



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41030

Entry Year 2018

Acreage: 2,629

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 2016-08-31

Stand Examiner: Adam Petrelius

Legal Description:

T44N R15W Sections 19, 20, 29, 30, 31, 32

Identified Planning Goals:

The main goal of this compartment is to conduct multiple resource management for current and future generations.

Soil and topography:

The topography in this compartment is mostly flat, and elevations generally decrease towards the southwestern boundaries of the compartment. Mixed pine species are the predominant cover type located on the soils. The major soil types found within the compartment, in order of abundance, are Hiawatha-Deerpark-Rubicon Complex, Markey Mucky Peat, and Rousseau-Neconish-Deford Complex. The major habitat types within the compartment are PARVAa, unclassified wetland, PARV, PVE, and AFPo.

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

State land within this compartment was acquired between 1903 and 1951. Numerous private parcels are located adjacent to the compartment. Some of these parcels contain permanent residences, and some contain camps. Access to some of these parcels is through State Land. There are a few roads where gates may be located on State Land, and a survey request will be made to determine their location.

Unique Natural Features:

None

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

This compartment contains Hickey Creek, the West Branch of Hickey Creek, and Section Nineteen Creek, which are all tributaries to the West Branch of the Manistique River (also included in this compartment). Hickey Creek and the West Branch of Hickey Creek are designated Type 1 trout streams less than 50' width. A 300' buffer is recommended for Hickey Creek and the West Branch of Hickey Creek in riparian areas susceptible to Aspen regeneration. For all other riparian areas, Best Management Practices should be followed to reduce erosion into waterbodies.

Wildlife Habitat Considerations:

The wildlife habitat management goals include maintaining super canopy trees within the conifer community, increasing diversity and mast production by under-planting red oak, maintaining early successional habitat, and providing snags and den trees through variable retention techniques. This compartment lies within the Seney/Manistique Swamp Management Area and the featured species within this MA are American beaver, moose, ruffed grouse, sharp-tailed grouse, snowshoe hare, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington Formation and Utica Shale subcrop below the glacial drift. The Stonington could be used for stone. Gravel pits are not located in the area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

County Road 448 travels north/south through the compartment and is plowed during winter months. Numerous other forest roads are present in the eastern half of the compartment. The western half is mostly marsh and vehicle access is

not available.

Survey Needs:

Survey work is needed.

Recreational Facilities and Opportunities:

A snowmobile trail travels north/south within the compartment and along portions of the County Road 448. County Road 448 is plowed during winter months, which makes this compartment accessible year round. Fishing opportunities are present in Hickey Creek and the West Branch of the Manistique River. An old State Forest Campground is located along the West Branch of the Manistique River and is now closed. People have been observed camping here during the various hunting seasons.

Fire Protection:

Response time to fires within this compartment will be moderate. A well established road system will make fire operations easier within the compartment. The southwestern portion of the compartment is the only area where a road system is lacking. An abundance of water is present for fire suppression tactics. About 2/3 of this compartment is upland with surface fuels consisting pine litter and grass. A fire that burned in 1983, Schoolcraft Fire #6, is still noticeable in 3 stands of mixed pine.

Additional Compartment Information:

The following reports from the Inventory are attached:

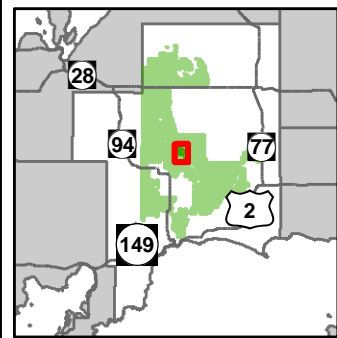
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

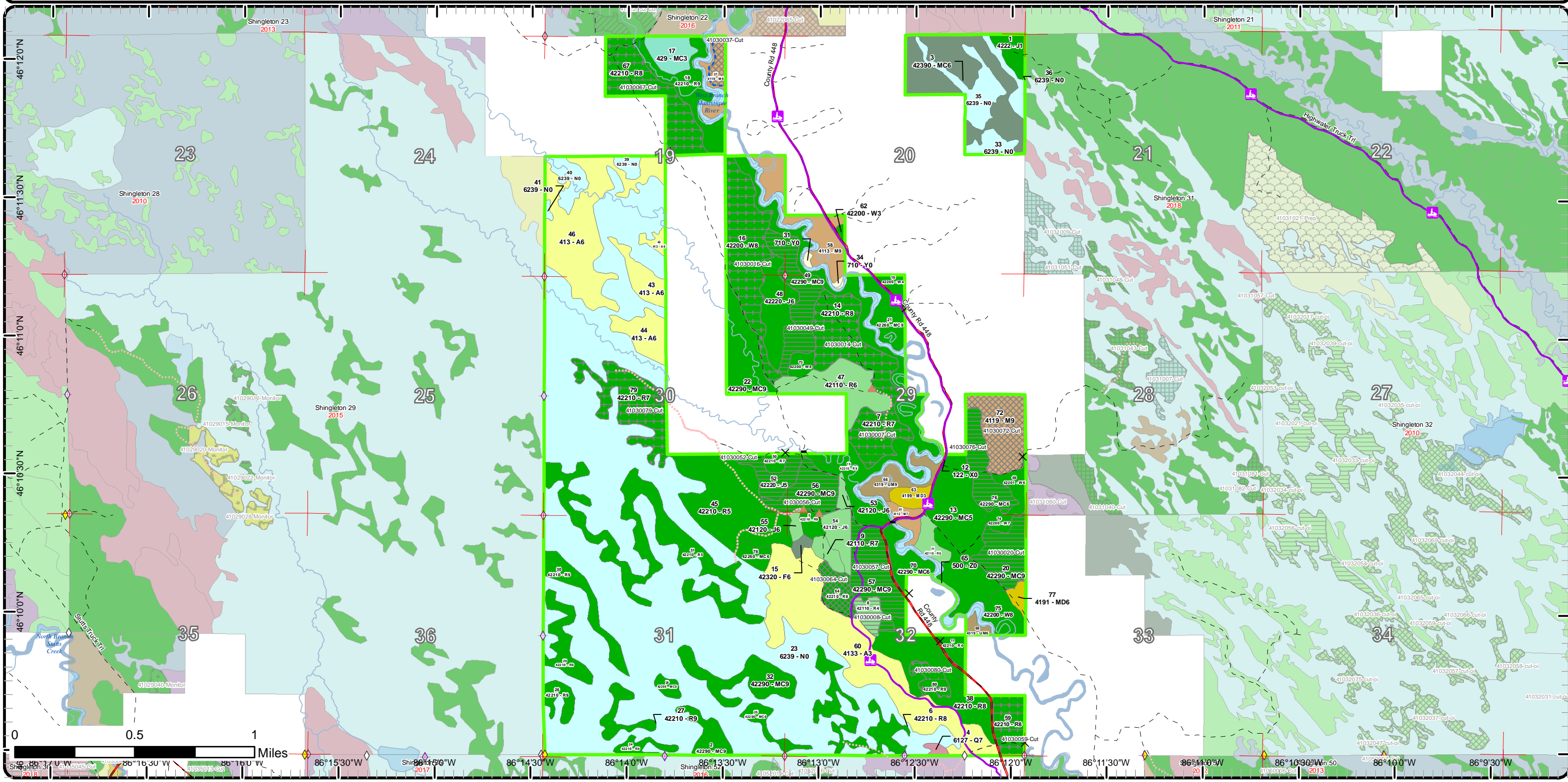
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

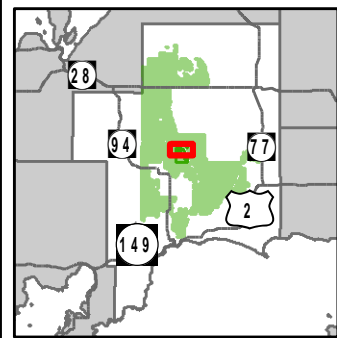
Compartment: 30
 T44N, R15W, Sec: 19, 20, 29-32
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique Swamp
 YOE: 2018
 Acres: 2,629 GIS Calculated
 Examiner: Adam Petrelius
 Map Revised: 12/6/2016
 Map Phase: Post Review



- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- X Gate
- ▲ Berms
- Bridges
- Culverts
- Snowmobile Trails
- Designated Snowmobile Trails
- Paved Roads
- County Gravel Roads
- - Poor Dirt Roads
- ⋯ Closed Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Harvest, Overstory Removal
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 500 - Water
- 623 - Emergent Wetland
- 710 - Sand/Soil
- Lakes

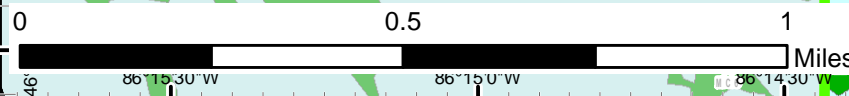
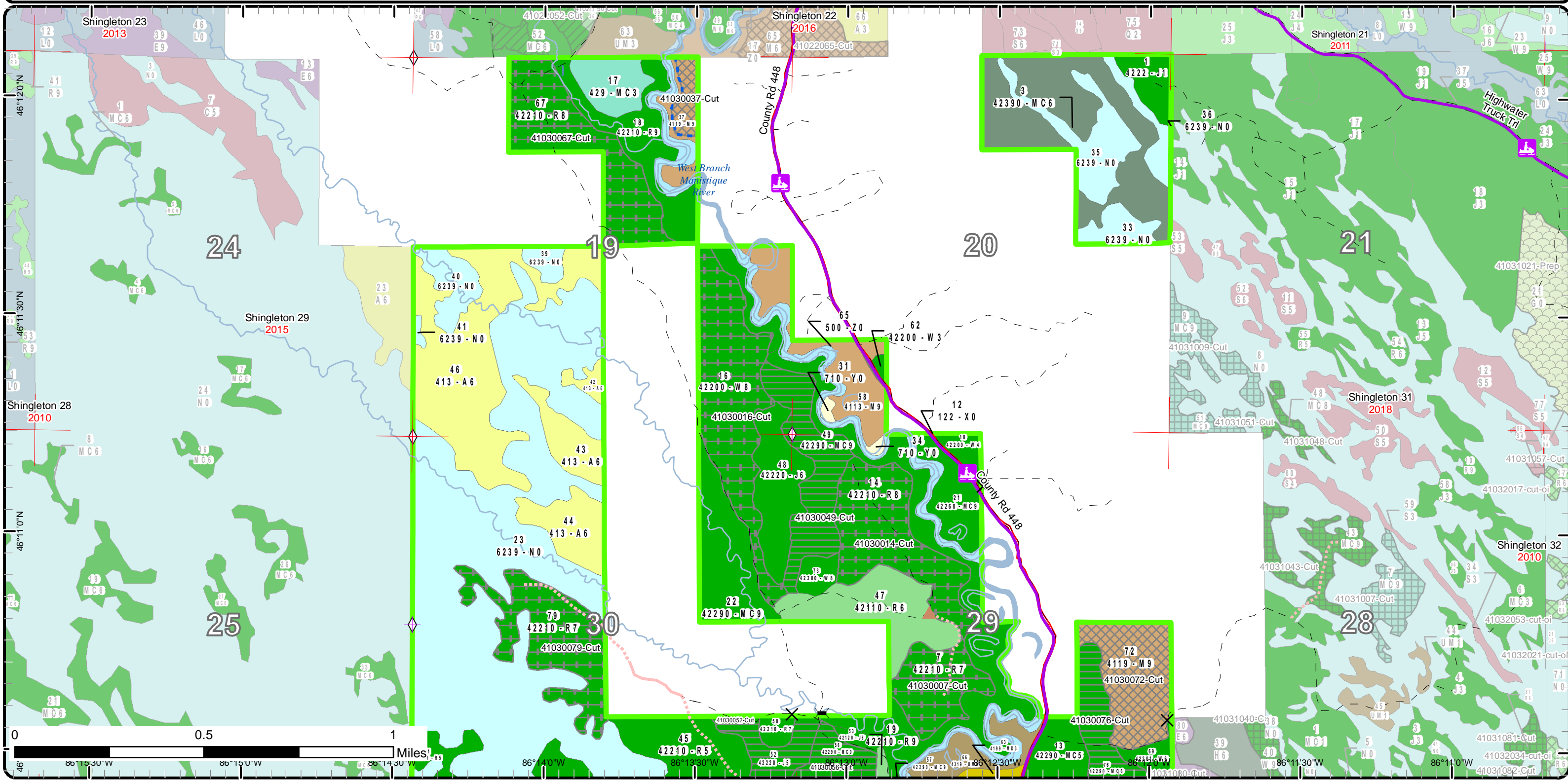


Cover Type & Treatments Map



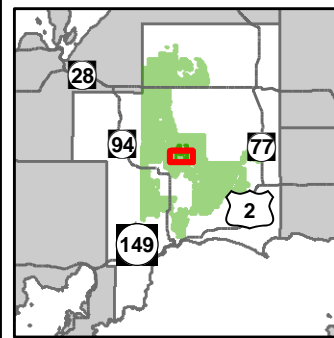
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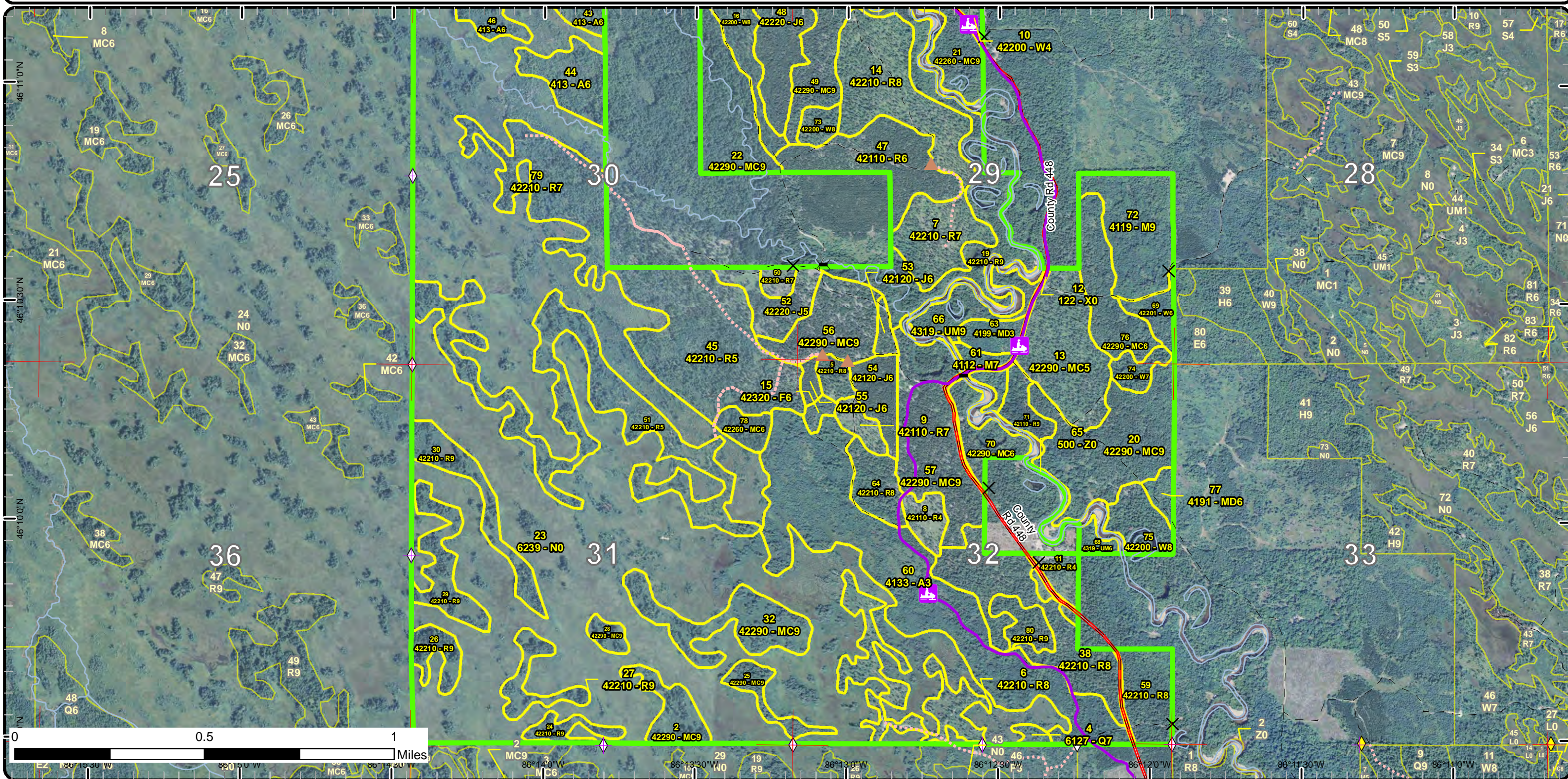


Stand Boundary Map

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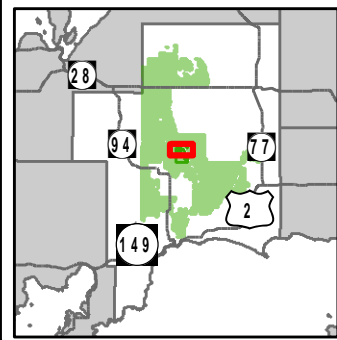


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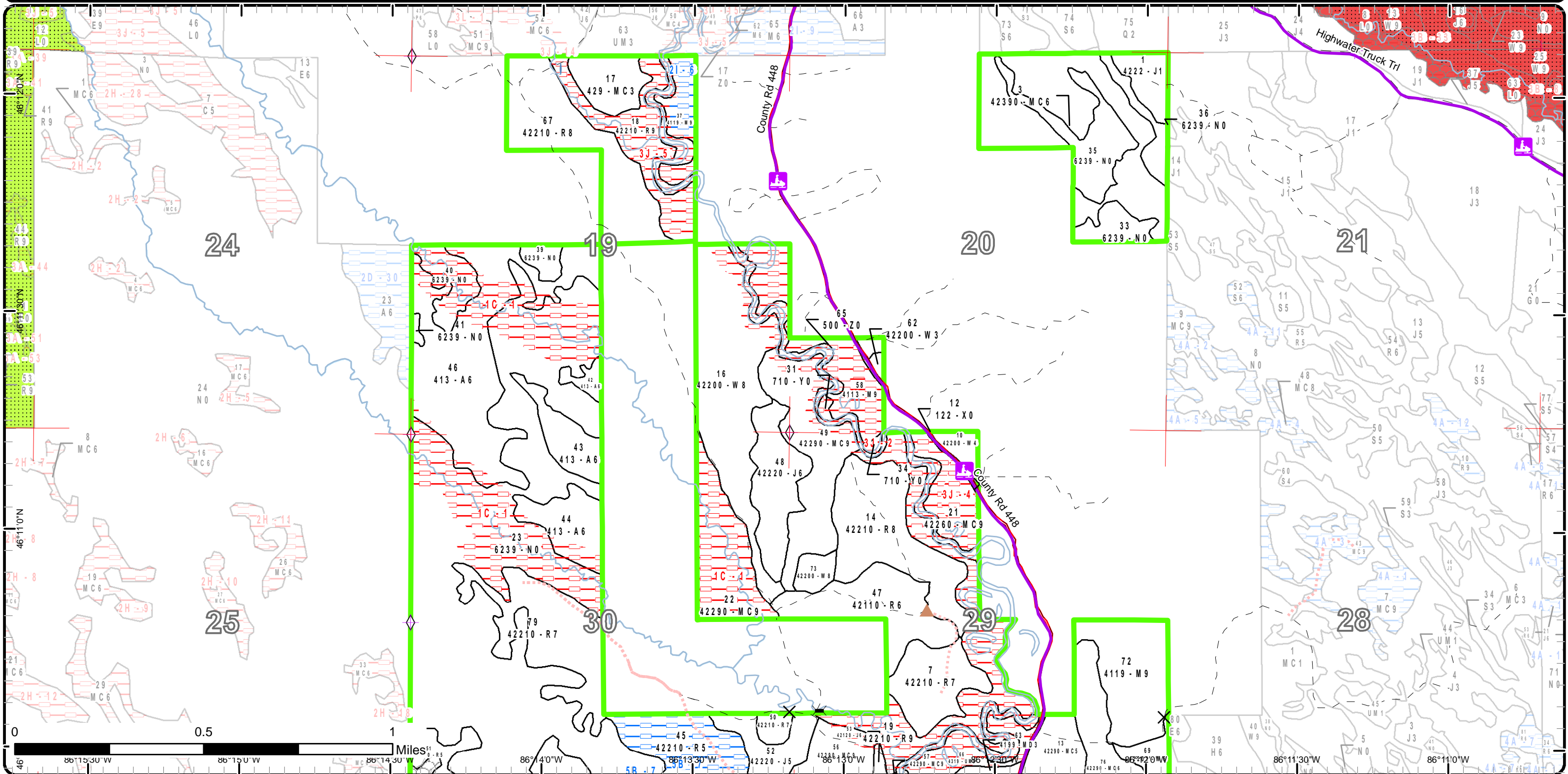


Special Conservation Areas & Site Conditions Map

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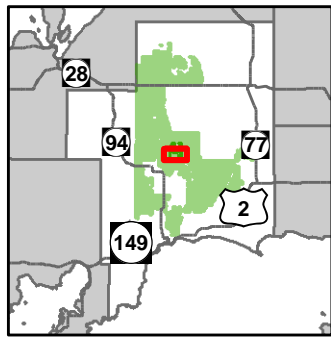


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- - - Closed Roads
- ≡ Rivers
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 5B: Maintain for regeneration purposes
- 1C: Other dept or div proc/practices
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Possible Type 2 Old Growth

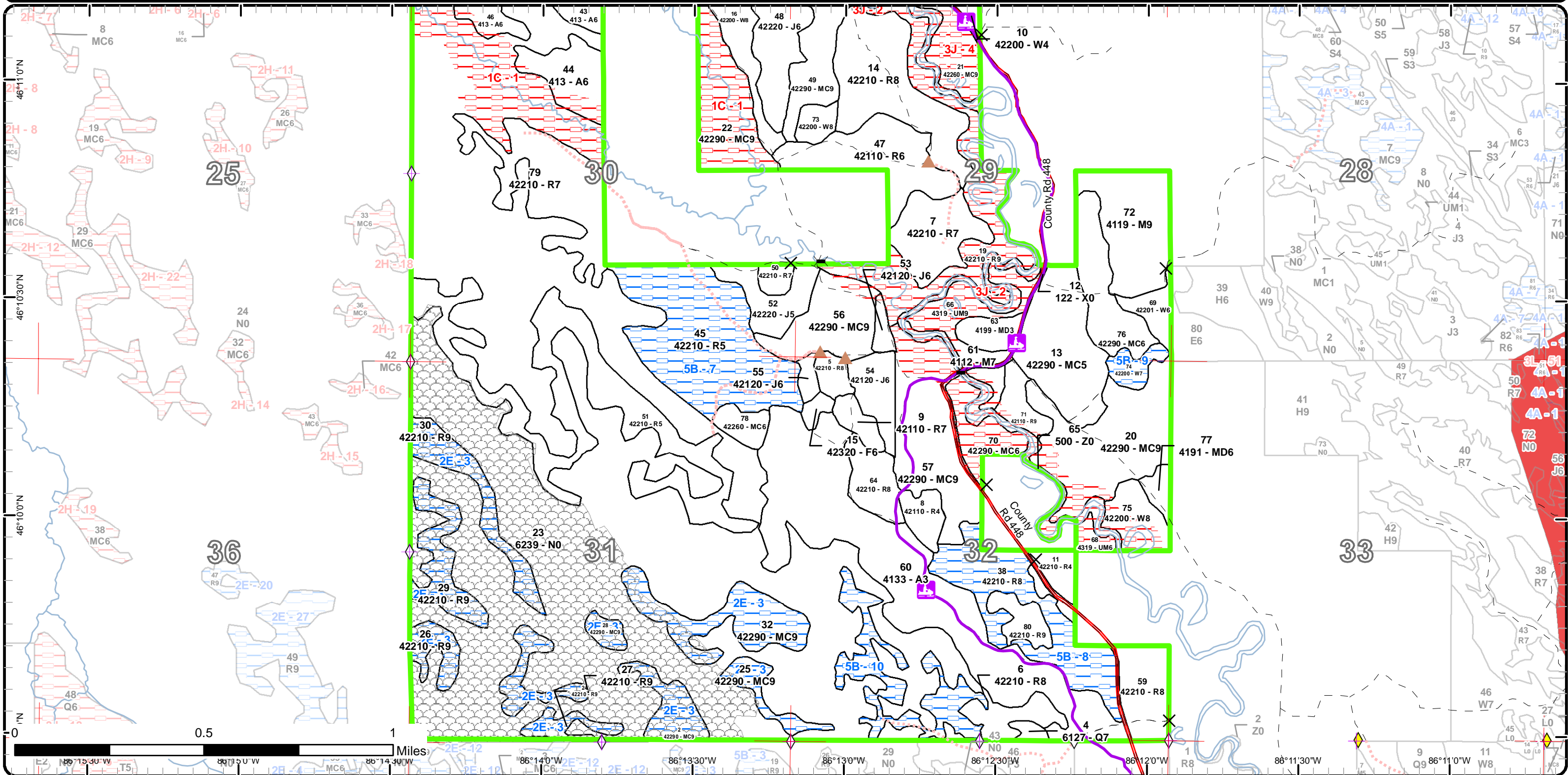


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- Available w/ Constraints
- Unavailable
- 2E: Road needed
- 5B: Maintain for regeneration purposes
- 1C: Other dept or div proc/practices
- 3J: Water quality / BMPs (stream, river, or lake)
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Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	125	123	0	0	0	0	0	0	0	0	0	0	0	0	0	248
Jack Pine	0	11	0	4	29	14	4	17	0	0	0	0	0	0	0	0	0	0	78
Lowland Conifers	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Marsh	854	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	854
Mixed Upland Deciduous	0	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	0	13
Natural Mixed Pines	0	0	0	0	22	0	110	68	137	0	0	0	0	0	0	0	0	43	380
Northern Hardwood	0	0	0	0	0	0	0	70	21	0	0	0	0	0	0	0	0	0	91
Red Pine	0	0	0	37	10	13	6	289	327	0	0	0	0	0	0	0	0	0	682
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Conifers	0	0	0	16	0	0	0	67	0	0	0	0	0	0	0	0	0	0	83
Upland Mixed Forest	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	19
Upland Spruce/Fir	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Urban	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Water	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
White Pine	0	0	0	1	8	0	0	6	76	15	7	0	0	0	0	0	0	0	113
Total	915	11	0	154	197	46	17	205	452	567	15	7	0	0	0	0	0	43	2628



Report 2 – Treatment Summary

Shingleton Mgt. Unit
Year of Entry: 2018

Acres of Harvest

Compartment 30
Total Compartment Acres: 2,629

Commercial Harvest - 498
Harvests with Site Condition - 8
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
Jack Pine	17	0	0	0	0	0	0	0	0	17
Natural Mixed Pines	157	0	0	0	0	0	0	0	0	157
Northern Hardwood	0	45	0	0	0	0	0	0	0	45
Red Pine	9	15	0	0	0	202	0	0	0	225
White Pine	0	0	0	0	0	62	0	0	0	62
Total	182	60	0	0	0	264	0	0	0	506

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	506	0	0	0	0	0	0	0	0	506
Next Step	0	225	182	0	139	139	506	0	0	1192
Total	506	225	182	0	139	139	506	0	0	1698



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
7	41030007-Cut	26.3	42210 - Natural Red Pine	Sawtimber Poor	89	51-80	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak if present. Leave a few red pine and white pine for diversity. Buffer River 100 feet.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable red pine, white pine, jack pine

Regen:

Other If planting is needed following harvest the species should be red pine.

Comment:

Proposed Start Date: 10/01/2017

8	41030008-Cut	8.6	42110 - Planted Red Pine	Poetimber Poor	70	1-50	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all species live and dead down to 2 inches. Retention will be at southern tip of stand.

Specs:

Next Step Burn, Slash; Pesticide, Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable red pine

Regen:OtherComment:

Proposed Start Date: 10/01/2017

14	41030014-Cut	49.7	42210 - Natural Red Pine	Sawtimber Medium	89	51-80	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak if present. Leave some scattered red pine and white pine for diversity. Buffer river 100 feet. Protect pine

Specs: regeneration with timbersale spec.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable red pine, white pine, jack pine

Regen:

Other If planting is needed post harvest the species should be red pine.

Comment:

Proposed Start Date: 10/01/2017

16	41030016-Cut	62.4	42200 - Natural White Pine	Sawtimber Medium	89	51-80	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Remove overstory. Cut all red pine and white pine except a few that should be left for diversity. Place spec in timbersale to protect regeneration.

Specs: Buffer creek 100 feet. Leave all trees that are 1 stick in size or 6 inches diameter and less. Exclude areas of advanced regeneration and light basal area with red line. acreage and shape of treatment will reduce greatly.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen:OtherComment:

Proposed Start Date: 10/01/2017



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	41030020-Cut	28.5	42290 - Natural Mixed Pine	Sawtimber Well	69	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Cut all trees live or dead. Retention will be a portion of the stand west of the road.

Specs:

Next Step Pesticide, Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Burn, Slash

Treatments:

Acceptable red pine only

Regen:OtherComment:

Proposed Start Date: 10/01/2017

37	41030037-Cut	7.6	4119 - Mixed Northern Hardwoods	Sawtimber Well	81	111-140	Harvest	Group Selection	411 - Northern Hardwood	Two-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition: Survey Needed**

Prescription Create large gaps to promote regeneration of intolerant species. Thin areas between gaps. 50 foot minimum buffer on river. Permission from private

Specs: would be needed also.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen:

Other Stand is factored for survey work because adjacent stand in C22 can not be surveyed either.

Comment:

Proposed Start Date: 10/01/2017

49	41030049-Cut	36.5	42290 - Natural Mixed Pine	Sawtimber Well	89	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees live or dead. Buffer river 100 feet minimum, this will be the retention area. No herbicide use on the portions of stand that are purchased

Specs: land.

Next Step Pesticide, Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Burn, Slash

Treatments:

Acceptable red pine only

Regen:OtherComment:

Proposed Start Date: 10/01/2017

52	41030052-Cut	16.9	42220 - Natural Jack Pine	Poletimber Medium	63	51-80	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak if present down to 2 inches. Leave some scattered red pine and white pine for diversity. Minimize impacts to

Specs: snowmobile trail. No herbicide use on portion of stand that is purchased land.

Next Step SitePrep, Scarification; Planting, Initial Plant; Monitoring, Natural Regen (Intermediate); SitePrep, Trenching

Treatments:

Acceptable any species onsite. jack pine will be planted if regeneration fails.

Regen:OtherComment:

Proposed Start Date: 10/01/2017



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
56	41030056-Cut	26.2	42290 - Natural Mixed Pine	Sawtimber Well	63	81-110	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak if present down to 2 inches. Leave some scattered red pine and white pine for diversity. Minimize impacts to snowmobile trail. No herbicide use on purchased land portion of stand.

Next Step SitePrep, Scarification; SitePrep, Trenching; Monitoring, Natural Regen (Intermediate); Planting, Initial Plant

Acceptable any species onsite. if regeneration fails we will plant jack pine.

Other
Comment:

Proposed Start Date: 10/01/2017

57	41030057-Cut	39.4	42290 - Natural Mixed Pine	Sawtimber Well	72	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees live or dead. Retention area near river was excluded from treatment boundary.

Next Step Pesticide, Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Burn, Slash

Acceptable red pine only

Other
Comment:

Proposed Start Date: 10/01/2017

59	41030059-Cut	20.2	42210 - Natural Red Pine	Sawtimber Medium	75	51-80	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except hemlock and oak if present. Leave some red pine and white pine for diversity. Protect regeneration with timbersale spec. Leave all trees with 1 stick or less or 6 inch diameter

Next Step Monitoring, Natural Regen (Re-Inventory)

Acceptable any species onsite

Other
Comment:

Proposed Start Date: 10/01/2017

64	41030064-Cut	14.6	42210 - Natural Red Pine	Sawtimber Medium	85	51-80	Harvest	Single Tree Selection	429 - Mixed Upland Conifers	Uneven-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Select harvest of pine. Remove most of the mature red pine and white pine. Leave the large crown trees and smaller poles. Mark aspen if needed for operability since some of it is merchantable now. Minimize impacts to snowmobile trail.

Next Step Monitoring, Natural Regen (Re-Inventory)

Acceptable any species onsite

Other
Comment:

Proposed Start Date: 10/01/2017



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
67	41030067-Cut	51.0	42210 - Natural Red Pine	Sawtimber Medium	89	51-80	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Remove overstory. Cut all red pine and white pine except a few that should be left for diversity. Place spec in timbersale to protect regeneration.

Specs: Buffer creek 100 feet. Leave all trees that are 1 stick in size or 6 inches diameter and less. Exclude areas of advanced regeneration and light basal area with red line. acreage and shape of treatment will reduce greatly.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

72	41030072-Cut	37.8	4119 - Mixed Northern Hardwoods	Sawtimber Well	75	81-110	Harvest	Group Selection	411 - Northern Hardwood	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Select harvest and create large canopy gaps where lesser occurring species exist. Cut all trees within groups. Exclude hemlock pockets in NE as

Specs: retention.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

76	41030076-Cut	26.1	42290 - Natural Mixed Pine	Poletimber Well	62	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees live or dead greater than 2 inches. Less than 3% retention is acceptable.

Specs:

Next Step Pesticide, Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Burn, Slash

Treatments:

Acceptable red pine

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

79	41030079-Cut	45.0	42210 - Natural Red Pine	Sawtimber Poor	79	51-80	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Remove overstory. Cut all red pine and white pine except a few that should be left for diversity. Place spec in timbersale to protect the regeneration.

Specs: Leave all trees with 1 stick or less or 6 inch diameter.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017



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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
80 41030080-Cut	9.3	42210 - Natural Red Pine	Sawtimber Well	79	81-110	Harvest	Overstory Removal	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Cut all trees except hemlock and oak if present. Protect regeneration with timbersale spec. Leave some scattered red pine and white pine for diversity. Minimize impacts to snowmobile trail. Leave all trees with 1 stick or less or 6 inches diameter

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any species onsite

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 506.1**

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 30
Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions					
		With Condition	Not Available		2E	2I	5B	1C	3J
248	226	0	22	Aspen				22	
78	77	0	0	Jack Pine					0
3	3	0	0	Lowland Conifers					
854	764	0	90	Marsh				90	
13	13	0	0	Mixed Upland Deciduous					
381	225	58	98	Natural Mixed Pines	58			35	63
91	45	8	38	Northern Hardwood		8			38
682	378	221	82	Red Pine	67		154		82
2	0	0	2	Sand, Soil					2
83	83	0	0	Upland Conifers					
19	0	0	19	Upland Mixed Forest					19
3	3	0	0	Upland Spruce/Fir					
8	5	0	4	Urban					4
51	0	0	51	Water					51
113	91	7	15	White Pine			7		15
2,629	1,913	295	422	Total Forested Acres	126	8	161	147	275
	73%	11%	16%	Relative Percent					

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	1C: Other dept or div proc/practices	147	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Fisheries division 300 foot buffer along Hickey Creek trout stream to discourage aspen regeneration.							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	222	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 30
Year of Entry: 2018

3	Available	2E: Road needed	126	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments: multiple old sloughs lie within this portion of the stand. These sloughs are dry, however it would be best to leave this stand alone especially since it lies next to the county road.							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	44	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	2I: Survey needed	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	5B: Maintain for regeneration purposes	78	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Available	5B: Maintain for regeneration purposes	46	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5B: Maintain for regeneration purposes	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 30
Year of Entry: 2018

10	Available	5B: Maintain for regeneration purposes	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments: cut in 2011							



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
	Potential Old Growth		SCA Removal	349
Comments				
Islands in marsh. Does not meet current SCA criteria.				



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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4222 - Natural Jack Pine	Sapling Poor	11.2	5	1-50	<p>OPIC - FMD: Stand is a ridge of jack pine with smaller diameter spruce located on the edges of it. A few red pine were noticed in the stand (less than 10 square feet basal area). Stand should be set up and sold with adjacent stand in Compartment 31, YOE 2008. Prescription should also match adjacent stand in Compartment 31.</p> <p>[9/22/08 BB] Stand is now on proposal 19-08-01 Lots a Line Pine Residual BA = Red Pine 4 sq ft, White Pine scattered</p> <p>[1/17/2012 TSI] Lots a Line Pine Sale #41-019-11-01 was completed on 11/21/2011 (TCR Date)</p> <p>(2/2/15 AP) Stand was scarified and has passed regeneration counts in 2015. 909 jack pine, 411 black spruce, and 75 white pine. FTP 1381 is closed. Possible work under wildlife FTP for oak planting remains.</p>
2	42290 - Natural Mixed Pine	Sawtimber Well	14.1	88	81-110	
3	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	66.6	65	51-80	mostly lowland spruce which is submerch to 3 sticks. Too many areas are non-merch to harvest.
4	6127 - Lowland Pine	Sawtimber Poor	2.6	81	1-50	Cut in 2011
5	42210 - Natural Red Pine	Sawtimber Medium	6.0	63	51-80	southern portion was cut in 2010 and planted with red pine, residual basal area was too high in most areas though.
6	42210 - Natural Red Pine	Sawtimber Medium	30.9	81	51-80	Cut in 2011
7	42210 - Natural Red Pine	Sawtimber Poor	26.3	89	51-80	cut in 2010
8	42110 - Planted Red Pine	Poletimber Poor	8.6	70	1-50	1 year regen count showed 575 red pine, 100 jack pine, 75 white pine. Previous comments stated and acceptable species.
9	42110 - Planted Red Pine	Sawtimber Poor	6.8	81	1-50	<p>1 year regen count 500 red pine, 45 white pine. areas of stand have high residual pine.</p> <p>100 red oak were planted by wildlife in 2010. Regeneration monitoring treatment was dropped. It was decided if regeneration is poor during next inventory cycle it will become part of a larger harvest and plantation management plan that involves trenching and planting.</p>
10	42200 - Natural White Pine	Poletimber Poor	5.8	76	1-50	Stand cut in 2010 and passed regeneration check. 600 oak were planted in 2010, did not notice any onsite currently, but was hard to tell since leaves were off.
11	42210 - Natural Red Pine	Poletimber Poor	9.6	41	1-50	Stand was cut in 1992 and 2009. 300 oak seedlings were planted in 2010. did not notice any onsite, but may be easier when leaves are on trees.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	42290 - Natural Mixed Pine	Poletimber Medium	43.2	85	1-50	Stand has 4 distinct age classes. Thinned in 1992 and shelterwood in 2010. 7,900 oak seedlings were planted in 2010. Did not notice any currently but leaves were off and they would have been difficult to see.
14	42210 - Natural Red Pine	Sawtimber Medium	49.7	89	51-80	Burned in 1983, salvaged afterwards and also cut in 2010. Amazing mixed pine regeneration and zero hardwood competition. Stand is red pine, but will end up converting to a white pine stand with a red pine component.
15	42320 - Upland Spruce	Poletimber Well	3.1	84	111-140	site is black spruce, but dry enough to scarify or trench
16	42200 - Natural White Pine	Sawtimber Medium	69.6	89	51-80	Cut in 2000
17	429 - Mixed Upland Conifers	Sapling Well	16.0	24	1-50	
18	42210 - Natural Red Pine	Sawtimber Well	30.4	89	111-140	OPIC - FMD: SELECT CUT WITH DOG LEG PINE SALE. 54-98-01 Understory is 10 to 12 foot tall aspen with some mixed pine regeneration
19	42210 - Natural Red Pine	Sawtimber Well	50.5	89	81-110	7900 oak seedling were planted within stand in 2010 by wildlife.
20	42290 - Natural Mixed Pine	Sawtimber Well	55.4	69	81-110	
21	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	17.8	71	81-110	Much of this stand lies within the river buffer. many old sloughs are present also. would be best to factor limit the stand since the county road also travels through it.
22	42290 - Natural Mixed Pine	Sawtimber Well	34.7	89	111-140	majority of stand lies within river buffer of the Hickey which is a designated trout stream.
24	42210 - Natural Red Pine	Sawtimber Well	7.1	88	81-110	
25	42290 - Natural Mixed Pine	Sawtimber Well	8.9	88	81-110	
26	42210 - Natural Red Pine	Sawtimber Well	9.4	88	81-110	
27	42210 - Natural Red Pine	Sawtimber Well	11.2	88	81-110	
28	42290 - Natural Mixed Pine	Sawtimber Well	4.7	88	81-110	
29	42210 - Natural Red Pine	Sawtimber Well	19.5	88	81-110	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	42210 - Natural Red Pine	Sawtimber Well	20.1	88	81-110	
32	42290 - Natural Mixed Pine	Sawtimber Well	30.8	88	81-110	
37	4119 - Mixed Northern Hardwoods	Sawtimber Well	13.1	81	111-140	1300 oak seedlings were planted in 2010 by wildlife.
38	42210 - Natural Red Pine	Sawtimber Medium	45.7	79	51-80	most of the aspen is in the southern part of the stand.
42	413 - Aspen	Poletimber Well	4.3	36	1-50	Stand is located between Hickey Creek and the west Branch of Hickey Creek. Access in future will require a portable bridge. Inventory notes from 10 years ago stated some trees were starting to become merchantable now. Did not look at stand this time due to difficult access.
43	413 - Aspen	Poletimber Well	15.2	36	1-50	Stand is located between Hickey Creek and the west Branch of Hickey Creek. Access in future will require a portable bridge. Inventory notes from 10 years ago stated some trees were starting to become merchantable now. Did not look at stand this time due to difficult access.
44	413 - Aspen	Poletimber Well	19.9	36	1-50	Stand is located between Hickey Creek and the west Branch of Hickey Creek. Access in future will require a portable bridge. Inventory notes from 10 years ago stated some trees were starting to become merchantable now. Did not look at stand this time due to difficult access.
45	42210 - Natural Red Pine	Poletimber Medium	77.5	79	51-80	
46	413 - Aspen	Poletimber Well	83.8	36	1-50	Majority of stand is located between Hickey Creek and the west Branch of Hickey Creek. Access in future will require a portable bridge. Inventory notes from 10 years ago stated some trees were starting to become merchantable now. Did not look at stand this time due to difficult access.
47	42110 - Planted Red Pine	Poletimber Well	36.8	30	81-110	Stand burned in 1983, then was planted with red pine. Jack pine is outcompeting red pine where present and overtopping it. wait till jack pine is older to thin
48	42220 - Natural Jack Pine	Poletimber Well	28.5	33	51-80	some mature jack pine present from fire that burned in 1983
49	42290 - Natural Mixed Pine	Sawtimber Well	44.3	89	81-110	.portions of stand were salvaged after the fire in 1983 and have 32 year old jack pine but a lot of the stand has some old mature jack pine that was never salvaged
50	42210 - Natural Red Pine	Sawtimber Poor	4.3	56	1-50	Scarified in 2011. passed regeneration check.
51	42210 - Natural Red Pine	Poletimber Medium	82.4	70	51-80	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	42220 - Natural Jack Pine	Poletimber Medium	16.9	63	51-80	
53	42120 - Planted Jack Pine	Poletimber Well	3.7	24	1-50	
54	42120 - Planted Jack Pine	Poletimber Well	14.0	41	111-140	mixed plantation with some older RP also. majority was planted to jack pine but some red pine areas are present.
55	42120 - Planted Jack Pine	Poletimber Well	3.5	54	111-140	
56	42290 - Natural Mixed Pine	Sawtimber Well	28.9	63	81-110	
57	42290 - Natural Mixed Pine	Sawtimber Well	49.8	72	81-110	Jack pine is a mix of 50 and 70 year old trees.
58	4113 - R.Maple, Conifer	Sawtimber Well	32.1	76	111-140	
59	42210 - Natural Red Pine	Sawtimber Medium	20.2	75	51-80	
60	4133 - Aspen, Mixed Pine	Sapling Well	124.9	23	1-50	
61	4112 - Maple, Beech, Cherry Association	Sawtimber Poor	7.6	81	81-110	Thinned in 1992. Majority of this stand lies within the river buffer.
62	42200 - Natural White Pine	Sapling Well	1.4	23	Immature	old grass opening
63	4199 - Other Mixed Upland Deciduous	Sapling Well	8.4	23	1-50	
64	42210 - Natural Red Pine	Sawtimber Medium	14.6	85	51-80	All species but red and white pine removed in 1992.
66	4319 - Mixed Upland Forest	Sawtimber Well	15.4	76	81-110	
67	42210 - Natural Red Pine	Sawtimber Medium	51.0	89	51-80	Cut in 2000. Stand is red pine but most of it will be converting to aspen.
68	4319 - Mixed Upland Forest	Poletimber Well	3.9	76	81-110	
69	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	8.4	31	1-50	

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Shingleton Mgt. Unit

Report 7 – Forested Stands

Compartment: 30
Year of Entry: 2018

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	42290 - Natural Mixed Pine	Poletimber Well	14.7	45	81-110	1/2 bushel of acorns was planted in 2006. Inventoried stand when leaves were off so I could not tell easily if any grew. Stand is site of a closed state forest campground - West Branch and still shows signs of use.
71	42110 - Planted Red Pine	Sawtimber Well	9.2	55	81-110	Row thinned in 2012. Residual basal area is too low to do another thinning now. Stand is going to convert to red maple without herbicide use in future.
72	4119 - Mixed Northern Hardwoods	Sawtimber Well	37.8	75	81-110	Some better quality hardwoods exist in the NW corner, but not worth conducting uneven aged management. Scattered old grass openings exist within stand that have filled in with white pine saplings / poles. Most of the larger hardwood is located on the ridges with better soils.
73	42200 - Natural White Pine	Sawtimber Medium	6.1	89	81-110	cut in 2010
74	42200 - Natural White Pine	Sawtimber Poor	7.1	105	1-50	
75	42200 - Natural White Pine	Sawtimber Medium	14.6	90	51-80	
76	42290 - Natural Mixed Pine	Poletimber Well	26.1	62	111-140	
77	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	4.9	62	81-110	
78	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	7.5	40	51-80	
79	42210 - Natural Red Pine	Sawtimber Poor	45.0	79	51-80	
80	42210 - Natural Red Pine	Sawtimber Well	9.3	79	81-110	



Stand	Cover Type	Acres	Managed Site	General Comments:
12	122 - Road/Parking Lot	8.2	No	
23	6239 - Mixed Emergent Wetland	792.5	No	
31	710 - Sand, Soil	1.3	No	
33	6239 - Mixed Emergent Wetland	9.7	No	
34	710 - Sand, Soil	1.0	No	
35	6239 - Mixed Emergent Wetland	23.5	No	
36	6239 - Mixed Emergent Wetland	8.6	No	
39	6239 - Mixed Emergent Wetland	5.2	No	
40	6239 - Mixed Emergent Wetland	13.3	No	
41	6239 - Mixed Emergent Wetland	1.2	No	
65	500 - Water	51.4	No	