



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32009

Entry Year 2020

Acreage: 1,775

County Marquette

Management Area: Dead Horse Moraines

Revision Date: 2018-08-06

Stand Examiner: Peter Holodnick

Legal Description:

44N R23W SECTIONS 24,25, and 36

Identified Planning Goals:

This area has very diverse forest stands due to the high productivity of the soils. However soils can be very difficult to work on because of the higher silt and clay content. Traditionally these hardwood stands contained hemlock. We will encourage hemlock in hardwood harvests by possibly underplanting or otherwise encouraging natural reproduction. All areas proposed for harvest are hardwood selection harvests. There is one small stand that has never been thinned but the rest proposed for this entry period have been thinned at least once. We will retain all species represented and all size classes including all large legacy trees. We will retain at least two den trees per acre if present. All existing cedar, hemlock, white pine and red pine will be retained. We will retain at least 50% of existing cherry, w.spruce, yellow birch in these stands. All stands along Deer creek and N. Branch Deer Creek are put into riparian management protection.

Soil and topography:

Level to rolling uplands bisected with low drainage and swamps. Cathro-Ensley complex, Shoepac-Ensley complex, Charlevoix-Ensley complex, Trenary silt-loam, Charlevoix silt-loam, Shoepac-Trenary silt loam, Cathro-Ensley muck, Chippeny-Nahma mucks.

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

Mostly a large block of state land with a few residences or hunting camps along the county road at the north side of the compartment and a couple hunting camps south.

Unique Natural Features:

The "Boiling Springs" are in this compartment, an area of numerous large, high-output springs along the N. Branch Deer Creek.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Special riparian Management stands:13, 14, 15, 16, 20, 21, 26, 27, 28, 29, 30, 32, 33, 34, 46, 38, 39, 41, 52 and 401.

Watershed and Fisheries Considerations:

The northern region of this compartment contains the North Branch of Deer Creek which serves as a tributary to Deer Creek. The North Branch of Deer Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the North Branch of Deer 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 (specifically stands 4, 10, and 15).

The central region of this compartment contains Spring Creek, an unnamed tributary, and Deer Creek. Spring Creek serves as a tributary to Deer Creek and is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Spring 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 (specifically stand 4 and 25). The unnamed stream, which serves as a tributary to Deer Creek, is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the unnamed stream 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. Deer Creek, which serves as a tributary to Werners Creek, is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Deer Creek in riparian areas susceptible to Aspen regeneration (specifically stand 58). 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 (specifically stands 36, 37, and 43).

The southern region of this compartment borders the northern stream bank of Deadhorse Creek which serves as a tributary to the Rapid River. Deadhorse Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is

recommended for Deadhorse 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.

Wildlife Habitat Considerations:

Compartment 009 is found within the Dead Horse Moraines Management Area; on Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include Northern Hardwood, Aspen, and Mixed Lowland Conifer. This management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area. The most significant wildlife management issues in the management area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); coarse woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraines Management Area: black bear, pileated woodpecker, ruffed grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Compartment 9 Section 24, 25 & 36, T44N-R23W, Marquette County: Surface sediments consist of medium-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Ordovician Trenton Group subgroups below the glacial drift. This formation is quarried in the UP for dolostone. A gravel pit is located in section 20 and potential appears to be good on uplands. Abandoned iron mines are located twelve miles to the northwest. This compartment has not been previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Generally good from either county road 444 or the Deadhorse road south of Deer creek. The roads are sometimes in poor condition due to the water holding capacity of the soils.

Survey Needs:

Recreational Facilities and Opportunities:

Fire Protection:

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**

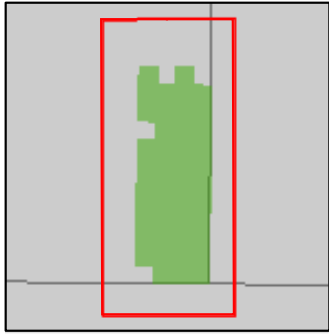
The following information is displayed, where pertinent, on the attached compartment maps:

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

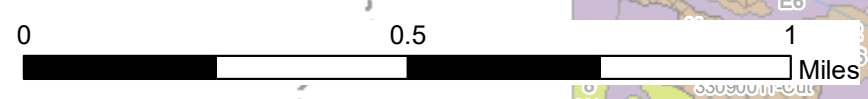
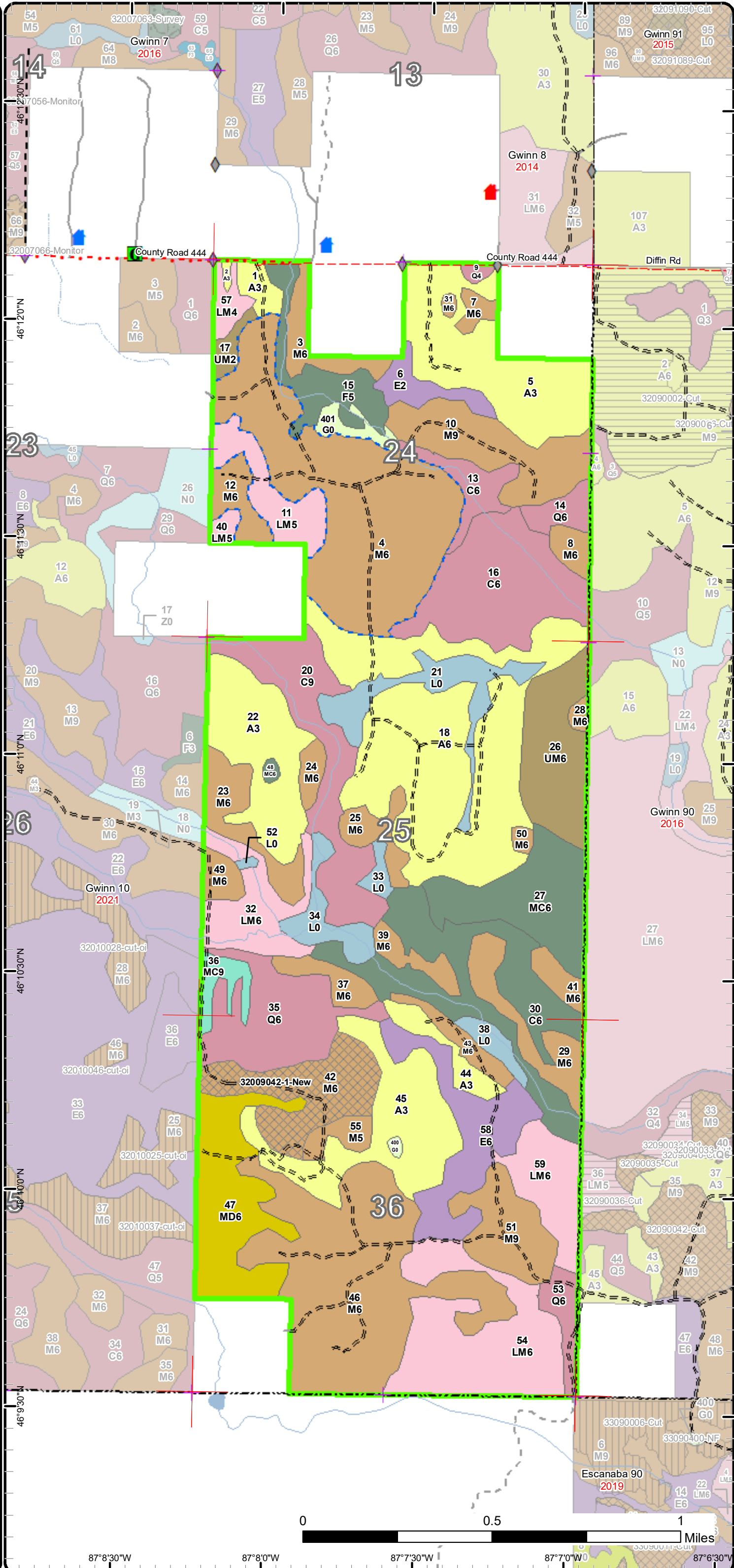
Cover Type & Treatments Map

Compartment: 9
T44N, R23W, Sec. 24, 25, 36

County: Marquette
Unit: Gwinn
Mgmt Area: Dead Horse Moraines
YOE: 2020
Acres: 1,775 GIS Calculated
Examiner: Peter Holodnick
Map Revised: 10/18/2018
Map Phase: Pre-Review



- Miris Corners
- + Remonumented Section Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Intermittent Stream
- Lake/Pond
- Lakes and Rivers All
- Cabin
- House
- Gate
- Structures
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- Lakes

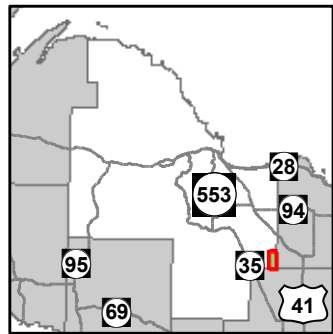


87°8'30"W 87°8'0"W 87°7'30"W 87°7'0"W 87°6'30"W

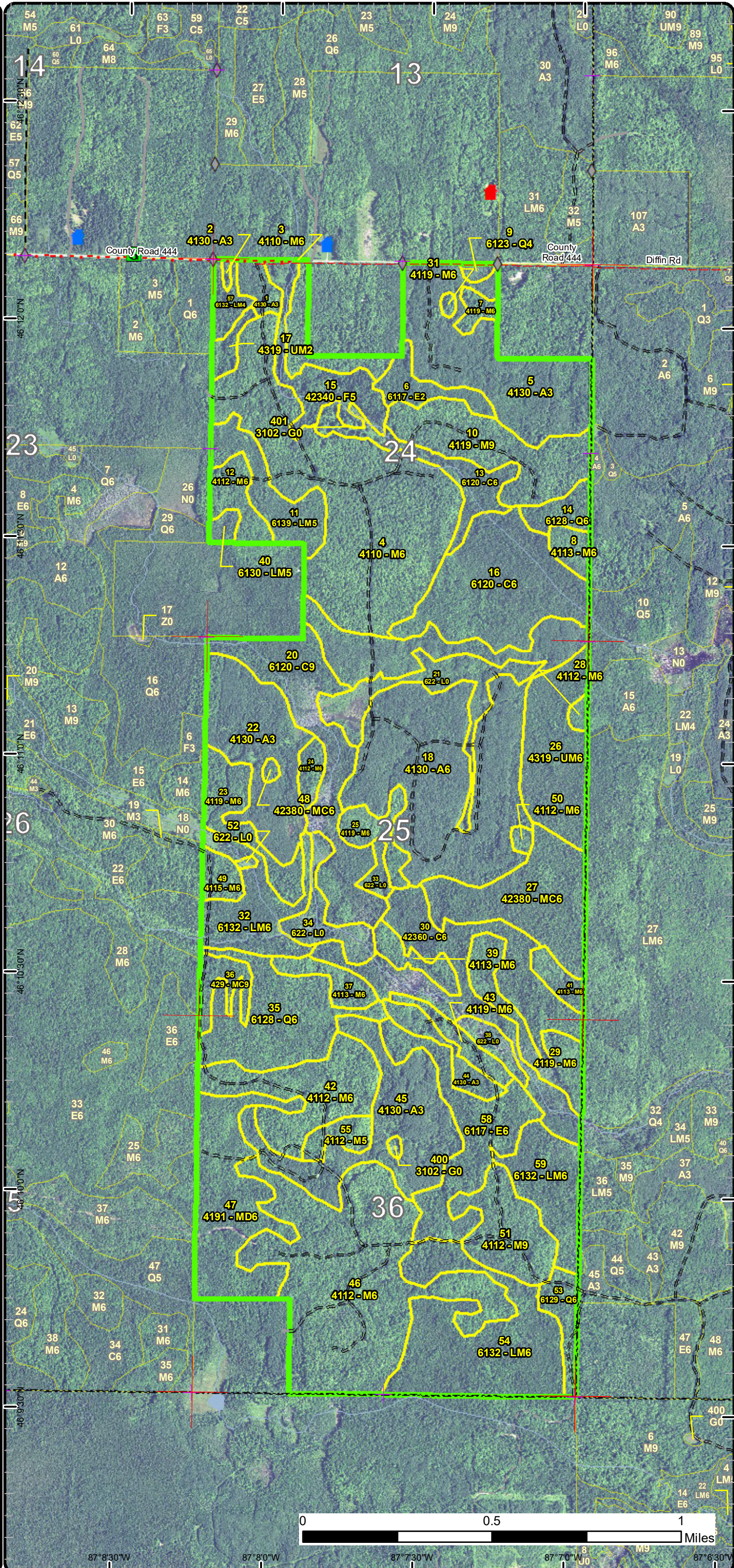
Stand Boundary Map

Compartment: 9
T44N, R23W, Sec. 24, 25, 36

County: Marquette
Unit: Gwinn
Mgmt Area: Dead Horse Moraines
YOE: 2020
Acres: 1,775 GIS Calculated
Examiner: Peter Holodnick
Map Revised: 8/13/2018
Map Phase: Web-Post



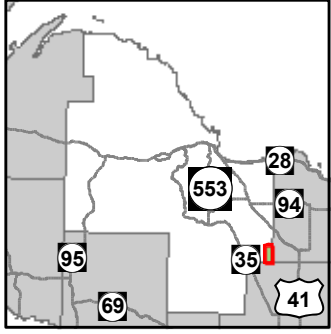
- Miris Corners
- + Remonumented Section Corners
- ◆ Field Grade Corners
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- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
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- Structures
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- 411 - Northern Hardwood
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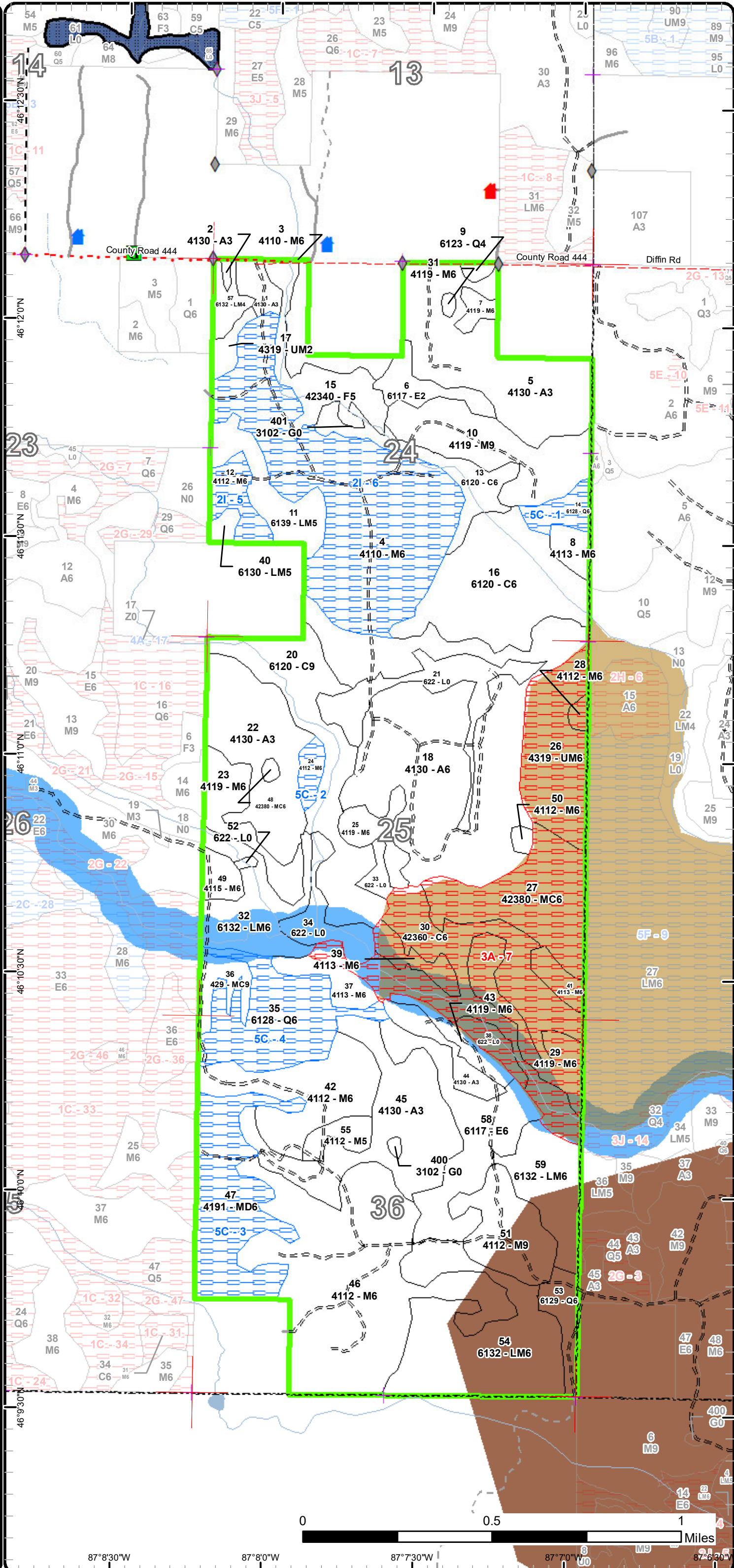
Special Conservation Areas & Site Conditions Map

Compartment: 9
T44N, R23W, Sec. 24, 25, 36

County: Marquette
Unit: Gwinn
Mgmt Area: Dead Horse Moraines
YOE: 2020
Acres: 1,775 GIS Calculated
Examiner: Peter Holodnick
Map Revised: 8/13/2018
Map Phase: Web-Post



- Miris Corners
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- DNR - Secondary Forest Road
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- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Cabin
- House
- Gate
- Structures
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3A: Conservation Values incompatible with harvest at this time
- Stand Boundaries
- SCA
- Forest Habitat Core Interior
- Cold Water Streams
- High Priority Trout Stream Buffer
- Deer Winter Range
- Spring or Seep



Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit

Compartment 9

Year of Entry 2020

Peter Holodnick : Examiner



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	21	196	166	0	0	0	0	0	0	0	0	0	0	0	0	0	383
Cedar	0	0	0	0	0	0	0	0	0	0	76	16	61	72	0	0	0	0	225
Herbaceous Openland	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Conifers	0	0	0	0	0	0	0	0	2	0	54	0	10	0	0	0	0	12	78
Lowland Deciduous	0	0	0	13	0	0	0	0	0	0	48	0	0	0	0	0	0	0	61
Lowland Mixed Forest	0	0	0	0	0	0	8	0	29	0	142	0	0	0	0	0	0	0	179
Lowland Shrub	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	61
Northern Hardwood	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	572	578
Upland Conifers	0	0	0	0	0	0	0	0	0	52	11	0	0	0	0	0	0	1	64
Upland Mixed Forest	0	0	6	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	52
Upland Spruce/Fir	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	27
Total	67	0	27	209	166	0	8	27	31	59	377	77	71	72	0	0	0	585	1775



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Compartment 9

Year of Entry: 2020

Acres of Harvest

Total Compartment Acres: 1,775

Commercial Harvest - 247
 Harvests with Site Condition - 159
 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
Lowland Deciduous	0	0	0	48	0	0	0	0	0	48
Northern Hardwood	0	308	0	0	11	0	0	0	0	319
Upland Conifers	0	0	0	11	0	0	0	0	0	11
Upland Spruce/Fir	27	0	0	0	0	0	0	0	0	27
Total	27	308	0	59	11	0	0	0	0	405

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	405	0	0	0	0	0	0	0	0	405
Next Step	0	0	0	0	0	0	405	0	0	405
Total	405	0	0	0	0	0	405	0	0	811



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
4	32009004-9-New	145.0	4110 - Sugar Maple Association	Poletimber Well	85	111-140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	Draft Proposal

Habitat Cut: No Site Condition: Survey Needed

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. No cut Hemlock, Cedar, and Black Cherry. Favor White Ash and Basswood to keep in the stand. This stand can be cut in the summer.

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

Acceptable Regen: Any tree species currently in the overstory would be acceptable.

Other Comment: The north branch of deer creek is a type 1 designated trout stream. A 100 foot buffer will be need. A survey is needed for this stand.

Wildlife: Retain all Black Cherry (5%) for mast production – black bear and Favor White Ash (5%) and Basswood (5%) –seed production and cavity nesters- pileated woodpecker, ruffed grouse

Proposed Start Date: 10/01/2019

10	32009010-7-New	48.1	4119 - Mixed Northern Hardwoods	Sawtimber Well	85	111-140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	Draft Proposal
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Habitat Cut: No Site Condition:

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. Favor White Ash, Basswood, and Yellow Birch to keep in the stand. No cut Hemlock and Cedar.

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

Acceptable Regen: Any tree species currently in the overstory would be acceptable.

Other Comment: The basal area is a little bit low so there may be some walk through areas when marking. The north branch of deer creek is a type 1 designated trout stream and will need a 100 foot buffer.

Wildlife: Favor White Ash (5%) Basswood (5%) and Yellow Birch (5%) –seed production and cavity nesters- pileated woodpecker, ruffed grouse

Proposed Start Date: 10/01/2019

12	32009012-5-New	13.7	4112 - Maple, Beech, Cherry Association	Poletimber Well	85	111-140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	Draft Proposal
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Habitat Cut: No Site Condition: Survey Needed

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. No cut Hemlock, Cedar, and White Ash. This stand can be cut in a dry summer however the access road is wet and needs to be slashed and crane matted.

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

Acceptable Regen: Any tree species currently in the overstory is acceptable.

Other Comment: Survey needed

Proposed Start Date: 10/01/2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
15	32009015-8- New	27.3	42340 - Upland Spruce/Fir	Poletimber Medium	68	141- 170	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all trees Except Black Cherry, Yellow Birch, American Elm and Basswood. Leave 3-10% retention. This stand could be cut in dry summer.

Specs: The north branch of deer creek is a trout stream put a 100 ft buffer on that stream.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory would be acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2019

25	32009025-10- New	12.7	4119 - Mixed Northern Hardwoods	Poletimber Well	85	111- 140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven- Aged	Draft Proposal
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Habitat Cut: No**Site Condition:**

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of

Specs: overstory species and stand structure. No cut Hemlock, Cedar, and Black Cherry. Favor Black Ash and Yellow Birch to keep in the stand. This sale will need to be cut in the winter because of lowland access road.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen:

Other

This is a low to mid quality hardwood stand.

Comment:

Wildlife: Retain all Black Cherry (5%) for mast production – black bear and Favor Black Ash (5%) and Yellow Birch (5%) –seed production and cavity nesters- pileated woodpecker, ruffed grouse

Proposed Start Date: 10/01/2019

36	32009036-11- New	10.6	429 - Mixed Upland Conifers	Sawtimber Well	98	141- 170	Harvest	Seed Tree with Retention	4191 - Mixed Upland Deciduous with Conifer	Uneven- Aged	Draft Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except Hemlock, Yellow Birch, Black Cherry and White Pine. Cut Cedar only for operability. Leave 3-10% retention. Winter cut

Specs: only.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any tree species currently in the overstory would be acceptable

Regen:

Other

This is a little mix of everything. Cedar will need to be cut to operate in some areas.

Comment:

Wildlife: Double the stumpage on White Cedar – White-tailed Deer

Proposed Start Date: 10/01/2019

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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
37 32009037-6-New	11.0	4113 - R.Maple, Conifer	Poletimber Well	85	81-110	Harvest	Shelterwood	4119 - Mixed Northern Hardwoods	Uneven-Aged	Draft Proposal

Habitat Cut: No**Site Condition:**

Prescription Mark Hardwoods to between 50-60 BA. Focus your marking on the red maple with poor form or deformities. Favor a few large healthy black Cherry to keep in the stand. No retention due to small size. No cut Hemlock or Cedar. Winter cut only

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

Acceptable Any tree species currently in the overstory would be acceptable.
Regen:

Other This stand has a lot of poor quality red maple.
Comment:

Wildlife: Favor some large health Black Cherry (15%) for mast production – black bear

Proposed Start Date: 10/01/2019

42 32009042-1-New	46.6	4112 - Maple, Beech, Cherry Association	Poletimber Well	85	111-140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. No cut Hemlock and Cedar. This stand could be cut in the summer.

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

Acceptable Any tree species currently in the overstory would be acceptable.
Regen:

Other mid quality to high quality hardwood stand.
Comment:

Wildlife: Favor Black Cherry (15%) for mast production – black bear

Proposed Start Date: 10/01/2019

43 32009043-2-New	9.8	4119 - Mixed Northern Hardwoods	Poletimber Well	85	111-140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	Draft Proposal
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Habitat Cut: No**Site Condition:**

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. No cut Hemlock and Cedar. Favor Black Cherry to keep in the stand. This stand needs to be cut in the Winter do to access and close proximity to Deer Winter Range.

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

Acceptable Any tree species currently in the overstory would be acceptable.
Regen:

Other This stand has poor to mid-quality hardwoods. There are however some saw logs present and has potential for TSI through marking.
Comment:

Wildlife: Add a winter cutting specification – Close to a Deer wintering complex. Favor Black Cherry (5%) for mast production – black bear

Proposed Start Date: 10/01/2019

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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
51	32009051-4- New	32.5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	85	111- 140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven- Aged	Draft Proposal

Habitat Cut: No**Site Condition:**

Prescription Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. No cut Hemlock and Cedar. Favor Black Cherry to keep in the stand. This Winter cut only because of deer wintering range.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable

Regen:

Other This is a high quality sugar maple stand. It is part of the deer winter range.

Comment:

Wildlife: Add a winter cutting specification – Deer wintering complex. Favor Black Cherry (5%) for mast production – black bear

Proposed Start Date: 10/01/2019

58	32009058-3- New	48.1	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	98	141- 170	Harvest	Seed Tree with Retention	611 - Lowland Deciduous Forest	Uneven- Aged	Draft Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees except Hemlock, Cherry, Yellow Birch and Cedar. Leave 3-10% retention in areas where there is pockets of cedar or wet patches.

Specs: Cut in the winter only.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory.

Regen:

Other This is a typical Mcfarland Mix. There are some areas of red maple logs however it is mostly poor quality hardwoods. This stand has variable densities and many different diverse tree species.

Comment:

Proposed Start Date: 10/01/2019

**Total Treatment
Acreage Proposed: 405.4**

Report 4 – Site Conditions

Gwinn Mgt. Unit

Peter Holodnick : Examiner

Compartment: 9

Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	2I	5C	3A
		With Condition	Not Available				
382	382	0	0	Aspen			
225	149	0	76	Cedar			76
8	8	0	0	Herbaceous Openland			
78	15	64	0	Lowland Conifers		64	
61	61	0	0	Lowland Deciduous			
179	179	0	0	Lowland Mixed Forest			
59	52	0	7	Lowland Shrub			7
61	0	61	0	Mixed Upland Deciduous		61	
579	370	165	44	Northern Hardwood	159	6	44
64	12	0	52	Upland Conifers			52
52	6	0	46	Upland Mixed Forest			46
27	27	0	0	Upland Spruce/Fir			
1,775	1,261	289	225	Total Forested Acres	159	130	225
	71%	16%	13%	Relative Percent			

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Cut with stand 8 when that is ready to be harvested. This stand would be hard to cut without cutting Hemlock or Cedar.							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This stand has difficult access It should be harvested when stands 22, 23, and 48 need it in order to make the volumes worth it.							

Report 4 – Site Conditions

Gwinn Mgt. Unit

Peter Holodnick : Examiner

Compartment: 9

Year of Entry: 2020

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	61	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Trees are too small to cut. Wait until they get larger in diameter before cutting.							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	54	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Trees are still too small to cut. Wait till they get more diameter on them.							
5	Available	2I: Survey needed	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	2I: Survey needed	145	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3A: Conservation Values incompatible with harvest at this time	225	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
Comments: Stands 38,41,30,39,29,26,28,and 27 are part of the forest habitat core interior conservation area (Werners Creek). Stands 28,26,27, and 30 are part of the Red Shouldered hawk terrestrial community.							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	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.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Sapling Well	7.8	16	Immature	cut permit #7-00-01 in 2002 Wirtanen. A3 well-stocked. A few residual w.pine and hemlock. Some small hardwood and fir.
2	4130 - Aspen	Sapling Well	1.0	16	Immature	cut permit #7-00-01 in 2002 wirtanen, Cut all but hemlock, cedar. Some fir seeding in as well as ash and red maple sprouts. A3 well stocked in center 6' tall.
3	4110 - Sugar Maple Association	Poletimber Well	15.0	85	81-110	Thin Next Entry. partially thinned 1980. Thinned 2002 permit #7-00-01 in 2002 wirtanen. Good quality M7M6, not much new regeneration yet. Some older gaps have 1-2" dbh sugar maple. Some ruts occurred during sale in low areas near corner of private land SE.
4	4110 - Sugar Maple Association	Poletimber Well	145.0	85	111-140	Thinned 1980. Select cut 2002 permit #7-00-01 Wirtanen,Nice high quality stand M9 and M6 in various areas, overall M8M6. Some regeneration starting but is partially browsed.
5	4130 - Aspen	Sapling Well	75.5	25	Immature	Cut permit # 26-91-1. 4" average dbh well-stocked mostly. Some wetter areas non-stocked and some areas are F2 with fir seeding in.
6	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Medium	13.2	25	Immature	F2F3E3. Cut permit 26-91-01. Medium to well-stocked. Scattered Fir 10' tall average, still seeding in. Patches of ash seedlings 6" tall. Alder and cattails in wetter areas. Almost fully stocked in most areas. May be an E3 stand next entry.
7	4119 - Mixed Northern Hardwoods	Poletimber Well	5.0	85	81-110	Thinned 1993 PERMIT 26-91-1. Hemlock component. 1/3 of stand is hemlock. Some blowdown since cut. Good regeneration in gaps 6-8' tall. Ok quality red maple stand but not the best quality hardwood. Diverse however with some nice den trees. Not quite ready for thinning yet.
8	4113 - R.Maple, Conifer	Poletimber Well	7.3	86	51-80	Mostly hardwood of poor to medium timber quality with lower wet cedar areas on edge and in swales.
9	6123 - Lowland Fir	Poletimber Poor	2.2	73	1-50	
10	4119 - Mixed Northern Hardwoods	Sawtimber Well	48.1	85	111-140	M6M7 thinned 1980. Some regen but browsed. Cut in 2002 Witanen permit #7-00-01. Half of stand is M9. Good quality hardwoods. This stand could use a light thinning.
11	6139 - Mixed Lowland Forest	Poletimber Medium	25.5	76	51-80	Small 1-2 stick ash and small cedar. Scattered larger yellow birch. Mostly E3 understory 2"dbh. Larger trees SW.
12	4112 - Maple, Beech, Cherry Association	Poletimber Well	13.7	85	111-140	Thinned 1980. Select cut 2002 permit #7-00-01 Wirtanen,Nice high quality stand M9 and M6 in various areas, overall M8M6. Some regeneration starting but is partially browsed.
13	6120 - Lowland Cedar	Poletimber Well	15.8	108	51-80	Wet 3-Stick ash mixed with other hardwoods and conifers. More cedar and fir in wetter areas. Numerous springs and underground stream here.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	10.1	112	81-110	partial cut 1980. Some cedar removed. Mix of Q and E. Blowdown and sparse in areas. Beginning uneven age. Springs and stream here.
15	42340 - Upland Spruce/Fir	Poletimber Medium	27.3	68	141-170	lots of mature BF. Not much regeneration because of thick mature overstory.
16	6120 - Lowland Cedar	Poletimber Well	71.9	123	111-140	Flowing springs into creek. Mature larger cedar near creek. Blowdown areas and other sparse areas. More hardwood there. SCA to protect springs and associated riparian areas. Some areas are E type especially near hardwood edge. Typical McFarland up and down transition forest types especially south. Some hemlock patches there.
17	4319 - Mixed Upland Forest	Sapling Medium	5.7	16	Immature	OPIC - FMD: Cut permit #7-00-01 wirtanen. All but cedar and hemlock was cut. F2 with fir and ash seeding in. should be fully stocked soon. Residual hemlock and cedar. Red maple sprouts, not much aspen on higher ground.
18	4130 - Aspen	Poletimber Well	165.6	32	Immature	Cut 1984 to 1987. Well-stocked mostly. 4-6" dbh. Some w. birch seeding in as well as other hardwoods. F3 in areas. Some areas still 4" dbh A3.
20	6120 - Lowland Cedar	Sawtimber Well	61.4	112	141-170	Some blowdown. Some beaver activity. Some areas are Q type but mostly C. NW is C3 and small 1-stick cedar. South C6 but middle is C9. SCA is to protect riparian values of stream. Also an upland hardwood and hemlock area of about 5 acres NE of clearcut stand included.
22	4130 - Aspen	Sapling Well	56.1	26	Immature	OPIC - FMD: A3 mostly well-stocked 2-4" dbh. Some wetter swales are M2F2 with some non-stocked areas. F2 with willow tamarack and fir seeding in. Should be fully stocked eventually.
23	4119 - Mixed Northern Hardwoods	Poletimber Well	22.7	85	1-50	Thinned 1992. Some blowdown. Poor to medium quality timber stand. Part of stand is M5. Good regeneration of red maple. In part of stand hemlock was planted.
24	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.1	85	111-140	Cut when you cut stand 23,48, or 22. Blowdown areas, some logging damage. Thinned 1992. Underplanted with hemlock about 2005. Poor to medium quality stand. Some browsing on hardwood regeneration but part is up to 8' tall now, mostly red maple. Some sugar maple but most of stand is red maple and yellow birch.
25	4119 - Mixed Northern Hardwoods	Poletimber Well	12.7	85	111-140	Well-stocked hardwood ready for thinning. Some potential for timber improvement.
26	4319 - Mixed Upland Forest	Poletimber Well	46.0	98	51-80	Forest Habitat Core interior SCA. Mix of E,Q,C. Mostly Q. Wet but higher ground than C type. Diverse smaller trees overall. Areas of thick F3 or E3 under low BA areas. Proposed sca to provide for riparian values and continuity with adjacent compartment.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	51.8	85	51-80	Forest Core interior SCA. Mix of ash, cedar and lowland conifers. Large trees along upland edge but most of stand small trees. Some dieback in ash. Understory mountain maple and fir. Most of stand is ash and larger yellow birch with scattered cedar. Proposed SCA to provide for riparian values and continuity with adjacent compartment.
28	4112 - Maple, Beech, Cherry Association	Poletimber Well	2.5	85	51-80	Forest Habitat Core Interior SCA. Stand not visited 2008. Some high quality sugar maple poles, some aspen dropping out of stand. Difficult access. Island in swamp. Adjacent compartment is stand condition 8 to protect riparian values and provide associated undisturbed upland. Recommend same for this compartment to provide continuity.
29	4119 - Mixed Northern Hardwoods	Poletimber Well	24.0	85	81-110	Forest Habitat Core Interior SCA. Poor timber quality red maple mostly but a diverse mix of conifer and hardwood. Also very large older trees with den potential. Upland cedar throughout. Porcupine damage on hemlock. Sparse areas of past fir mortality. Remote. Past beaver flooding south with some old beaver activity in stand. Put in potential old growth due to diversity and riparian values.
30	42360 - Upland Cedar	Poletimber Well	76.1	99	81-110	Forest Habitat Core Interior SCA. Mix of E & C. Mostly C. Larger cedar, some L areas and hardwood in gaps. Some areas recently flooded by beaver near section line.
31	4119 - Mixed Northern Hardwoods	Poletimber Well	1.3	85	51-80	Thinned 1993 PERMIT 26-90-1. Hemlock component. 1/3 of stand is hemlock. Some blowdown since cut. Good regeneration in gaps 6-8' tall. Ok quality red maple stand but not the best quality hardwood. Diverse however with some nice den trees. Not quite ready for thinning yet.
32	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	33.6	99	81-110	
35	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	53.6	92	51-80	understory except well-stocked areas of small E. 1/3 to 1/2 conifers but mostly an E stand. Trees smaller 1-2 stick with scattered larger spruce. Q & C patches but mostly E. Some dieback in ash. Low productivity.
36	429 - Mixed Upland Conifers	Sawtimber Well	10.6	98	141-170	Big hemlock, W. Pine Road through west side. W7H7M6. Some upland cedar..
37	4113 - R.Maple, Conifer	Poletimber Well	11.0	85	81-110	This stand is poor timber quality.
39	4113 - R.Maple, Conifer	Poletimber Well	9.6	85	51-80	Forest Habitat Core Interior SCA. Poor quality red maple. Access poor. Large old yellow birch and red maple over evenage 8" dbh red maple. Upland cedar on edges of stand. Put in sca to protect riparian values of stream and associated buffers.
40	6130 - Fir, Aspen, Maple	Poletimber Medium	3.6	76	51-80	Small 1-2 stick ash and small cedar. Scattered larger yellow birch. Mostly E3 understory 2"dbh. Larger trees SW.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	4113 - R.Maple, Conifer	Poletimber Well	7.7	85	81-110	Forest Habitat Core Interior SCA. Poor timber quality red maple mostly but a diverse mix of conifer and hardwood. Also very large older trees with den potential. Upland cedar throughout. Porcupine damage on hemlock. Sparse areas of past fir mortality. Remote. Put in potential old growth due to large adjacent area east in next compartment is SCA.
42	4112 - Maple, Beech, Cherry Association	Poletimber Well	46.6	85	111-140	Thinned 1992, some blowdown. Good regeneration in most areas. Fair quality stand with good potential for increase in timber quality.
43	4119 - Mixed Northern Hardwoods	Poletimber Well	9.8	85	111-140	OPIC - FMD: Cut prmt. #8-00-01,
44	4130 - Aspen	Sapling Well	12.1	14	Immature	Cut prmt. # 8-00-01, Mostly well-stocked A3 1"-2"dbh.
45	4130 - Aspen	Sapling Well	64.3	26	Immature	Mostly well-stocked A3 2" dbh but some wetter areas non-stocked or poorly stocked seeding in with fir.
46	4112 - Maple, Beech, Cherry Association	Poletimber Well	139.8	85	81-110	Thinned 1984. Good quality most areas. Good regeneration in some spots. Mix of red maple and sugar maple stand due to changes in elevation. ***Under contract #014-10-1 "Deadhorse Creek Hardwoods". This is part of the deer wintering range.
47	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	60.6	106	111-140	OPIC - FMD: Mostly cedar but a mix of mostly lowland. Some small upland areas with fir and red maple eyc. Typical McFarland mix.
48	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	1.4	85	81-110	Small island in aspen left for diversity.Hemlock component.Patches of 16-24" hemlock.Some areas of good red maple regeneration.
49	4115 - Y.Birch, Hemlock NH	Poletimber Well	7.9	85	51-80	Sparse areas. Thinned 1980's and some blowdown since.Good regeneration mostly red maple. A few hemlock but mostly a red maple stand. Not ready for thinning yet.
50	4112 - Maple, Beech, Cherry Association	Poletimber Well	2.3	85	51-80	In this small patch the BA is too low for another thinning. Also access is poorer than the other small patches. Good wildlife trees here including some large hemlock. More diverse tree species than the other small patches here.
51	4112 - Maple, Beech, Cherry Association	Sawtimber Well	32.5	85	111-140	Thinned 1984 and again in 2004 under permit #8-00-01. Good sugar maple stand on high ground with good quality red maple and yellow birch on the lower edges. Some good wildlife trees here. This is part of the Deer wintering range. Good regen.
53	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	12.3	98	111-140	Mix of large hemlock, hardwood. Some w. pine and cedar. This is part of the deer wintering range.
54	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	76.9	98	51-80	Partially cut in1984 and earlier. Typical Mcfarland mix of Q,E,C and H or M. Mostly low and sparse with thick understory of ash, red maple or fir. Lower BA overall due to past cuttings. This is part of the deer wintering range

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Report 7 – Forested Stands

Compartment: 9
Year of Entry: 2020

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	4112 - Maple, Beech, Cherry Association	Poletimber Medium	8.5	85	1-50	Aspen cut out of stand 1990's. Very low BA of medium to poor quality maple, y. birch and hemlock.
57	6132 - Mixed Lowland Forest with Cedar	Poletimber Poor	8.0	57	Unspecified	
58	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	48.1	98	141-170	Partially cut in 1984 and earlier. Typical Mcfarland mix.
59	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	31.0	98	51-80	Partially cut in 1984 and earlier. Typical Mcfarland mix of Q,E,C and H or M. Mostly low and sparse with thick understory of ash, red maple or fir. Lower BA overall due to past cuttings. Part of the deer wintering range.



Stand	Cover Type	Acres	Managed Site	General Comments:
21	622 - Lowland Shrub	29.6	No	SCA. Mostly drained beaver flooding west but some water still in a small pond. Shrubs beginning near pond and larger shrubs farther from pond, mostly alder and willow. Put in SCA to protect riparian values of stream. Also includes part of swales in clearcut that are mostly low wet alder areas.
33	622 - Lowland Shrub	4.5	No	Mostly alder and willow in former flooded area.
34	622 - Lowland Shrub	16.5	No	OPIC - FMD: SCA. Mostly alder and willow with some N areas. A former beaver flooding. Put in SCA to protect riparian values of stream and associated buffer.
38	622 - Lowland Shrub	7.3	No	SCA. Stream riparian corridor stand. Past beaver activity. Was a beaver pond, now drained. Some residual older trees (spruce, fir, cedar) escaped flooding with medium to high alder and willow.
52	622 - Lowland Shrub	0.9	No	Drained beaver pond.
400	3102 - Grass	1.0	No	Treated with herbicide in 1980. OI Stand Year Origin was
401	3102 - Grass	7.1	No	