



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32058

Entry Year 2020

Acreage: 1,692

County Marquette

Management Area: Ralph Ground Moraine

Revision Date: 2018-08-06

Stand Examiner: Eric Brolin

Legal Description:

Sections 28 - 30, T44N - R26W, Marquette County

Identified Planning Goals:

Located south and west of Gwinn, this compartment contains a variety of timber types and is a very popular recreational area, primarily for hunting and fishing.

Much of the compartment consists of large cedar and swamp conifer stands, with hardwood ridges and aspen flats. Most of the Aspen types are being managed for age class distribution. All harvest plans will include considerations for conifer retention, species diversity, coarse woody debris, and BMP's.

Special conservation area stands have been selected to protect and enhance the riparian values and wildlife travel corridors along Bryan Creek and the West Branch of the Big West Branch of the Escanaba River.

Soil and topography:

Terrain is undulating and moderately steep with soils ranging from mucks and peats to well -drained loams over limestone bedrock. Major soils include Lupton, Cathro, Tawas, Emmet, Longrie, Summerville, Carbondale, Tacoosh, and Angelica.

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

This compartment is entirely surrounded by state owned land.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

This compartment contains the former site of an original CCC camp.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

The northern region of this compartment contains the West Branch of the Escanaba River. The West Branch of the Escanaba River is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the West Branch of the Escanaba River in riparian areas susceptible to Aspen regeneration (specifically stand 10). 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 058 is found within the Ralph Ground Moraine Management Area; on Ground Moraines in northern Dickinson and southern Marquette Counties. The dominant Natural Communities are mesic northern forest, poor conifer swamps, and dry mesic northern forest. Major forest cover types include Aspen, Northern Hardwoods, and Mixed Lowland Conifers. Almost every cover type and associated species can be found within the management area including several deer wintering complexes. This management area provides some of the finest grouse and woodcock hunting in the Midwest and this is a wildlife management priority that will continue. Wildlife management issues in the management area are: early successional forest conditions (associated with alder, riparian zones, or forested wetlands); mast (hard and soft); habitat fragmentation; mature forest (upland deciduous, especially aspen and mixed forest with little understory); coarse woody debris; and deer wintering complexes.

The following have been identified as featured species for the Ralph Ground Moraine Management Area: American woodcock, black bear, Northern goshawk, ruffed grouse, and whitetail deer.

Mineral Resource and Development Concerns and/or Restrictions

Marquette County

Surface sediments consist of medium-textured till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Cambrian Trempealeau Formation subcrops below the glacial drift. The Trempealeau could be used for stone. A gravel pit is located in Section 30, and potential is good on the drumlins. Abandoned iron mines are located eight miles to the northeast. This area has not been previously leased. There is no economic oil and gas production in the UP.

Vehicle Access:

Excellent access from County Road 438 and Ross Grade across much of the compartment.

Survey Needs:

None

Recreational Facilities and Opportunities:

Recreational activity for this area is primarily for upland hunting of ruffed grouse, woodcock, snowshoe hare, and whitetail deer. Bryan Creek is also popular for fishing.

Fire Protection:

This compartment has a low risk for wildfire.

Additional Compartment Information:

The following reports from the Inventory are attached:

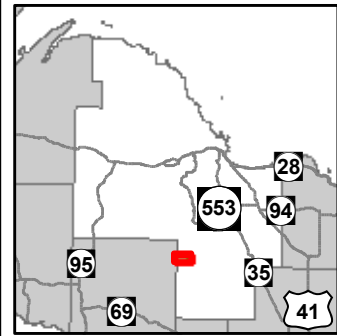
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

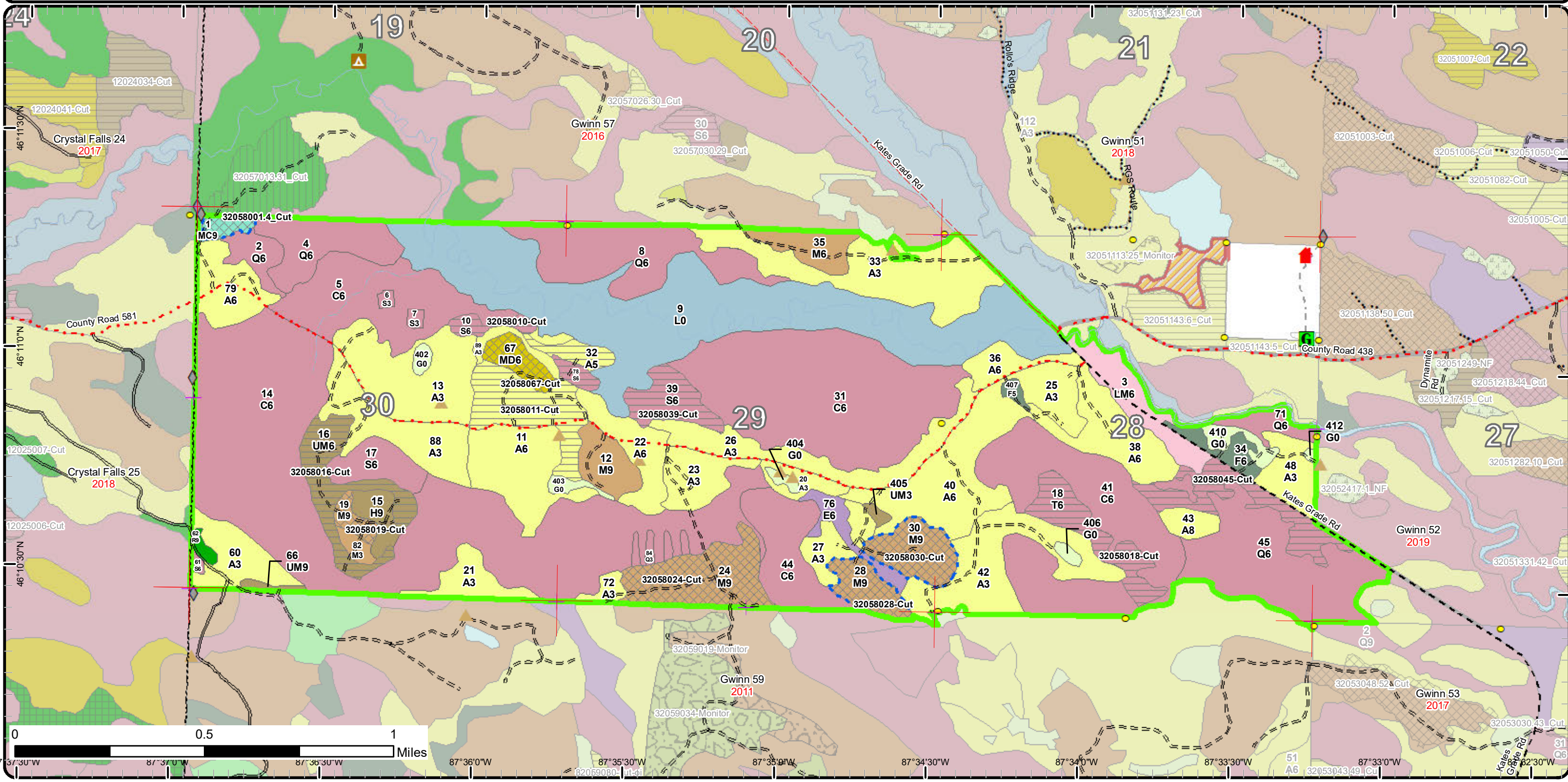
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 58
 T44N, R26W, Sec: 28, 29, 30
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Ralph Ground
 Moraine
 YOE: 2020
 Acres: 1,692 GIS Calculated
 Examiner: Eric Brolin
 Map Revised: 8/13/2018 Map
 Phase: Web-Post

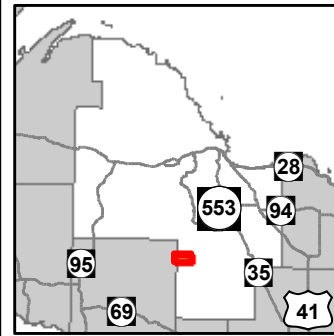


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- Gate
- Campground
- Structures
- Intermittent Stream
- Perennial River
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 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

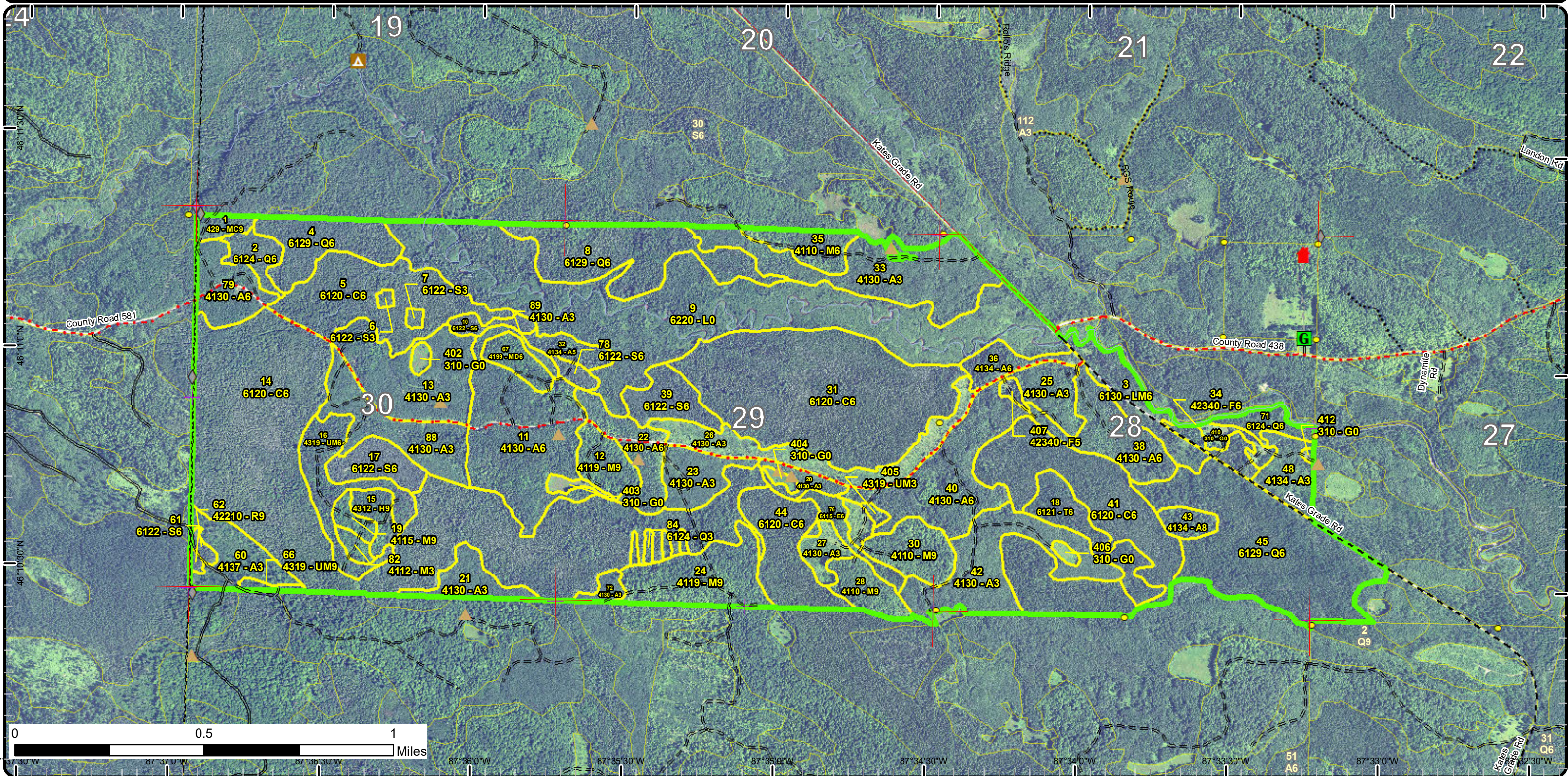


Stand Boundary Map

Compartment: 58
 T44N, R26W, Sec:28, 29, 30
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 Moraine
 YOE: 2020
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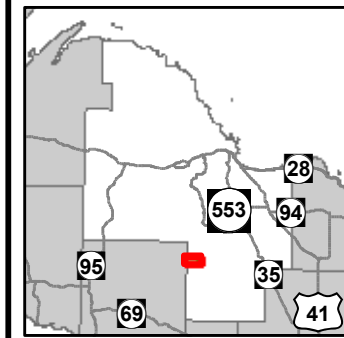


- | | | |
|--|------------------------------|---------------------------------|
| — Miris Corners | ▲ Gate | 611 - Lowland Deciduous Forest |
| ✚ Remonumented Section Corners | ▲ Campground | 612 - Lowland Coniferous Forest |
| ● Survey Grade Corners | ▲ Structures | 613 - Lowland Mixed Forest |
| ◆ Field Grade Corners | — Intermittent Stream | 310 - Herbaceous Openland |
| — Counties | — Perennial River | 622 - Lowland Shrub |
| — DNR - Secondary Forest Road | — Compartment Boundary | 411 - Northern Hardwood |
| — DNR - Forest Access Route | — Stand Boundaries | 413 - Aspen |
| — Federal / State - Dirt / Gravel Road | 419 - Mixed Upland Deciduous | 422 - Natural Pines |
| — County - Gravel Road | 423 - Other Upland Conifers | 429 - Mixed Upland Conifers |
| — County - Dirt Road (Seasonal) | 430 - Upland Mixed Forest | |
| — Private - Dirt / Gravel Road | | |
| ▲ Cabin | | |
| ▲ Berms | | |

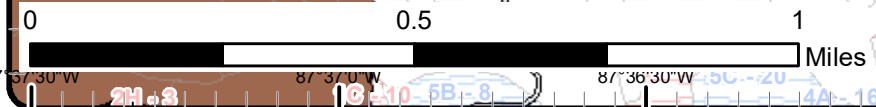
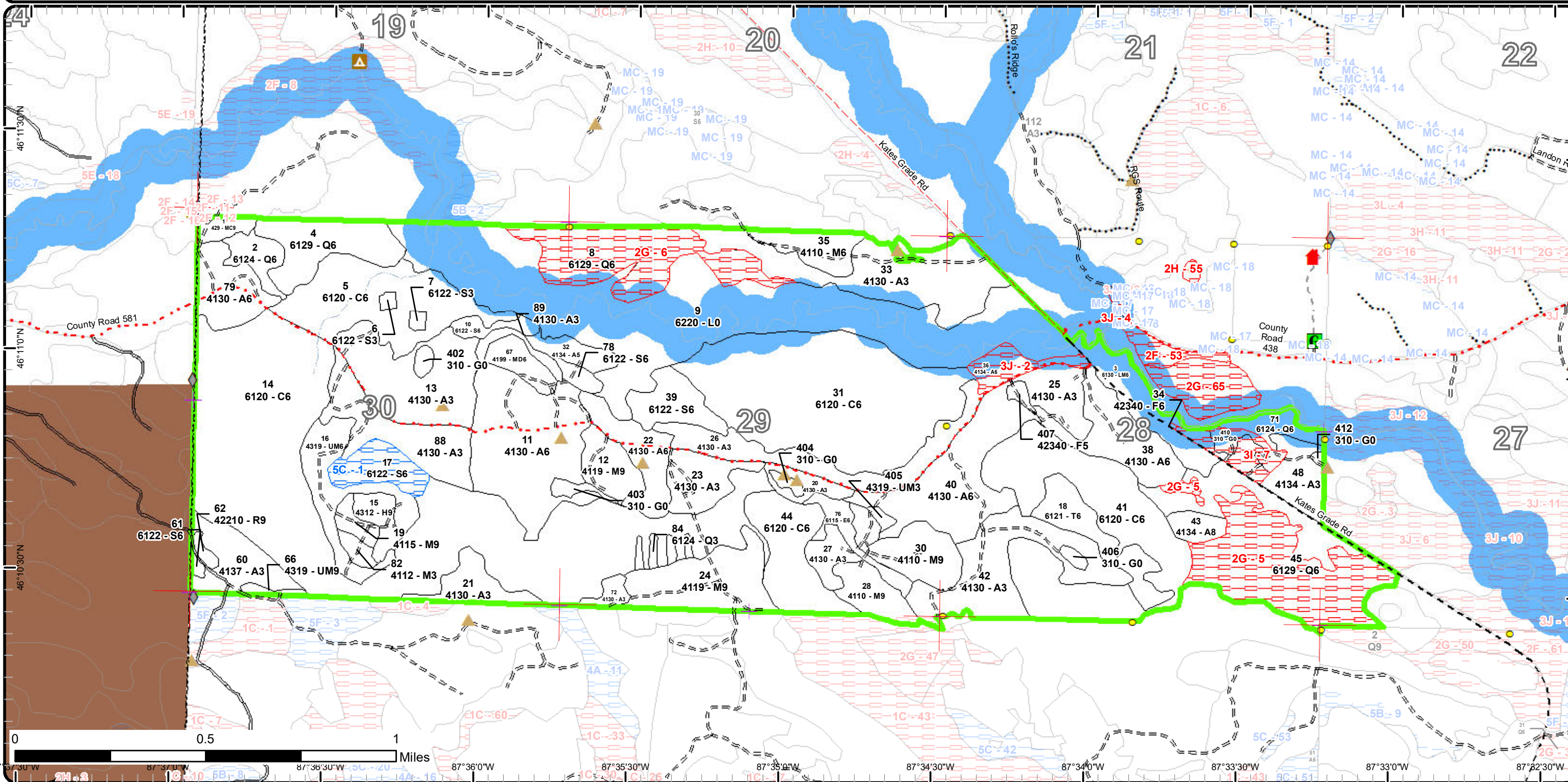


Special Conservation Areas & Site Conditions Map

Compartment: 58
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- Miris Corners
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- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- Gate
- ▲ Campground
- Structures
- Intermittent Stream
- Perennial River
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3I: Historical / archeological (add locked comments)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer
- Wildlife Management Areas



Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment 58 Year of Entry 2020



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	44	89	177	47	131	0	10	0	0	15	0	0	0	0	0	0	0	512
Cedar	0	0	0	0	0	0	0	0	0	0	275	123	137	0	0	0	0	0	535
Hemlock	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
Herbaceous Openland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Lowland Conifers	0	0	0	8	4	9	0	0	27	0	0	91	49	0	0	0	0	0	187
Lowland Deciduous	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Lowland Mixed Forest	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Shrub	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	184
Lowland Spruce/Fir	0	0	0	0	3	0	0	1	0	40	0	0	0	0	0	0	0	0	43
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9
Northern Hardwood	0	0	0	0	4	0	0	0	13	47	0	18	0	0	0	0	0	18	100
Red Pine	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Tamarack	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	21
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
Upland Mixed Forest	0	0	0	2	0	26	0	2	0	0	0	0	0	0	0	0	0	0	30
Upland Spruce/Fir	0	0	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	199	44	89	189	58	195	0	22	61	96	290	247	186	0	0	0	0	18	1691



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 58

Total Compartment Acres: 1,692

Commercial Harvest - 179
 Harvests with Site Condition - 36
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	36	0	0	0	0	0	0	0	0	36
Cedar	0	4	0	0	0	0	0	0	0	4
Lowland Conifers	24	0	0	0	0	0	0	0	0	24
Lowland Spruce/Fir	25	0	0	0	0	0	0	0	0	25
Mixed Upland Deciduous	0	9	0	0	0	0	0	0	0	9
Northern Hardwood	0	70	0	0	0	0	0	0	0	70
Tamarack	21	0	0	0	0	0	0	0	0	21
Upland Mixed Forest	26	0	0	0	0	0	0	0	0	26
Total	131	84	0	0	0	0	0	0	0	215

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	215	0	0	0	0	0	0	0	0	215
Next Step	0	4	0	0	0	0	210	0	0	215
Total	215	4	0	0	0	0	210	0	0	429

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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
14 32058001.4_C ut	4.4	6120 - Lowland Cedar	Poletimber Well	90	201+	Harvest	Group Selection	4220 - Natural White Pine	Even-Aged	Field Boundary

Habitat Cut: No**Site Condition: BMPs**

Prescription Strive to create shelterwood situation in order to promote pine regeneration. Leave all hemlock and cedar.

Specs:

Next Step SitePrep, Scarification

Treatments:

Acceptable White pine, red pine, aspen, spruce, maple, and birch.

Regen:OtherComment:

Proposed Start Date: 10/01/2009

10 32058010-Cut	5.2	6122 - Black Spruce	Poletimber Well	85	111- 140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec. to promote black spruce regeneration. Leave cedar, hemlock, white spruce, and paper birch. Also leave all aspen to

Specs: discourage regeneration within the 300' river buffer.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable black spruce, fir, cedar

Regen:

Other Harvest during frozen conditions. Recommend green paint for white spruce while setting up to avoid accidental cutting.

Comment:

Wildlife: Add in retain all Paper Birch (1%) – cavity nesters and seed source. Retain all White Spruce (1%) – wildlife cover – Game Fund Purchased

Proposed Start Date: 10/01/2019

11 32058011-Cut	29.2	4130 - Aspen	Poletimber Well	44	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec. to promote aspen regeneration by removing dense fir sapling understory. Leave red pine, white pine, white spruce, and black cherry. In addition, green tree approximately 1 paper birch per cruise plot. This treatment is to create age class diversity on a contiguous 80+ acre block of aspen along the road which is the same age.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce/fir, mixed hardwood

Regen:

Other Wildlife: Retain all Black Cherry (1%) – Black Bear, White Spruce (1%) – Wildlife cover and scattered Paper Birch – Cavity nesters – Game Fund Purchased

Proposed Start Date: 10/01/2019

16 32058016-Cut	26.0	4319 - Mixed Upland Forest	Poletimber Well	44	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest to 2" spec. to regenerate declining spruce/fir and aspen. This harvest is meant to capture the high volume of spruce/fir before it is potentially lost to spruce budworm. Leave cedar, hemlock, red pine, and white pine. In addition, green tree approximately one white spruce or paper birch per cruise plot. Do not push treatment lines into adjoining hardwoods or lowland stands.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce/fir, hardwood

Regen:

Other Spruce/fir may not hold on until the normal cycle it would get harvested in possibly 3-5 years.

Comment:

Wildlife: Retention should include some White Spruce (wildlife cover) and scattered Paper Birch – Cavity nesters – Game Fund Purchased

Proposed Start Date: 10/01/2019



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	32058018-Cut	20.8	6121 - Tamarack	Poletimber Well	73	111-140	Harvest	Clearcut with Retention	6128 - Lowland Coniferous, Mixed Deciduous	Two-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Harvest to a 4" spec. to promote tamarack and black spruce regeneration. Leave all cedar and hemlock if present. Capture some paper birch and
Specs: older tamarack with patch retention. Do not push treatment lines into the adjoining dense cedar stand.

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

Acceptable Regen: black spruce, cedar, tamarack, spruce/fir

Other Harvest during frozen conditions.

Comment: Wildlife: Leave some older age Tamarack – Gray Jay and the little bit of paper birch (2%) that is available – Game Fund Purchased

Proposed Start Date: 10/01/2019

19	32058019-Cut	4.9	4115 - Y.Birch, Hemlock NH	Sawtimber Well	181	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Remove larger diameter, poorer quality trees to create 40'-60' canopy gaps while removing all stems 1"> within the
Specs: gaps. Remove all merchantable spruce/fir to encourage hardwood regeneration. This treatment is to encourage hardwood regeneration within an older, large diameter stand. Leave hemlock and cedar. Use caution to not damage residual hemlock or large cavity trees. Favor diversity while marking especially yellow birch.

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

Acceptable Regen: northern hardwood, hemlock

Other Wildlife - Favor Yellow Birch (15%) – nest trees an important food source for many winter birds as well as ruffed grouse. leave some trees with
Comment: obvious defects for wildlife habitat,–State Game Fund Purchased

Proposed Start Date: 10/01/2019

24	32058024-Cut	33.6	4119 - Mixed Northern Hardwoods	Sawtimber Well	85	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Focus on maintaining and re-opening old canopy gaps (40'-60' diameter) to continue growth on the advance regen that
Specs: is already present. Leave cedar, hemlock, and yellow birch. Use caution to not damage residual hemlock. Favor diversity while marking and leave some cavity trees for wildlife habitat.

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

Acceptable Regen: northern hardwood, hemlock

Other Wildlife - Retain all Yellow Birch (5%) – nest trees an important food source for many winter birds as well as ruffed grouse; leave some trees with
Comment: obvious defects for wildlife habitat, also favor bass wood –State Game Fund Purchased

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
28 32058028-Cut	13.4	4110 - Sugar Maple Association	Sawtimber Well	75	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No Site Condition: Other Dept./Div. Processes

Prescription Mark stand to 70-90 BA. Re-open old canopy gaps (40'-60' diameter) where advanced maple regeneration is present. Remove poorer quality trees to create new 40'-60' canopy gaps while removing all stems 1" > within the gaps. These larger gaps will encourage regeneration and create more diversity by favoring mid-tolerant species (yellow birch, basswood, white ash). This treatment is to encourage hardwood regeneration to create an uneven aged stand. Leave hemlock and remnant sugar maple snags / cavity trees. Favor diversity while marking especially basswood and paper birch.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: northern hardwood

Other

Wildlife - Do not cut oversized trees and leave some trees with obvious defects for wildlife habitat, also favor bass wood and paper birch –State Game Fund Purchased

Proposed Start Date: 10/01/2019

30 32058030-Cut	18.1	4110 - Sugar Maple Association	Sawtimber Well	100	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No Site Condition: Other Dept./Div. Processes

Prescription Mark stand to 70-90 BA. Re-open old canopy gaps (40'-60' diameter) where advanced maple regeneration is present. Remove poorer quality trees to create new 40'-60' canopy gaps while removing all stems 1" > within the gaps. These larger gaps will encourage regeneration and create more diversity by favoring mid-tolerant species (yellow birch, basswood, white ash). This treatment is to encourage hardwood regeneration to create an uneven aged stand. Leave cedar, hemlock, and white pine. Also leave some cavity trees for wildlife habitat. Favor diversity while marking.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: northern hardwood, hemlock

Other

Wildlife - Do not cut oversized trees and leave some trees with obvious defects for wildlife habitat, also retain all white pine – black bear –State Game Fund Purchased

Proposed Start Date: 10/01/2019

32 32058032-Cut	6.5	4134 - Aspen, Spruce/Fir	Poletimber Medium	90	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No Site Condition:

Prescription Harvest to a 2" spec. to promote aspen, red maple, and fir regeneration. Leave cedar, hemlock, red pine, and white pine if present. Green tree some healthy, wind firm white spruce. Buffer the West Branch Escanaba River 300'. Treatment line has been updated for buffer.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: aspen, red maple, spruce/fir

Other

Frozen conditions will be required for access to this stand from the south through a black spruce stand.

Comment:

Wildlife - Look for opportunities to leave wind firm white spruce-seed source and wildlife cover –State Game Fund Purchased

Proposed Start Date: 10/01/2019

39 32058039-Cut	16.1	6122 - Black Spruce	Poletimber Well	89	141-170	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal
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Habitat Cut: No Site Condition:

Prescription Harvest to a 2" spec. to promote black spruce regeneration. Leave cedar and hemlock. Also leave some larger aspen for raptor nesting sites.

Specs: Exclude a patch of the original stand for retention.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: black spruce, fir, cedar

Other

Harvest during frozen conditions.

Comment:

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
45	32058045-Cut	23.7	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	103	111- 140	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Harvest to a 4" spec. to promote tamarack and black spruce regeneration. Leave cedar, black ash, and paper birch. Do not push treatment lines
Specs: into adjoining dense cedar or black ash areas.

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

Acceptable tamarack, black spruce, fir, cedar
Regen:

Other Harvest during frozen conditions.
Comment:

Wildlife - This stand is 40% Cedar, harvest the Tamarack and Spruce if it can be accessed without harming the Cedar resource-- White-tail Deer. Leave some older age Tamarack - Gray Jay and the little bit of paper birch (2%) that is available - Game Fund Purchased

Proposed Start Date: 10/01/2019

67	32058067-Cut	9.1	4199 - Other Mixed Upland Deciduous	Poletimber Well	85	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Remove all merchantable white birch except if marked with green paint. Green tree approximately one white birch per cruise plot. Leave cedar.
Specs: This treatment is to encourage a natural conversion to a mixed northern hardwood stand from a declining white birch stand by allowing advanced hardwood regeneration and residual trees to grow. Use extra caution to not damage residual maple saplings and poles.

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

Acceptable mixed northern hardwoods, white birch
Regen:

Other Maple is abundant but not enough to thin. If a dense solid hardwood patch is found it may be marked in orange paint to northern hardwood
Comment: standards.

Wildlife - Retain Cedar (1%) and a few scattered white birch - Game Fund Purchased

Proposed Start Date: 10/01/2019

78	32058078-Cut	3.7	6122 - Black Spruce	Poletimber Well	85	111- 140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec. to promote black spruce regeneration. Leave cedar and hemlock. Exclude the small patch of dense cedar in the northwest
Specs: tip for retention.

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

Acceptable black spruce, fir, cedar
Regen:

Other Harvest during frozen conditions.
Comment:

Proposed Start Date: 10/01/2019

**Total Treatment
Acreage Proposed: 214.7**

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 58
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		5C	1C	2G	3I	3J
512	456	0	56	Aspen		46	0		10
535	535	0	0	Cedar					
8	8	0	0	Hemlock					
15	9	0	6	Herbaceous Openland				6	0
188	64	0	124	Lowland Conifers			115		8
9	0	0	9	Lowland Deciduous		9			
21	0	0	21	Lowland Mixed Forest					21
184	184	0	0	Lowland Shrub					
43	29	15	0	Lowland Spruce/Fir	15				
9	9	0	0	Mixed Upland Deciduous					
100	70	0	31	Northern Hardwood		31			
2	2	0	0	Red Pine					
21	21	0	0	Tamarack					
5	5	0	0	Upland Conifers					
30	30	0	0	Upland Mixed Forest					
10	2	0	8	Upland Spruce/Fir				8	
1,692	1,424	15	254	Total Forested Acres	15	85	116	14	40
	84%	1%	15%	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	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
Approximately 80% of stand (east 3/4) is barely merchantable. Retain until next YOE and reevaluate average diameter for harvest.							

Report 4 – Site Conditions

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2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
Comments: Nearly this whole stand is covered by the 300' river buffer.							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 300' buffer for trout stream to west.							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	67	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	49	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3I: Historical / archeological (add locked comments)	14	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Area of historic Escanaba CCC camps							

Report 4 – Site Conditions

Gwinn Mgt. Unit
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Compartment: 58
Year of Entry: 2020

53	Unavailable	2F: Too steep	7	4A: No Markets Available for these Forest Products	Unspecified	Unspecified	Unspecified
Comments:							
55	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
65	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

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



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	429 - Mixed Upland Conifers	Sawtimber Well	5.2	103	141-170	<p>Hemlock/pine stand on a south facing slope. Patches of aspen poles and red maple saplings. Dense fir under story in areas. Stand is marked for a harvest combined with the adjoining compartment.</p> <p>OPIC - FMD: Thinned in 1974 and 1996-97, this stand is the southern part of a large dry mesic stand which lies primarily in the adjacent compartment to the north, and as a result, is managed as one stand. The stand consists of large diameter red and white pine with large diameter hemlock inclusions. Most of the marketable fir component was removed in 96-97.</p>
2	6124 - Lowland Spruce- Fir	Poletimber Well	9.2	43	81-110	<p>Lowland ground was cut with adjoining aspen stand to the west in the past. This stand regenerated dense to spruce/fir, black spruce, and some smaller diameter offsite aspen.</p>
3	6130 - Fir, Aspen, Maple	Poletimber Well	21.2	44	81-110	<p>Low ground fir stand. Aspen ranges from saplings to old remnant trees across the stand. Wet alder patches and black ash saplings filling in canopy gaps in wetter areas.</p>
4	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	27.4	72	81-110	<p>Lowland conifer. Not much cedar, more around edges and in the east 1/3 of the stand. Heavy to larger tamarack in the center of stand. Scattered white birch mixed in. Fir more abundant around edge. Very healthy trees could hold until next YOE for more diameter growth on a lot of the sub-merchantable black spruce.</p> <p>OPIC - FMD: A mix of black spruce, tamarack, fir, cedar. Very wet.</p>
5	6120 - Lowland Cedar	Poletimber Well	53.2	115	111-140	<p>Cedar stand varying in age and size. A majority of this stand is 90 year old 10" cedar. A swath across the middle is 115+ and noticeably larger averaging 14" diameter cedar and almost no black spruce in this area. There is a pocket on the south edge more dense to black spruce that could be harvested and accessed from the southern adjoining stand. Fir sapling dense in areas. Scattered white birch poles and tamarack scattered across stand.</p> <p>OPIC - FMD: Nice cedar swamp, almost a C8. Good diameters on much of the cedar.</p>
6	6122 - Black Spruce	Sapling Well	1.2	38	Unspecified	<p>Dense to black spruce saplings. Some alder in the understory. Did not see any cedar regeneration. A trail does access this stand from the south and is flagged in for now.</p> <p>OPIC - FMD: Patch cedar cut from 1980. Regeneration consists of black spruce, fir, balsam, white birch, tag alder. Could not find any cedar regeneration above the snow line.</p>
7	6122 - Black Spruce	Sapling Well	1.3	38	Unspecified	<p>Dense to black spruce saplings. Alder is mixed in the understory. Did not see any cedar regeneration.</p> <p>OPIC - FMD: Patch cedar cut from 1980. Regeneration consists of black spruce, fir, balsam, white birch, tag alder. Could not find any cedar regeneration above the snow line.</p>
8	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	48.7	110	111-140	<p>Very wet lowland floodplain. Patchy canopy with a lot of alder.</p> <p>OPIC - FMD: Very wet conifer swamp with cedar, black spruce, fir, soft maple, white birch, over tag alder, fir, spruce.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
10	6122 - Black Spruce	Poletimber Well	5.2	85	111-140	<p>Very nice black spruce stand. Some overstory aspen and fir mixed in. Some red maple saplings in the understory around the south edge.</p> <p>OPIC - FMD: Almost a pure black spruce swamp with occasional white birch and cedar.</p>
11	4130 - Aspen	Poletimber Well	62.7	44	81-110	<p>Aspen stand with VERY dense fir understory across a majority of the stand. More white birch and hardwood saplings mixed in the south 1/3 of this stand. Large remnant white spruce (70+ years old) mixed in across the stand.</p> <p>OPIC - FMD: Has just grown into a pole stand. Aspen is 5-7" dbh, 1-2 stick. Scattered fir clump</p>
12	4119 - Mixed Northern Hardwoods	Sawtimber Well	13.5	85	81-110	<p>Hardwood log stand. Ironwood saplings dense in areas. No regeneration in the understory. BA averages 80-90 with room to grow.</p> <p>OPIC - FMD: Thinned in 1979 and 2003 under permit # 020-00-01. Scattered upland cedar.</p>
13	4130 - Aspen	Sapling Well	42.9	26	Immature	<p>Young aspen stand. Areas with a dense fir sapling understory, especially where aspen did not become established. High ridge road cuts across the middle of the stand to a large opening which borders a lowland cedar stand. About 5 acres was not harvested with this stand in the northwest tip. This area has very large spruce/fir and white birch that is declining and will not hold. OPIC - FMD: 2-3" dbh, 20-25' tall. Scattered small openings.</p>
14	6120 - Lowland Cedar	Poletimber Well	243.9	90	201+	<p>Lowland cedar stand. Large diameter trees with very dense canopy. Lighter patch in center is dead/declining cedar with fir saplings growing in. Some aspen mixed in areas. Found average age to be much younger than past inventory that was entered.</p> <p>OPIC - FMD: Large stand with occasional "islands" of black spruce, fir, aspen.</p>
15	4312 - Hemlock, Mixed Deciduous	Sawtimber Well	8.4	102	141-170	<p>Large diameter hemlock stand. Large maple and yellow birch mixed in with a couple small patches of fir saplings. No regen is found in the understory. Average BA over 160 from large diameter trees.</p> <p>OPIC - FMD: Beautiful large well stocked hemlock stand with big yellow birch and hard maple saw timber trees. No understory visible above the snow.</p>
16	4319 - Mixed Upland Forest	Poletimber Well	26.0	44	81-110	<p>Merchantable fir stand averaging 4+ stick trees. Dense fir sapling under story and hardwood saplings in areas with other large scattered remnant spruce/fir within. Maple and white birch component mixed in. White birch more abundant in transitions. Majority of merchantable/larger diameter fir is being hit quite heavy by spruce budworm. Aspen areas range from pole sized patches to scattered older trees.</p> <p>OPIC - FMD: Select cut in 1980. Fir and aspen 2-4 stick poletimber over heavy fir seedlings and saplings. Scattered white spruce, white birch and upland cedar. Stand has several semi open pockets and young aspen clones. One dense hemlock pocket in the northern section of the stand.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	6122 - Black Spruce	Poletimber Well	14.8	88	51-80	Very small diameter stand nearly solid to black spruce. Average BA is less than 50 for barely merchantable trees across a majority of the stand. Larger diameters in the west 1/4 of the stand transitions to 1-2 stick, 5" diameter average across the rest of the stand. LOPIC - FMD: Scattered cedar and black spruce. Very wet. Stand fades to a bog in the center.
18	6121 - Tamarack	Poletimber Well	20.8	73	111-140	Dense tamarack and black spruce patches with larger cedar in the understory. Little patches with slight elevation increases have fir mixed in.
19	4115 - Y.Birch, Hemlock NH	Sawtimber Well	4.9	181	111-140	Large diameter hardwoods with patches more dense to hardwood saplings/poles. Large hemlock is found scattered across this stand. Average BA at or above 140 from large diameter trees. Transitions to fir around edges. OPIC - FMD: Large diameter hardwoods with good blend of hemlock.
20	4130 - Aspen	Sapling Well	6.6	27	Immature	Aspen sapling/pole stand. Fir found in the understory in areas. This stand surrounds a larger managed wildlife opening which is bermed off.
21	4130 - Aspen	Sapling Well	13.0	18	Immature	Young aspen stand with scattered fir. Access from south adjoining compartment/floodwood road. OPIC - FMD: Cut under permit # 021-00-01. Dense, fully stocked stand.
22	4130 - Aspen	Poletimber Well	19.4	44	81-110	Nice aspen pole stand. Not much understory across the stand. OPIC - FMD: Has just grown into a pole stand. Aspen is 5-7" dbh, 1-2 stick. Scattered fir clumps.
23	4130 - Aspen	Sapling Well	16.4	15	Immature	Very dense aspen sapling stand. Very few conifer regeneration. OPIC - FMD: Cut in 2003 under permit #20-00-01.
24	4119 - Mixed Northern Hardwoods	Sawtimber Well	33.6	85	111-140	Hardwood log stand. Hemlock is more dominant in the west 1/4 of the stand. Surprising amount of advanced maple regeneration especially in the east half. Maple saplings in canopy openings average 20' tall and very dense in areas. Average of 120 BA, a little lighter in the east half where the most regen is present. OPIC - FMD: Select cut under permit #021-00-01. Good mix of hemlock scattered in the stand with a excellent H9 stand adjacent to the south. Regen is primarily raspberry and ironwood.
25	4130 - Aspen	Sapling Well	14.4	23	Immature	Aspen sapling stand with scattered fir. Declining and/or dead white birch trees are scattered across the stand. Fir is dense in areas where aspen did not become established especially around many of the edges.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	4130 - Aspen	Sapling Well	31.4	5	Immature	<p>Near fully stocked with saplings. Patches of cattails with wetter ground and more red maple saplings in the east half. A few large remnant maples were left scattered across the stand for aesthetics.</p> <p>OPIC - FMD: Narrow stand along Co. Rd 438 that drops off sharply to the cedar stand to the north. Contains a rocky shelf in the western portion of the stand. The aspen is large, over mature and the stand varies considerably. The predominant cover type changes back and forth between aspen, fir, white birch and Balm. The sale boundary will stay up out of the wet zone and exclude the low black spruce/conifer fringed. Scattered large hardwoods and the small hardwood island along 438 will be retained for aesthetics. 2013- Stand harvested by Roy Nelson III under contract # 007-10-01.</p>
27	4130 - Aspen	Sapling Well	12.2	5	Immature	<p>Aspen sapling stand. Fully stocked except for old skidding trails and landing areas. Black ash swale splits the stand in half.</p> <p>OPIC - FMD: Scattered fir and large white spruce, occasional white birch. West side is lower with fewer hardwoods and more spruce/fir and birch. Black ash swale inside the stand. 2013- Stand harvested by Roy Nelson III under contract # 007-10-01.</p>
28	4110 - Sugar Maple Association	Sawtimber Well	13.4	75	111-140	<p>Hardwood ridge log stand. Nearly solid sugar maple. Average large diameter trees with a 120 BA. Uniform canopy across stand except for a few old canopy gaps. These old gaps were 50'-60' in diameter and are starting to grow in. The maple regeneration in a majority of the gaps is very, very excellent, dense to 20'+ tall sugar maple saplings. Older large declining remnant maple mixed in across the stand should be retained for snags.</p> <p>OPIC - FMD: TSID IN 1978 Cut in 2002-2003 by Sanville under permit # 022-00-01. Occasional white birch. Has just transitioned to an M9 stand.</p>
30	4110 - Sugar Maple Association	Sawtimber Well	18.1	100	111-140	<p>Large hardwood log stand. Average of 130 BA. Ironwood and maple saplings filling in smaller holes otherwise there is a pretty uniform canopy across the stand. Some upland cedar found within the north half. White spruce/fir saplings around some of the edges.</p> <p>OPIC - FMD: Cut in 2003 by Sanville under permit # 022-00-01. Scattered upland cedar. High percentage of 12" sawlogs.</p>
31	6120 - Lowland Cedar	Poletimber Well	123.2	102	111-140	<p>Large stand very dense to cedar. Some Black spruce, fir, and hardwood species mixed around the edges. Patches of fir saplings/poles and areas with more dense fir understory or filling in canopy gaps. Very wet.</p> <p>OPIC - FMD: OI Stand Year Origin was 1916</p>
32	4134 - Aspen, Spruce/Fir	Poletimber Medium	8.1	90	51-80	<p>Very old aspen stand, around 90 years old. Fir growing in patches otherwise fairly open understory in areas except for fir seedlings.</p> <p>OPIC - FMD: Narrow 2 chain wide dry ridge that regenerated to aspen and birch after a fire. The stand is converting naturally to a fir stand.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
33	4130 - Aspen	Sapling Well	53.8	27	Immature	Aspen sapling stand with scattered fir. OPIC - FMD: A3, 2-4" dbh, 10-20' tall. A few sparse areas but still fully stocked.
34	42340 - Upland Spruce/Fir	Poletimber Well	7.7	48	81-110	Dense conifer stand. Majority is 48 years old with larger much older (85+) remnant spruce/fir scattered within. Fir is being hit by budworm. Very dense understory with aspen saplings around the edges. OPIC - FMD: SCA Former site of the Escanaba River CCC camp. Stand consists of the camp spruce plantings with fir and aspen volunteers. Retain for historic and recreational purposes.
35	4110 - Sugar Maple Association	Poletimber Well	13.4	95	81-110	Very little diversity, dense to sugar maple log stand. A majority of the trees are larger diameter (14"+) and poorer quality. Large snags are found scattered across the stand. Very dense ironwood sapling understory. Average BA of 120+ across most of the stand, fairly closed canopy with stressed pole/log trees. A couple of canopy gaps, originally 50'-60' in diameter were observed that are growing in. These few gaps did have good maple regeneration which is out-competing the ironwood saplings in these areas. The only maple regeneration is in gaps or small holes in the canopy. OPIC - FMD: Manage with the stand to the north. Last treated in 1997-1998. Still a pole stand but moving toward M9. Better maple regeneration in this stand. Contains a small patch of white pine sawtimber on the south edge.
36	4134 - Aspen, Spruce/Fir	Poletimber Well	10.3	62	81-110	Old declining aspen stand. Mixed age classes across stand. After the 300' river buffer there is approximately 3 acres of this stand left which could be combined with adjoining aspen stands in the future for harvest but will be retained for now. OPIC - FMD: SCA Overmature poor quality aspen with a mix of fir, black spruce, soft maple and white birch. Scattered red and white pine. This stand will be retained as a riparian buffer along the West Branch of the Big West Branch of the Escanaba River.
38	4130 - Aspen	Poletimber Well	28.2	44	81-110	Healthy aspen pole stand. More of an open understory in the west half turning to dense fir in the east. Some larger fir and cedar mixed in the far east 1/3 of this stand with some areas of softer ground. An old trail cuts across the middle from behind the monument on County Road 438. OPIC - FMD: Nice aspen pole stand.
39	6122 - Black Spruce	Poletimber Well	16.1	89	141-170	Healthy black spruce stand, good diameter trees. Very little cedar mixed in except for the southwest corner of this stand. OPIC - FMD: Almost a pure black spruce swamp with occasional white birch, cedar and balm.
40	4130 - Aspen	Poletimber Well	46.8	38	81-110	Aspen pole stand, good quality, larger diameter trees for this age. Scattered patches of dense understory spruce/fir. A couple small patches contain smaller diameter trees. There are a few small bogs/alder patches (mainly in the east half) with some white pine and black spruce poles that should be excluded from future harvests. A small 1 acre maple log patch is found in the center of the stand. OPIC - FMD: 3-5" dbh well stocked aspen over fir.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	6120 - Lowland Cedar	Poletimber Well	83.8	116	51-80	Fairly open canopy cedar stand in the south with a dense alder understory otherwise dense cedar with tamarack and black spruce speckled within. Larger diameter cedar. A "T" stand (18) was delineated out from this original cedar stand after inventory was completed. OPIC - FMD: Large, very well stocked cedar swamp. Part of the stand contains a higher fir and spruce component. The stand surrounds a small "island" of aspen.
42	4130 - Aspen	Sapling Well	44.6	24	Immature	Aspen stand nearly pole sized in most areas. Very little in the understory. Note upland stand but may have saturated ground year round as alder and tamarack saplings are found in the road across the stand. Finished cutting in 1995. OPIC - FMD: Aspen is doing well. 2-3" 10-20' tall.
43	4134 - Aspen, Spruce/Fir	Sawtimber Medium	6.4	97	51-80	Very old, large aspen with scattered snags. White birch is declining rapidly or dead already. Fairly open understory with scattered fir and aspen saplings, and hazel. This stand was determined to be accessible through an adjacent lowland tamarack stand. A Broad-winged hawk was observed but did not see any stick nests. This would be an excellent stand to leave for wildlife with the very old, large aspen and snags. OPIC - FMD: Isolated inaccessible island surrounded by cedar. Formerly designated as potential old growth. Proposed for removal from an SCA.
44	6120 - Lowland Cedar	Poletimber Well	30.9	91	141-170	Solid to cedar except for around the edges there are other species mixed in. Very wet. OPIC - FMD: Large stand with occasional "islands" of black spruce, fir, aspen.
45	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	90.5	103	111-140	Lowland conifer stand. Ranges across stand from dense veins of black spruce, tamarack, cedar, and areas with everything mixed in. Tamarack ranges from 80-100+ years old, older in the south along the road where it is also declining. Very wet and difficult to access ground. OPIC - FMD: Dense mixed swamp conifers with tamarack over scattered black spruce, fir and tag alder. Scattered aspen and white birch. Very wet.
48	4134 - Aspen, Spruce/Fir	Sapling Well	14.9	28	Immature	Aspen sapling stand. Some low ground areas with alder scattered across the stand. Dense patches of fir within. OPIC - FMD: Well stocked aspen 1-3" dbh 10-20' tall.
60	4137 - Aspen, Birch	Sapling Well	19.8	18	Immature	Fairly diverse sapling stand with scattered remnant pine. White pine saplings found within. OPIC - FMD: Scattered white pine and red pine over small A1 patches and raspberry.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	6122 - Black Spruce	Poletimber Well	1.1	64	81-110	Lowland black spruce. Multiple borings averaged age at 64 years old, note old inventory put this stand at 85 years old. Connected stand in adjoining compartment may be older?... OPIC - FMD: Black Spruce swamp pocket.
62	42210 - Natural Red Pine	Sawtimber Well	2.2	103	201+	Natural red pine stand on south facing slope. Average of 220 BA with 16" diameter trees. Conifer poles in understory. OPIC - FMD: Beautiful red and white pine growing on a steep sidehill. Small fir in the understory.
66	4319 - Mixed Upland Forest	Sawtimber Well	2.1	66	81-110	Very diverse mix. Dense fir under story. White birch is beginning to decline. Age based off of majority species with much older remnant pine/hemlock scattered within. Could be harvested with adjoining compartment in the future. OPIC - FMD: Nice white and red pine growing on a steep sidehill. A continuation of the same ridge as stand 62. Occasional white birch pole. Small fir in the understory.
67	4199 - Other Mixed Upland Deciduous	Poletimber Well	9.1	85	111-140	Birch is declining and may not make it until the next YOE. North facing slope stand. Maple poles and saplings abundant, could remove white birch to easily convert to hardwood stand. Birch is more dominant in the east half but also has more dense patches of maple saplings east. Maple seedlings scattered in areas. OPIC - FMD: Cut under permit #020-00-01 removing spruce/fir and aspen. Overstory birch is moderately healthy. The stand continues to slowly convert to hardwoods.
71	6124 - Lowland Spruce- Fir	Poletimber Well	8.2	20	1-50	Most of this stand has fallen apart except some longer lived species. Black ash and fir is regenerating well across most of the stand and in any openings. OPIC - FMD: SCA A5P4B4 Similar to stand 63 but contains less fir and leans heavier toward a P4B4 stand. Formerly designated as potential old growth. The understory ranges from F2 to L.
72	4130 - Aspen	Sapling Well	4.0	18	Immature	Aspen sapling stand. Alder drainage cuts across the bottom of this stand. OPIC - FMD: Cut under permit # 021-00-01. Dense, fully stocked stand.
76	6115 - Lowland Ash	Poletimber Well	8.9	68	81-110	Black ash ranging from larger diameter in the south half to more poles/saplings in the north half. The north half has spruce/fir and some other hardwood species mixed in. Southern tip is more dense to cedar/black spruce. OPIC - FMD: Small black ash swale with an occasional aspen and white birch.
78	6122 - Black Spruce	Poletimber Well	3.7	85	111-140	Solid black spruce with scattered cedar and some white birch around the edges. Small, dense patch of cedar in northwest tip. OPIC - FMD: Almost a pure black spruce swamp with occasional white birch and cedar.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	4130 - Aspen	Poletimber Well	20.6	43	81-110	<p>Healthy aspen stand with very dense fir under story across a majority of the stand. Lowland species mixed on edges. Remnant aspen and white spruce speckled across the stand. A small gravel site (growing in) is located in the center of this stand on the south edge of County Road 438.</p> <p>OPIC - FMD: Has grown into a fully stocked A6 stand 5-7" dbh 1-2 sticks tall. Understory is A3 over F1.</p>
82	4112 - Maple, Beech, Cherry Association	Sapling Well	3.5	30	81-110	<p>Dense maple sapling/pole stand. BA averages less than 100 with scattered merchantable poles and large remnant hardwoods mixed in. Reevaluate to merge with adjoining hardwood stands in future.</p> <p>OPIC - FMD: Well stocked sugar maple sapling stand resulting from an earlier wildlife cutting. Will soon be transitioning to a pole stand.</p>
84	6124 - Lowland Spruce-Fir	Sapling Well	3.9	36	1-50	<p>Dense to black spruce saplings. Did not see any cedar regeneration above the snow. OPIC - FMD: Cedar strip cuttings that have regenerated to black spruce, fir, Balm, white birch, a few white pine over tag alder. Birch and balm is 10'-18' tall, black spruce 6'-15' tall, fir 4'-8'. Could not find any cedar regeneration.</p>
88	4130 - Aspen	Sapling Well	31.0	18	Immature	<p>Fully stocked aspen sapling stand. Remnant dead/declining white birch within, more dense in patches. A three acre birch stand on the east edge was merged with this stand. The birch stand was a failed seed tree attempt and has a nearly fully stocked understory of aspen and fir saplings. Scattered fir saplings mixed across the stand. OPIC - FMD: Cut under permit # 019-00-01. Stand has regenerated nicely and is 6-12' tall. Formerly part of stand 58.</p>
89	4130 - Aspen	Sapling Well	4.4	18	Immature	<p>Aspen sapling strip stand with fir mixed in and some black spruce regen on the north edge.</p> <p>OPIC - FMD: Cut under permit #020-00-01, this stand was originally a strip of aspen included in stand 67 along ecotone between the upland white birch and black spruce lowlands.</p>
405	4319 - Mixed Upland Forest	Sapling Well	1.5	25	1-50	Grown in opening.
407	42340 - Upland Spruce/Fir	Poletimber Medium	2.0	25	1-50	Grown in opening.



Stand	Cover Type	Acres	Managed Site	General Comments:
9	6220 - Alder/willow	183.6	No	Riparian zone for the West Branch Escanaba River. Mainly alder/cattail with black spruce and swamp conifer around the edges. Very wet. OPIC - FMD: SCA Retain as a riparian zone to protect the wetland and wildlife values and travel corridor along the West Branch of the Big West Branch of the Escanaba River. Primarily tag alder with an occasional clump of swamp conifers.
402	310 - Herbaceous Openland	2.2	No	Large opening with fir saplings around edges and raspberry patches scattered across.
403	310 - Herbaceous Openland	2.7	Yes	Long opening with a few patches of saplings. OPIC - FMD: Created in 1975. Last mowing was in 1989.
404	310 - Herbaceous Openland	1.8	Yes	Opening with a couple of cherry and aspen saplings.
406	310 - Herbaceous Openland	1.7	Yes	Opening with very little woody veg regen.
410	310 - Herbaceous Openland	5.9	Yes	CCC opening. Growing in with spruce/fir, aspen, and cherry.
412	310 - Herbaceous Openland	0.7	Yes	Opening seeding in with numerous sapling species.