	171	30	43	0	0	204	0	0	0	448



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
20	41061006_Monitor	42.6	330 - Low-Density Trees	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**Prescription check regenerationSpecs:Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)Treatments:Acceptable jack pine, aspenRegen:Other Percent to Treat = 100%Comment:Proposed Start Date: 10/1 /2019

11	41061011_Cut	54.5	42210 - Natural Red Pine	Sawtimber Well	62	81-110	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**Prescription Remove overstory, do not cut oak or hemlock. Leave a few red and white pine as a seed source. Leave retention where appropriate. Add spec. toSpecs: protect existing regen.Next StepTreatments:Acceptable Mixed conifer with aspen clones.Regen:Other Include stand 2 comp 70 with this harvest.Comment:Proposed Start Date: 10/1 /2019

12	41061012_Cut	9.1	42210 - Natural Red Pine	Sawtimber Well	71	81-110	Harvest	Clearcut with Retention	4221 - Natural Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**Prescription Cut all trees. put retention where appropriate. Leave scattered red and white pine as a seed source.Specs:Next Step SitePrep, Scarification; Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Mix of existing trees.Regen:Other Manage with stand 10, Comp 71.Comment:Proposed Start Date: 10/1 /2025

14	41061014_Cut	21.1	42220 - Natural Jack Pine	Poetimber Medium	72	51-80	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**Prescription Cut all trees. Put retention where appropriate.Specs:Next Step SitePrep, Scarification; ; ; Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Mix of existing trees.Regen:Other Manage with stand 10, Comp 71.Comment:Proposed Start Date: 10/1 /2025



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
41	41061041_Cut	40.5	42210 - Natural Red Pine	Sawtimber Well	85	81-110	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Clear-cut, green tree a few large red and white pine do not cut any hemlock. Exclude area heavy to hemlock along east edge as retention. Add spec
Specs: to protect existing regen. Add spec to protect wood turtle.

Next Step
Treatments:

Acceptable Advanced regen consisting of an upland mix already exists. All current species are acceptable to fill in the gaps.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

51	41061051_Cut	42.4	4110 - Sugar Maple Association	Sawtimber Well	90	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Mark to cut, following standards set in the Complete Marker, reducing residual BA to 80sqft. All spruce and fir may be designated to cut.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Mix of existing overstory species acceptable regen.
Regen:

Other Patch of spruce/fir, located in center of stand, OK to be lower than target BA after cutting.
Comment: Include stand 30 in comp 73.

Proposed Start Date: 10/1 /2019

68	41061068_Cut	3.7	42210 - Natural Red Pine	Sawtimber Well	66	111-140	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clear cut all trees except hemlock. Exclude eastern tip, which contains some large red and white pine, as retention. Mark a few red and white pine to
Specs: leave.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Mixed conifer.
Regen:

Other Due to small acreage and location, Stand will not have a next step of planting. Natural regen should not be a problem, however, will likely be more
Comment: white pine than red pine. Nearby stand 41 had great success with natural regen in the past.

Proposed Start Date: 10/1 /2019

2	41070002-Cut	16.8	42210 - Natural Red Pine	Sawtimber Well	72	81-110	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Proposal
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Habitat Cut: No**Site Condition:**

Prescription Remove overstory, do not cut oak or hemlock. Leave a few red and white pine as a seed source. Leave retention where appropriate. Add spec. to
Specs: protect existing regen.

Next Step
Treatments:

Acceptable Mixed conifer with aspen clones.
Regen:

Other Include stand 11 of comp 61 with this harvest.
Comment:

Proposed Start Date: 10/1 /2019



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
30 41073030-Cut	9.1	4113 - R.Maple, Conifer	Poletimber Well	181	51-80	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Proposal

Habitat Cut: No

Site Condition:

Prescription Mark to cut, following standards set in the Complete Marker, reducing residual BA to 80sqft. All spruce and fir may be designated to cut.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Mix of existing over story acceptable regen.
Regen:

Other Include this treatment with stand 51 in comp 61.
Comment:

Proposed Start Date: 10/1 /2019

**Total Treatment
Acreage Proposed: 239.8**

Report 4 – Site Conditions

Shingleton Mgt. Unit
Thomas Burnis : Examiner

Compartment: 61
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Acres	
		With Condition	Not Available		3J	5E
18	18	0	0	Aspen		
168	162	0	5	Cedar	5	
26	0	0	26	Hemlock	26	
373	373	0	0	Jack Pine		
52	49	0	4	Low-Density Trees	0	4
96	96	0	0	Lowland Aspen/Balsam Poplar		
11	11	0	0	Lowland Conifers		
30	30	0	0	Lowland Shrub		
284	271	0	12	Lowland Spruce/Fir	12	
355	355	0	0	Marsh		
22	22	0	0	Mixed Upland Deciduous		
12	0	0	12	Natural Mixed Pines	12	
90	70	0	21	Northern Hardwood	21	
158	157	0	0	Red Pine		0
0	0	0	0	Sand, Soil	0	
164	164	0	0	Treed Bog		
6	6	0	0	Upland Conifers		
67	32	0	35	Upland Mixed Forest	35	
68	68	0	0	Upland Spruce/Fir		
47	43	0	4	Water	4	
2,044	1,926		118	Total Forested Acres	114	4
	94%		6%	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 Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Thomas Burnis : Examiner

Compartment: 61
Year of Entry: 2020

2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	24	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Thomas Burnis : Examiner

Compartment: 61
Year of Entry: 2020

9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand contains patches of cedar and also several drainage type areas leading towards river. By the time you avoid these areas, there is not enough acreage left to operate in.							
34	Available	4A: No Markets Available for these Forest Products	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Hold and cut with stand 30, comp 57.							

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				
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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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4115 - Y.Birch, Hemlock NH	Sawtimber Well	6.0	91	111-140	<p>OPIC - FMD: Some portions of stand are high and dry while others are low enough to be seasonally flooded. Stand is a mix of species typing as M overall. Pelkie Deford soils and AFPo habitat type.</p> <p>12/5/17: Evidence of past cutting. Large poor quality red maple. Recommend no management due to small acreage, location to river and the many gullies and drainages within stand.</p>
3	6112 - Lowland Aspen	Sapling Well	65.1	17	Immature	<p>OPIC - FMD: 10/18/01 Sale cut winter 2001. (5/31/06 AP) 2006 regen counts - 477 jack pine, 111 red pine, 242 aspen, 242 black spruce, 14 balsam fir, 28 cherry - 1114 total trees per acre. Close FTP C41-826.</p> <p>Regen counts for this stand were lumped together with adjacent jack pine stands.</p> <p>New stand Comments [2008] Regen is actually more aspen than counts reflect due to the way they were extrapolated. Stand also has some residual red pine, some heavy pockets but only 10 feet overall. Soils are Markey Mucky peat.</p>
4	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	5.4	74	111-140	<p>OPIC - FMD: Soils are Pelkie Deford several drainages.</p> <p>03/08/18: Included in MNFI polygon for Wood Turtle.</p>
7	42220 - Natural Jack Pine	Sapling Medium	141.8	17	Immature	<p>OPIC - FMD: Sale cut winter 2001. (5/31/06 AP) 2006 regen counts - 477 jack pine, 111 red pine, 242 aspen, 242 black spruce, 14 balsam fir, 28 cherry - 1114 total trees per acre. Stand is fully stocked to management objective. Close FTP C41-826</p> <p>New stand comments 2008, stand regenerated well, there is some scattered red pine residual. Old roads have filled in with trees. Soils are Rousseau Neconish Spot and the Habitat type is PVE.</p>
9	42220 - Natural Jack Pine	Poletimber Medium	2.8	38	1-50	<p>OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.</p>
10	42220 - Natural Jack Pine	Poletimber Well	3.1	72	51-80	<p>OPIC - FMD: Stand is a small isolated island of Jack Pine too small to sell. Possibly could treat with adjacent stands in Compartment 71.</p>
11	42210 - Natural Red Pine	Sawtimber Well	54.5	62	81-110	<p>OPIC - FMD: Stand was cut in the winters of 2000 and 2001 as part of the Clemons Lake Sale. Residual stocking is variable heaviest on SE. Regen is red pine, jack pine, spruce and aspen hold 1 more entry. Soils are Rousseau Neconish Spot and the Habitat type is PVE.</p>
12	42210 - Natural Red Pine	Sawtimber Well	9.1	71	81-110	<p>OPIC - FMD: Stand is a 2 aged red pine stand with pockets of jack pine. Stand borders Clemons Lake. Could possibly treat with adjacent stands in compartment 71 when it is re-inventoried. Soils are Rousseau Neconish Spot and the Habitat type is PVE.</p> <p>03/12/2018: Manage with stand 10 comp 71.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	42220 - Natural Jack Pine	Poletimber Well	1.7	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
14	42220 - Natural Jack Pine	Poletimber Medium	21.1	72	51-80	OPIC - FMD: Stand is a small isolated island of Jack Pine too small to sell. Possibly could treat with adjacent stands in Compartment 71. 02/27/2018: Rolling ridges with open areas, mostly upland. Manage with stands to the South comp 71.
17	42220 - Natural Jack Pine	Poletimber Medium	19.2	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
19	42120 - Planted Jack Pine	Sapling Well	12.1	10	Immature	OPIC - FMD: [11-9-2003 bb] North 2/3 cut fall of 2001, S1/3 cut fall 2002. Sale is now closed and was scarified 2003 [3-1-02] Stand Partially cut and available, cut summer 2001 [1-27-03] Rest of stand was cut in the fall of 2002, entire acreage available. [10-26-03] Sale is now closed. [1/28/04 BB] Received a completion from Don indicating 40 acres were scarified, leaving 27 acres unscarified, this was probably due to areas with thick red pine. Schedule regen check in 2006. (6/1/06 AP) 2006 regen counts - jack pine - 19, red pine 67, red maple 86, aspen 200, black spruce 171, white pine 29, balsam fir 38, tamarack 10. On list to trench and plant in 2007. (5/29/08 AP) 11 acres was trenched and planted. The rest was too thick with red pine residual trees. Regen check in 2009. New Stand Comments 2008 The area that was trenched and planted is now just this portion of original stand and the remainder is Stand 80. FTP still open. (6/15/09 AP) 2009 regen check - 1400 jack pine. Stand needs a 3 year check in 2011. (6/7/2011 AP) 2011 regen counts showed excellent regeneration. FTP is closed.
21	4319 - Mixed Upland Forest	Sawtimber Well	18.7	100	111-140	Stand is being typed as E however, it could easily be typed as hemlock. These are not true lowland hardwoods but since they are in a flood plain typed as E. There is some good quality to them. Soils are Pelkie Deford and the Habitat type is AFPo.
22	42220 - Natural Jack Pine	Poletimber Medium	9.3	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
23	42220 - Natural Jack Pine	Poletimber Medium	8.8	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
25	4319 - Mixed Upland Forest	Sawtimber Well	15.0	90	111-140	OPIC - FMD: Stand is a narrow buffer along the West Branch of the Manistique River. It is soft maple dominated with areas of birch and hemlock. Soils are Pelkie Deford and the Habitat type is AFPo.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	21.6	35	1-50	OPIC - FMD: Stand was cut in 1982/1983, Brace Creek Hardwood. Stand has regenerated well and transitioning nicely. Lots of soft maple, white birch, yellow birch and fir. Soils are Pelkie Deford and the Habitat type is AFPO.
27	42220 - Natural Jack Pine	Poletimber Well	9.6	36	51-80	OPIC - FMD: Stand transitioning to poles. Proper Fine Sand Habitat type is PVE 03/09/2018: Look to cut next entry and include stand 28. Also, stand 84 if there is good access. Included in MNFI polygon for Wood Turtle.
28	42220 - Natural Jack Pine	Poletimber Well	6.5	53	51-80	OPIC - FMD: Stand is a couple of ages, hold 1 more entry till all is mature. Soils are Proper Fine Sand, PVE habitat type. 03/09/2018: Stand will last another entry. Hold to cut with stand 27, which should be mature enough by then. Also look to include stand 84 if good access. Included in MNFI polygon for Wood Turtle.
29	42220 - Natural Jack Pine	Poletimber Medium	14.5	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
30	4112 - Maple, Beech, Cherry Association	Poletimber Well	18.3	74	81-110	OPIC - FMD: Most of stand is upland, however there are lots of drainages. Bulk of stand is soft maple, type as M since if ever managed it would be select cut due to river corridor. Soils are Pelkie Deford and Habitat type is PVE
31	4112 - Maple, Beech, Cherry Association	Poletimber Well	2.9	74	81-110	OPIC - FMD: River Corridor Soils are Pelkie Deford, PVE habitat type
32	6112 - Lowland Aspen	Poletimber Well	13.1	36	1-50	OPIC - FMD: Stand mostly aspen with maple and fir as well, lots of drainages. No BA yet. Soils are Proper Fine Sand PVE 1/19/2018: Beaver flooding in much of stand, trees dying.
33	42120 - Planted Jack Pine	Sapling Well	21.8	12	Immature	OPIC - FMD: RED PINE POLES SCATTERED THROUGHOUT. MEAD HAS SURROUNDING AREA PLANTED TO RED PINE. LEAVE RED PINE POLES. [6/23/05 BB] Sale is now closed, Brace Creek Sale, Unit 2. Stand cut fall 2001. Red pine poles were left, stand not scarified yet, may be to old. Check regeneration in 2009. (5/24/06 AP) Stand was trenched and planted with jack pine in spring of 06. 20,000 trees. Regen check needed in 2007. (11/8/06 AP) 2007 regen check - 680 jack pine, 20 black spruce, 13 red pine, 13 balsam. Regen check needed in 2009. (6/15/09 AP) 2009 regen check - 643 jack pine, 3 red pine, 3 black spruce. Stand is fully stocked, and FTP C41-974 is closed.
36	4115 - Y.Birch, Hemlock NH	Sawtimber Well	9.2	91	111-140	OPIC - FMD: Some portions of stand are high and dry while others are low enough to be seasonally flooded. Stand is a mix of species typing as M overall. Pelkie Deford soils and AFPO habitat type. 12/5/17: Evidence of past cutting. Large poor quality red maple. Recommend no management due to small acreage, location to river and the many gullies and drainages within stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	42120 - Planted Jack Pine	Sapling Well	11.6	12	Immature	<p>OPIC - FMD: [6/23/05 BB] Sale is now closed, Brace Creek Sale, unit 3. Stand cut Fall 2001. Scarification scheduled but not yet done, likely to old. Check regeneration in 2009.</p> <p>(5/24/06 AP) Stand was trenched and planted in spring 06, 10,000 jack pine. Regen check needed in 2007.</p> <p>(11/8/06 AP) 2007 regen check: 880 jack pine, 10 balsam, 10 red pine. Regen check in 2009.</p> <p>(6/15/09 AP) 2009 regen check - 600 jack pine, 8 red pine. Stand is fully stocked, and FTP C41-974 is closed.</p>
38	42120 - Planted Jack Pine	Sapling Poor	22.7	5	1-50	<p>OPIC - FMD: [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Check regeneration in 2009.</p> <p>Attempted to check regen in 2008 but it failed, check again in 2009.</p> <p>Planted in spring 2015.</p> <p>(4/28/2010 AP) Regeneration walkthrough done spring of 2010. Not much of anything here. Black spruce is dominant species, but numbers are well below 600 tpa. Stand is not fully stocked and was referred to TMS.</p> <p>FTP # C41-1466 Trench and plant jack pine in areas without existing regeneration. Part of Brace Creek Pine, sale 27-2000 originally spruce that dried out and did not regenerate.</p> <p>(6/5/2013 AP): Stand was planted without trenches in spring 2013. Regeneration count scheduled for spring 2014. Passed regen check with 355 jack pine, 100 black spruce, 133 red pine</p>
39	6122 - Black Spruce	Poletimber Poor	61.7	77	Unspecified	<p>OPIC - FMD: Soils are Kinross Muck</p> <p>12/4/17: Mix of merchantable and sub- merchantable trees. Lowland brush throughout stand. Trees growing very slowly.</p>
40	6122 - Black Spruce	Sapling Poor	101.4	4	Immature	<p>[4/27/10 bb] Stand is now on proposal, 13-10 Three Otters Sale. Actual acreage = 100. Retention includes several small exclusions in Unit 2 and large area was cut off with the red line on the south west corner.</p> <p>Stand was cut as part of Three Otters. TCR Date 10/13/2014.</p> <p>12/4/17: Regen checked during inventory cycle. Stand consists of B. Sp., Fir, Tam ranging in height 5'-3'. JP coming in on the higher mounds.</p>
41	42210 - Natural Red Pine	Sawtimber Well	40.5	85	81-110	<p>OPIC - FMD: STAND WAS THINNED TWICE IN THE PAST. CONVERTING TO WHITE PINE.[6/23/05 BB] Sale is now closed, Brace Creek Sale. Original prescription called for a removal cut and convert to white pine. Stand is still a stocked log stand, mostly red pine. Changed MO back to red pine to make OI work however, the stand is converting on its own as planned. Look at in next decade for a real removal. The residual that was left is younger and stocking is just right to foster white pine regen as well as red pine. Hold 1 more decade. 12/04/18: Approx. 6 acres of stand included in State Game Fund.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	6122 - Black Spruce	Sapling Well	24.9	17	Immature	<p>OPIC - FMD: [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut Fall 2001. Check regeneration in 2009. Regen was checked and only 50% of the plots passed, so it failed. Check again in 2009 as indicated above. Soils are Kinross Muck</p> <p>(4/28/2010 AP) Regeneration walkthrough done spring of 2010. Fully stocked stand of black spruce, tamarack, jack pine, and red pine. A lot of residual 1-3 inch spruce remain from harvest, mostly in the south. Planting of stand 37 leaked into northern boundary of this stand.</p>
43	42220 - Natural Jack Pine	Poletimber Medium	5.5	38	1-50	<p>OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.</p>
44	6120 - Lowland Cedar	Poletimber Well	58.0	93	141-170	<p>OPIC - FMD: Stand has swaths of old deer yard type cuttings which have regenerated to spruce and balsam. Soils are Carbondale Lupton Tawas Mucks</p> <p>1/17/2018: Areas of pure B. spruce and of pure Ced. Trees are straight and tall where these spots exist.</p>
45	4112 - Maple, Beech, Cherry Association	Sapling Well	8.0	35	1-50	<p>OPIC - FMD: Stand was cut in 1982/1983, Brace Creek Hardwood. Stand has regenerated well and transitioning nicely. Lots of soft maple, white birch, yellow birch and fir. Soils are Pelkie Deford and the Habitat type is AFPo.</p>
46	6120 - Lowland Cedar	Poletimber Well	51.0	88	141-170	<p>OPIC - FMD: [1/8/06 BB] As agreed to at the 2008 Compartment Review approximately 10 acres of this stand was agreed to be cut as part of the cedar complex to the south.</p> <p>The stands to the south actually got put into a pilot project in which this stand was not included. I am leaving the comment in for historical purposes. This stand will be cut in 20 years with the stands to the south as phase two of the plan. Soils are Carbondale Lupton Tawas Muck</p>
47	6120 - Lowland Cedar	Poletimber Well	49.3	118	51-80	<p>OPIC - FMD: There are swaths of regen from old deer cuttings that have regenerated to spruce and fir. Quite a bit of birch along fringe of stand 70. Soils are Carbondale Lupton Tawas Mucks</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	42340 - Upland Spruce/Fir	Sapling Medium	63.5	13	Immature	<p>OPIC - FMD: [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Check regeneration in 2009. Stand has scattered white pine in it.</p> <p>Attempted to check regen in 2008 but it failed, check again in 2009.</p> <p>(4/28/2010 AP) Regeneration walkthrough done spring of 2010. Pockets of excellent regeneration exist in both the high and low ground. However, most of the stand is void of trees. Ridges with exposed soil seeded in well and the low ground with plenty of water also did well. Stand is not fully stocked and has been referred to TMS.</p> <p>FTP # C41-1466 Trench and plant jack pine in areas without existing regeneration. Part of Brace Creek Pine, sale 27-2000 originally spruce that dried out and did not regenerate.</p> <p>Thanks for the consideration...now the embarrassing part...My retired secretary got approval for this back in August and updated the tracking sheet then. This just proves I'm not a good secretary!</p> <hr/> <p>From: Milford, Steven (DNRE) Sent: Tuesday, March 22, 2011 2:37 PM To: Stampfly, Jeffrey (DNRE); Swanson, Kevin (DNRE); Kramer, Darren (DNRE); Minzey, Terry (DNRE) Cc: Kuhr, Donald (DNRE); Matson, Kristen (DNRE) Subject: RE: Change of OI, compartments 58 and 61 - 2010 YOE FTP# C41-1466</p> <p>I support the change Steve Milford EUP District Supervisor Forest Management Division MI Department of Natural Resources 906-293-5131 milfords@michigan.gov</p> <hr/> <p>From: Stampfly, Jeffrey (DNRE) Sent: Tuesday, March 22, 2011 12:46 PM To: Swanson, Kevin (DNRE); Kramer, Darren (DNRE); Milford, Steven (DNRE); Minzey, Terry (DNRE) Cc: Kuhr, Donald (DNRE); Matson, Kristen (DNRE) Subject: Change of OI, compartments 58 and 61 - 2010 YOE FTP# C41-1466</p> <p>Don Kuhr is requesting a change of OI for the subject compartments. Below are his comments explaining why he is requesting the change. The attached FTP is what results if his proposed changes are approved so I'm sending it along for approval as well.</p> <p>During a regeneration walk through evaluation, forester Adam Petrelius found the following stands lacking adequate regeneration: C58 stands 9,11,19 and 20; C61 stands 38 and 49. The MO on these stands was spruce however jack pine was a component. He observed that the wet areas and scarified area regenerated well. Due to the dry conditions and the amount of time since harvest I feel that it is unlikely anymore spruce will regenerate. I would like to trench and plant jack pine in the areas that lack regeneration. This will likely change the MO to Jack Pine depending on the final mix after planting. A formal regen survey done one year after planting will dictate the final MO.</p> <p>This letter is seeking a formal chapter 7 change of MO to jack pine with the provision that the final change will occur after the one year survey.</p> <p>I'm in agreement with this change and will sign the FTP. However, I would want OI changes will be made upon everyone's approval rather than after than after the one year survey. With</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
						<p>your approval, we'll update OI records based on the regeneration count results and as long as the stands are fully stocked, that's the MO we'll run with until the compartments are switched to IFMAP in 2018. Please send me your comments and approvals as soon as you can....thanks</p> <p>(6/5/2013): Stand was planted in spring 2013. Only about 20 acres of the site was trenched. (10/28/15 AP). Regeneration work is complete.</p>
50	6122 - Black Spruce	Poletimber Well	79.3	77	81-110	OPIC - FMD: Stand is heavy to cedar. Stand should be held 1 more entry for green-up and to treat with part 2 of the cedar plan to the south.
51	4110 - Sugar Maple Association	Sawtimber Well	42.4	90	81-110	OPIC - FMD: [10-24-03 BB] Stand cut under contract 34-00, Mad Hawk Sale. Stand was cut fall of 2002 and winter 2003. Stand is regenerating nicely.
52	429 - Mixed Upland Conifers	Poletimber Well	3.0	68	51-80	OPIC - FMD: Stand needs to be held for green-up of adjacent. Hold 1 more entry. Soils are Pelkie Deford 1/19/2018: Birch dying out, converting to fir.
53	42220 - Natural Jack Pine	Sapling Medium	15.9	17	Immature	OPIC - FMD: Stand cut winter 2001 Clemons Lake Sale (5/31/06 AP) 2006 regen counts - 477 jack pine, 111 red pine, 242 aspen, 242 black spruce, 14 balsam fir, 28 cherry - 1114 total trees per acre. Stand is fully stocked to management objective. Close FTP C41-826
54	6120 - Lowland Cedar	Poletimber Well	5.4	132	141-170	OPIC - FMD: Soils are Carbondale Lupton Tawas Mucks
60	42220 - Natural Jack Pine	Poletimber Medium	10.0	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
61	42220 - Natural Jack Pine	Poletimber Poor	1.9	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
62	42220 - Natural Jack Pine	Poletimber Medium	1.7	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.
63	42220 - Natural Jack Pine	Poletimber Well	14.8	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, aspen and black spruce mainly. Soils are Rubicon-Croswell and Habitat type is PVE.
64	42220 - Natural Jack Pine	Poletimber Medium	17.0	38	1-50	OPIC - FMD: Stand was cut in 1980 as part of the Hough Sale. Stand has regenerated to jack pine, red pine and black spruce mainly. Other species include tamarack and aspen. Soils are Rubicon-Croswell and Habitat type is PVE.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
66	42350 - Upland Hemlock	Sawtimber Well	16.9	118	111-140	OPIC - FMD: Stand was cut through in the early 70's which sprouted a lot of hardwood regen. Stand also has the potential snowmobile bridge crossing within it.
67	6122 - Black Spruce	Poletimber Well	4.1	35	Unspecified	OPIC - FMD: Soils are Pelkie Deford
68	42210 - Natural Red Pine	Sawtimber Well	4.0	66	111-140	OPIC - FMD: Stand is 2-3 aged should have been treated with adjacent stands last entry, easily will hold 1 more entry. Soils are Proper Fine sand. 12/4/17: Some very old and large Red and White pine located in Eastern tip.
69	6122 - Black Spruce	Poletimber Well	12.1	91	Unspecified	OPIC - FMD: Soils are Carbondale Lupton Tawas Mucks 12/4/17: Patches of large old cedar. Noticed ced. regen in moss areas.
70	6112 - Lowland Aspen	Sapling Well	17.7	15	Immature	OPIC - FMD: SMALL WHITE BIRCH AND FIR, SOME DYING ASPEN, FIR AND BRUSH IN UNDERSTORY. LEAVE A FRINGE OF BIRCH TREES AROUND EDGE. [10-24-03 BB] Stand cut under contract 34-00, Mad Hawk Sale. Stand was cut winter 2003. Stand has regenerated to spruce and fir. There are also areas of aspen regen. Did not see any cedar regen. Most of the white birch were browsed by deer and are no longer viable. The stand had a heavy component of these other species, accepting the regen that is in place as it is fairly good even with the absence of the birch however hopefully over time cedar will seed in. Soils are Carbondale Lupton Tawas Mucks
71	6120 - Lowland Cedar	Poletimber Well	4.3	88	141-170	OPIC - FMD: Soils are Carbondale Lupton Tawas Muck
72	429 - Mixed Upland Conifers	Poletimber Well	3.3	68	51-80	OPIC - FMD: Stand needs to be held for green-up of adjacent. Hold 1 more entry. Soils are Pelkie Deford 1/19/2018: Birch dying out, converting to fir.
73	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	5.1	74	111-140	OPIC - FMD: Soils are Pelkie Deford 03/08/18: Several drainages. Included in MNFI polygon for Wood Turtle.
74	4112 - Maple, Beech, Cherry Association	Poletimber Well	0.8	74	81-110	OPIC - FMD: River Corridor Soils are Pelkie Deford, PVE habitat type



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
80	42210 - Natural Red Pine	Sawtimber Well	22.7	70	51-80	OPIC - FMD: [11-9-2003 bb] North 2/3 cut fall of 2001, S1/3 cut fall 2002. Sale is now closed and was scarified 2003[3-1-02] Stand Partially cut and available, cut summer 2001[1-27-03] Rest of stand was cut in the fall of 2002, entire acreage available.[10-26-03] Sale is now closed.[1/28/04 BB] Received a completion from Don indicating 40 acres were scarified, leaving 27 acres unscarified, this was probably due to areas with thick red pine. Schedule regen check in 2006.(6/1/06 AP) 2006 regen counts - jack pine - 19, red pine 67, red maple 86, aspen 200, black spruce 171, white pine 29, balsam fir 38, tamarack 10. On list to trench and plant in 2007.(5/29/08 AP) 11 acres was trenched and planted. The rest was too thick with red pine residual trees. Regen check in 2009.NEW STAND COMMENTS 2008; The above comments were from the original stand, the portion that was trenched and planted stayed as stand 19 and the remainder is now this stand which is an R5 stand which needs another decade to grow. Stocking is variable and there are pockets of regen which are either jack pine or aspen. When stand is treated next time the pockets can either be typed out separately or treated.
81	42350 - Upland Hemlock	Sawtimber Well	8.8	121	201+	OPIC - FMD: Soils are Proper Fine sand habitat type is PVE
82	42290 - Natural Mixed Pine	Sawtimber Well	11.6	60	111-140	OPIC - FMD: River corridor stand, mixed stand with many species. 1/19/2018: Higher spots hold nice red pine, lower areas more of an "E" type.
83	4311 - Pine, Aspen Mix	Poletimber Well	31.7	36	1-50	OPIC - FMD: Stand regenerating nicely, quite a bit of jack pine as well. Soils are Pelkie Deford
84	42320 - Upland Spruce	Poletimber Well	4.8	50	81-110	OPIC - FMD: Soils are Pelkie Deford 03/09/2018: Upland island of spruce with a drainage along the east edge. Look to cut next entry if there is good access. Cut with stands 28 and 27. Included in MNFI polygon for Wood Turtle.
86	42210 - Natural Red Pine	Sawtimber Medium	16.1	68	51-80	[9/10/10 BB] Stand is on proposal, 41-032-10 Boneyard Remainder, Units 1, 15 actual acres. Retention is as described, residual red pine = 37 sq ft and white pine 9 sq ft. FTP C41-1462 submitted for scarification.2/25/16 AP: Harvested winter 2016. Scarification was not possible due to high residual basal area
87	4112 - Maple, Beech, Cherry Association	Poletimber Well	2.6	74	81-110	OPIC - FMD: River Corridor Soils are Pelkie Deford, PVE habitat type
88	4319 - Mixed Upland Forest	Sawtimber Well	1.3	100	81-110	Stand is being typed as E however, it could easily be typed as hemlock. These are not true lowland hardwoods but since they are in a flood plain typed as E. There is some good quality to them. Soils are Pelkie Deford and the Habitat type is AFPO.



S t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
91	42210 - Natural Red Pine	Sawtimber Well	10.8	70	51-80	<p>OPIC - FMD: [11-9-2003 bb] North 2/3 cut fall of 2001, S1/3 cut fall 2002. Sale is now closed and was scarified 2003[3-1-02] Stand Partially cut and available, cut summer 2001[1-27-03] Rest of stand was cut in the fall of 2002, entire acreage available.[10-26-03] Sale is now closed.[1/28/04 BB] Received a completion from Don indicating 40 acres were scarified, leaving 27 acres unscarified, this was probably due to areas with thick red pine. Schedule regen check in 2006.(6/1/06 AP) 2006 regen counts - jack pine - 19, red pine 67, red maple 86, aspen 200, black spruce 171, white pine 29, balsam fir 38, tamarack 10. On list to trench and plant in 2007.(5/29/08 AP) 11 acres was trenched and planted. The rest was too thick with red pine residual trees. Regen check in 2009.NEW STAND COMMENTS 2008; The above comments were from the original stand, the portion that was trenched and planted stayed as stand 19 and the remainder is now this stand which is an R5 stand which needs another decade to grow. Stocking is variable and there are pockets of regen which are either jack pine or aspen. When stand is treated next time the pockets can either be typed out seperately or treated.</p>
92	4134 - Aspen, Spruce/Fir	Sapling Well	17.6	16	51-80	<p>OPIC - FMD: [11-9-2003 bb] North 2/3 cut fall of 2001, S1/3 cut fall 2002. Sale is now closed and was scarified 2003 [3-1-02] Stand Partially cut and available, cut summer 2001 [1-27-03] Rest of stand was cut in the fall of 2002, entire acreage available. [10-26-03] Sale is now closed. [1/28/04 BB] Received a completion from Don indicating 40 acres were scarified, leaving 27 acres unscarified, this was probably due to areas with thick red pine. Schedule regen check in 2006. (6/1/06 AP) 2006 regen counts - jack pine - 19, red pine 67, red maple 86, aspen 200, black spruce 171, white pine 29, balsam fir 38, tamarack 10. On list to trench and plant in 2007. (5/29/08 AP) 11 acres was trenched and planted. The rest was too thick with red pine residual trees. Regen check in 2009. NEW STAND COMMENTS 2008; The above comments were from the original stand, the portion that was trenched and planted stayed as stand 19 and the remainder is now this stand which is an R5 stand which needs another decade to grow. Stocking is variable and there are pockets of regen which are either jack pine or aspen. When stand is treated next time the pockets can either be typed out seperately or treated. 2/27/2018: This stand was split out from the previous stand typed as R9.</p>



Stand	Cover Type	Acres	Managed Site	General Comments:
1	6224 - Treed Bog	1.4	No	
5	6224 - Treed Bog	10.0	No	
6	6239 - Mixed Emergent Wetland	291.2	No	
8	6239 - Mixed Emergent Wetland	2.9	No	
15	500 - Water	3.5	No	OPIC - FMD: CLEMONS LAKE
16	6239 - Mixed Emergent Wetland	9.4	No	
18	500 - Water	8.4	No	OPIC - FMD: Un-named Lake
20	330 - Low-Density Trees	52.2		<p>OPIC - FMD: East side of stand was split out. Stand is a couple of different ages. Some smaller diameter jack pine but it is at rotation age. Due to stocking cut stand, leave some red pine for seed and re-plant jack pine. Will need to buffer river. Accept only jack pine regen accept where aspen clones exist which can convert to aspen. Soils are Hiawatha Fine sand. Retention should occur in patches and emphasize areas that may be younger in age.</p> <p>[9/10/10 BB] Stand is on proposal, 41-032-10 Boneyard Remainder, Units 2 and 3, 43 actual acres. Retention is as described, residual red pine = 6 sq ft and white pine 4 sq ft. FTP-C41-1461 submitted for regeneration.</p>
24	500 - Water	3.0	No	OPIC - FMD: West Branch River Oxbow
34	500 - Water	2.7	No	OPIC - FMD: Stutts River and West Branch River
48	622 - Lowland Shrub	9.4	No	OPIC - FMD: Looks like the stand had been cut in the past. There is some regen but overall it is tag alder. Soils are Carbondale Lupton Tawas Mucks
55	6239 - Mixed Emergent Wetland	13.6	No	
56	6224 - Treed Bog	9.4	No	OPIC - FMD: Soils are Kinross Muck
57	6224 - Treed Bog	3.9	No	OPIC - FMD: Soils are Kinross Muck
58	6224 - Treed Bog	49.4	No	OPIC - FMD: Soils are Kinross Muck
59	6224 - Treed Bog	1.1	No	OPIC - FMD: Soils are Kinross Muck



Stand	Cover Type	Acres	Managed Site	General Comments:
65	500 - Water	3.7	No	OPIC - FMD: West Branch River Oxbow
75	500 - Water	9.8	No	OPIC - FMD: Stutts River
77	500 - Water	15.1	No	OPIC - FMD: West Branch River
78	623 - Emergent Wetland	37.7	No	OPIC - FMD: Stand is flooded with water most of the time. Soils are Markey Mucky peat.
79	6224 - Treed Bog	88.9	No	Dead and stunted mix of cedar and other lowland conifers.
85	500 - Water	0.6	No	OPIC - FMD: Stutts River Oxbow
89	710 - Sand, Soil	0.2	No	Beech.
90	622 - Lowland Shrub	20.2	No	OPIC - FMD: 10/18/01 Sale cut winter 2001. 03/01/2018: Originally part of the above mentioned sale but is solid alder and willow now.