



# Compartment Review Presentation

## Escanaba Forest Management Unit

Compartment 33092

Entry Year 2020

Acreage: 1,268

County Delta

Management Area: Dead Horse Moraines

**Revision Date:** 2018-06-25

**Stand Examiner:** Dan Racine

**Legal Description:**

T43N-R22W Sections 4, 9, 16

**Identified Planning Goals:**

The majority of the cover types within this compartment are lowland. The major lowland cover type is cedar. Northern hardwood and aspen are the major upland cover types. The treatments within this compartment are in the upland areas outside the cedar cover type and designed to regenerate the existing overstory species.

**Soil and topography:**

Topography is gently rolling. Major soils found within this compartment are Trenary and Deford loams on the uplands with Cathro and Carbondale mucks in the lowland.

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

Compartment is surrounded by state land. There is some corporate ownership located within this area.

**Unique Natural Features:**

Deadhorse creek.

**Archeological, Historical, and Cultural Features:**

None.

**Special Management Designations or Considerations:**

None.

**Watershed and Fisheries Considerations:**

NLMMU: The northern region of this compartment contains waterbodies which serve as tributaries to the Rapid River (Deadhorse Creek), as well as to the Tacoosh-Whitefish River (Unnamed waterbodies) watersheds. Both waterbodies are designated Type 1 trout streams less than 50' width. 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.

Southern regions of this compartment contain unnamed waterbodies which serve as a tributary to the Rapid River watershed. The unnamed waterbody is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the unnamed waterbody in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffer is recommended to protect these areas in accordance

**Wildlife Habitat Considerations:**

- Majority is cedar swamp/mixed swamp conifer. Valuable winter cover. Deadhorse Deer Winter Complex and associated management plan objectives will be an emphasis when evaluating forest treatments within this compartment.
- One-third is northern hardwoods and aspen. Anticipate selection cuts in this type. WLD staff will encourage retention of varied species for wildlife habitat value (ex; birch).
- Stands along the Rapid River have been retained to promote mature forest conditions (cavity trees, dead woody debris) and a riparian corridor. Mature forest providing benefit to wildlife.
- 2 grass openings are reasonably accessible to the public and resource managers (WLD Managed).

**Mineral Resource and Development Concerns and/or Restrictions**

The nearest active sand/gravel pit is located more than four miles away. Sand & gravel potential within the compartment appears to be minimal. There is limestone potential, but much of the compartment is covered by wetlands, which could inhibit development. No economic oil and gas production has been found in the UP. This area has not been previously leased or explored for metallic minerals, but areas to the south were previously explored for iron ore. Potential for

development of metallic minerals here is considered low.

**Vehicle Access:**

Access into the north end of compartment is good via the Deadhorse Creek Road. The public access into sections 4 and 16 is limited because of private ownership.

**Survey Needs:**

No survey corners will be required for this treatment period.

**Recreational Facilities and Opportunities:**

Hunting and trapping.

**Fire Protection:**

No hazard fuels in this area.

**Additional Compartment Information:**

- ◆ Cover Type by Age Class
- ◆ Cover Type by Management Objective
- ◆ Compartment Volume Summary
- ◆ Proposed Treatments – No Limiting Factors
- ◆ Proposed Treatments – With Limiting Factors
- ◆ Base feature information, stand numbers, cover types
- ◆ Proposed treatments
- ◆ Proposed road access system

**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**

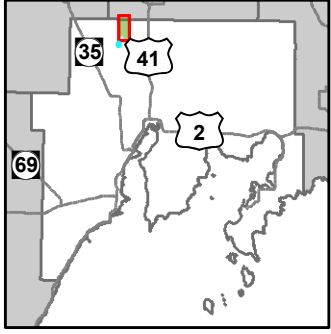
**The following information is displayed, where pertinent, on the attached compartment maps:**

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

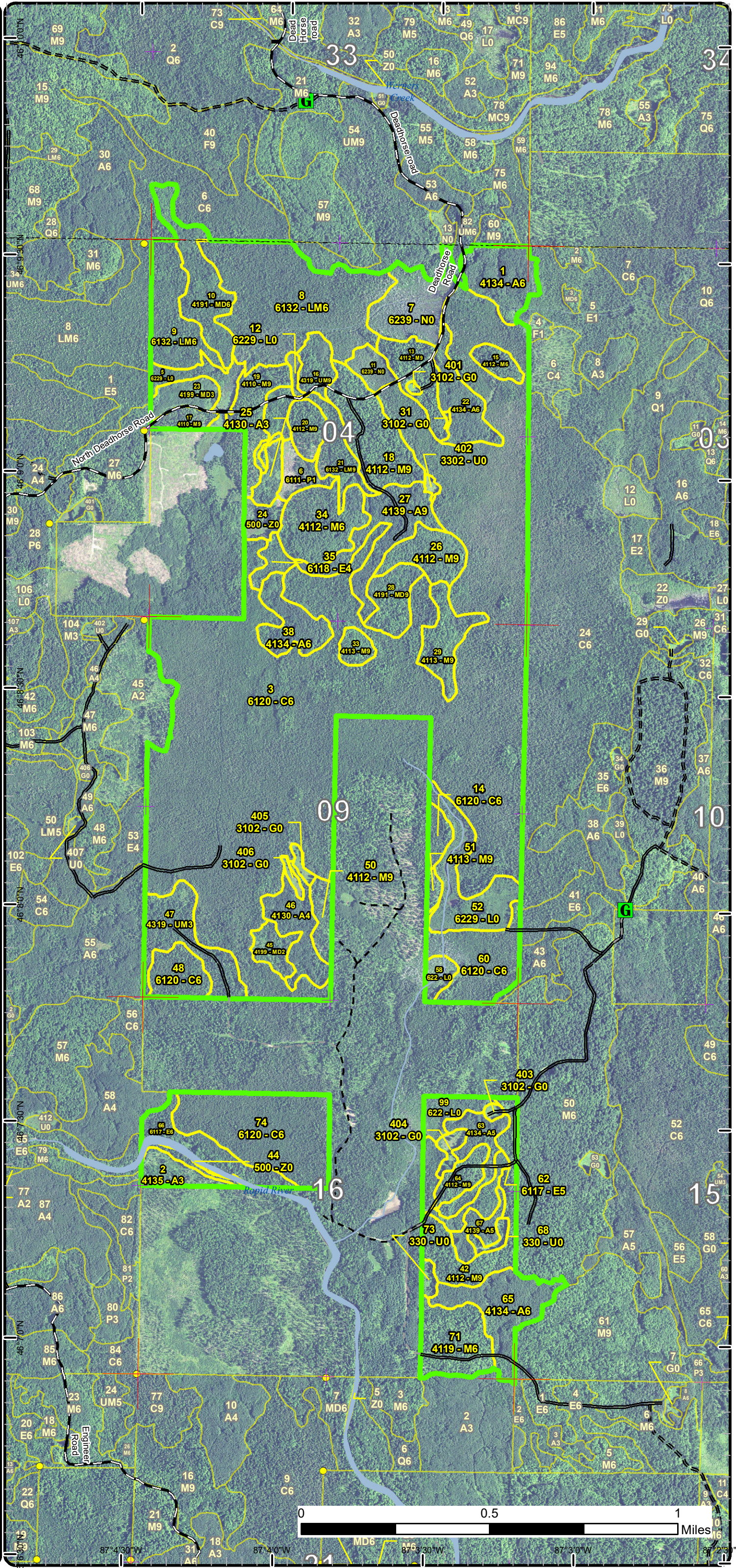


# Stand Boundary Map

Compartment: 92  
 T41N - R22W Sec. 22-26  
 County: Delta  
 Unit: Escanaba  
 Mgmt Area: Dead Horse Moraines  
 YOE: 2020  
 Acres: 1,268 GIS Calculated  
 Examiner: Dan Racine  
 Map Revised: 6/26/2018  
 Map Phase: Pre-Review



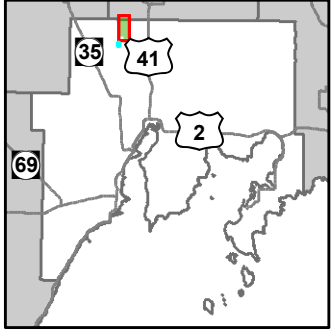
- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ▭ Compartment Boundary
- ▭ Stand Boundaries
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



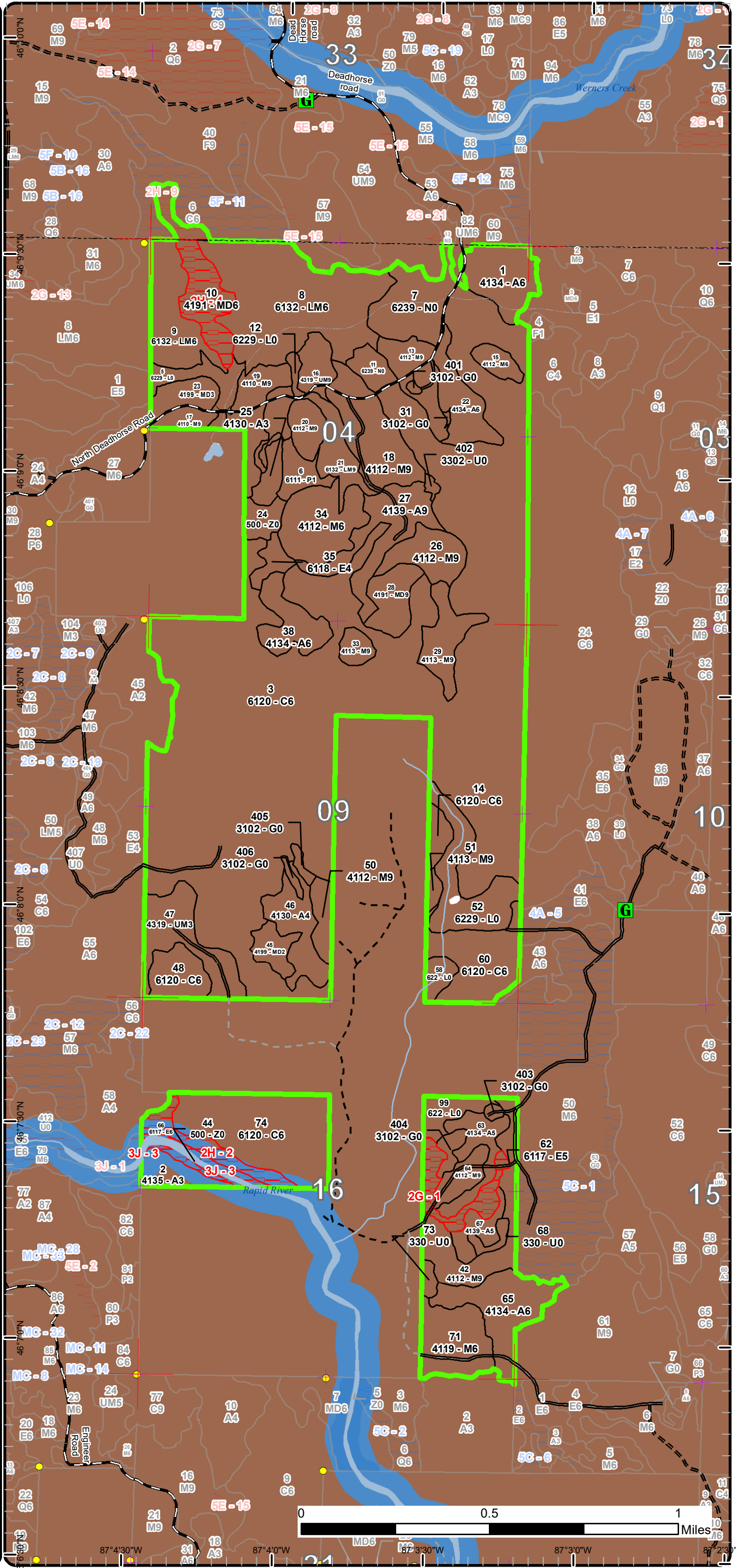
87°4'30"W 87°4'0"W 87°3'30"W 87°3'0"W  
 46°6'30"N 46°7'0"N 46°7'30"N 46°8'0"N 46°8'30"N 46°9'0"N

# Special Conservation Areas & Site Conditions Map

Compartment: 92  
 T41N - R22W Sec. 22-26  
 County: Delta  
 Unit: Escanaba  
 Mgmt Area: Dead Horse Moraines  
 YOE: 2020  
 Acres: 1,268 GIS Calculated  
 Examiner: Dan Racine  
 Map Revised: 6/26/2018  
 Map Phase: Pre-Review



- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Compartment Boundary
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Deer Winter Range
- Riparian Area



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	14	0	0	91	19	25	0	0	0	0	0	0	0	0	0	0	0	148
Cedar	0	0	0	0	0	0	0	0	0	5	0	543	38	0	0	0	0	0	586
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Aspen/Balsam Poplar	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Deciduous	0	0	0	0	0	0	5	0	0	0	32	0	0	0	0	0	0	0	37
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	89	23	0	0	0	0	0	0	112
Lowland Shrub	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Marsh	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Mixed Upland Deciduous	0	9	7	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	51
Northern Hardwood	0	0	0	0	0	0	0	2	146	0	0	0	0	0	0	0	0	45	193
Upland Mixed Forest	0	0	23	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	31
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
<b>Total</b>	<b>101</b>	<b>31</b>	<b>30</b>	<b>0</b>	<b>91</b>	<b>19</b>	<b>30</b>	<b>0</b>	<b>2</b>	<b>194</b>	<b>32</b>	<b>632</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>1267</b>



## Report 2 – Treatment Summary

Escanaba Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 92

Total Compartment Acres: 1,268

Commercial Harvest - 93  
 Harvests with Site Condition - 0  
 Next Step Harvest - 0  
 Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	39	0	0	0	0	0	0	0	0	39
Mixed Upland Deciduous	12	0	0	0	0	0	0	0	0	12
Northern Hardwood	5	31	0	0	0	0	0	0	0	36
Upland Mixed Forest	0	0	0	0	7	0	0	0	0	7
<b>Total</b>	<b>56</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	93	0	0	0	0	0	0	9	0	102
Next Step	0	0	0	0	0	93	0	0	0	93
<b>Total</b>	<b>93</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>195</b>



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	33092001-Cut	14.4	4134 - Aspen, Spruce/Fir	Poletimber Well	42	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u>			Clearcut with retention: Cut all trees 3 inches and greater except leave any cedar found. Retention will be the south part of stand along the drainage and the timber to the south of the drainage. A minimum 100 foot buffer will be left off the Deadhorse creek.								
<u>Specs:</u>											
<u>Next Step</u>			Monitoring, Natural Regen (Re-Inventry)								
<u>Treatments:</u>											
<u>Acceptable Regen:</u>			Aspen, Balm, Mixed conifers and any mix of the existing overstory species.								
<u>Other Comment:</u>			A 300 foot buffer is not required in this location but follow the treatment line and a greater than 100+ foot buffer will be left. Harvest this stand to distribute the age classes of aspen. Several stands exist within the age range of this stand within this compartment.								
<u>Proposed Start Date:</u>			10/01/2019								
16	33092016-Cut	6.5	4319 - Mixed Upland Forest	Sawtimber Well	81	81-110	Harvest	Shelterwood with Retention	4319 - Mixed Upland Forest	Two-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u>			Shelterwood with retention: Harvest the treatment area of this stand leaving all hemlock and cedar. The northern portion is smaller diameter and will be left off the sale. The harvest should include additional leave trees focusing on leaving red maple and large diameter yellow birch in the highest density hemlock areas. This harvest is enhancing the maple and existing upland conifer regeneration within this stand.								
<u>Specs:</u>											
<u>Next Step</u>			Monitoring, Natural Regen (Re-Inventry)								
<u>Treatments:</u>											
<u>Acceptable Regen:</u>			Maple, mixed upland conifers								
<u>Other Comment:</u>			There is smaller diameter maple, balm, and paper birch in the portion of the stand left off the treatment area. The treatment area is limited in maple regeneration.								
<u>Proposed Start Date:</u>			10/01/2019								
26	33092026-Cut	14.1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	81	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u>			Selection: Selection harvest this down to residual BA of approximately 70 creating canopy gaps where feasible. This stand is being harvested to enhance the existing stand quality and create an opportunity for maple regeneration.								
<u>Specs:</u>											
<u>Next Step</u>			Monitoring, Natural Regen (Re-Inventry)								
<u>Treatments:</u>											
<u>Acceptable Regen:</u>			Maple and any mix of the existing overstory species.								
<u>Other Comment:</u>											
<u>Proposed Start Date:</u>			10/01/2019								
27	33092027-Cut	24.5	4139 - Aspen, Mixed Deciduous	Sawtimber Well	53	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u>			Clearcut with retention: Cut all trees 3 inches and greater dbh except leave any cedar if found and leave retention along the boundary. This treatment is designed to maintain the aspen component and continue to diversify the age distribution of aspen within the management area.								
<u>Specs:</u>											
<u>Next Step</u>			Monitoring, Natural Regen (Re-Inventry)								
<u>Treatments:</u>											
<u>Acceptable Regen:</u>			Aspen, maple and mixed upland conifer species.								
<u>Other Comment:</u>											
<u>Proposed Start Date:</u>			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
28	33092028-Cut	12.2	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	81	81-110	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Proposal

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

Prescription Clearcut with retention: Cut all trees 3 inches and greater except leave the cedar, hemlock and yellow birch. Leave retention along the boundary line. This harvest will benefit a food source in a deer winter complex area and allow for age class diversity.

Specs:

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

Acceptable maple, aspen, balm, mixed conifer species.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2019

31	33092031-NF	0.3	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.

Specs:

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2019

33	33092033-Cut	4.7	4113 - R.Maple, Conifer	Sawtimber Well	83	111-140	Harvest	Clearcut	4319 - Mixed Upland Forest	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clearcut: Cut all trees 3 inches and greater dbh except do not cut any hemlock. This stand harvest will be a food source for deer in the obligate deer range. The harvest should regenerate to maple and mix of the overstory species.

Specs:

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

Acceptable Maple, mixed conifers and any mix of the existing overstory species.  
Regen:

Other The access to stand 33 will require a skid trail through stand 3. Cedar may be required to harvest to access this stand. The cedar will be scaled  
Comment: separate and the cedar spec will be applied for the additional trees removed from harvest area.

Proposed Start Date: 10/01/2019

34	33092034-Cut	17.0	4112 - Maple, Beech, Cherry Association	Poletimber Well	81	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Selection: Harvest all aspen, ash, and additional trees to retain approximately 70 Basal area. Create canopy gaps where feasible. This harvest will enhance the stand quality and create potential for additional hardwood regeneration.

Specs:

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

Acceptable Maple and any mix of the overstory species represented.  
Regen:

Other  
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
401	33092401-NF	0.6	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal											
<u>Specs:</u> of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.											
<u>Next Step</u> <u>Treatments:</u>											
<u>Acceptable</u> <u>Regen:</u>											
<u>Other</u> <u>Comment:</u>											
Proposed Start Date: 10/01/2019											
403	33092403-NF	1.1	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal											
<u>Specs:</u> of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.											
<u>Next Step</u> <u>Treatments:</u>											
<u>Acceptable</u> <u>Regen:</u>											
<u>Other</u> <u>Comment:</u>											
Proposed Start Date: 10/01/2019											
404	33092404-NF	3.4	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal											
<u>Specs:</u> of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.											
<u>Next Step</u> <u>Treatments:</u>											
<u>Acceptable</u> <u>Regen:</u>											
<u>Other</u> <u>Comment:</u>											
Proposed Start Date: 10/01/2019											
405	33092405-NF	1.8	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal											
<u>Specs:</u> of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.											
<u>Next Step</u> <u>Treatments:</u>											
<u>Acceptable</u> <u>Regen:</u>											
<u>Other</u> <u>Comment:</u>											
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
406	33092406-NF	1.4	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal  
Specs: of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2019

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**Total Treatment  
Acreage Proposed: 102.0**

## Report 4 – Site Conditions

Escanaba Mgt. Unit  
Dan Racine : Examiner

Compartment: 92  
Year of Entry: 2020

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	2G	2H	3J
		With Condition	Not Available				
149	149	0	0	Aspen			
586	586	0	0	Cedar			
9	9	0	0	Herbaceous Openland			
6	6	0	0	Low-Density Trees			
8	8	0	0	Lowland Aspen/Balsam Poplar			
36	5	0	31	Lowland Deciduous	12	12	8
112	112	0	0	Lowland Mixed Forest			
50	50	0	0	Lowland Shrub			
28	28	0	0	Marsh			
51	28	0	23	Mixed Upland Deciduous		23	
194	194	0	0	Northern Hardwood			
31	31	0	0	Upland Mixed Forest			
8	7	0	0	Water			0
1,268	1,214		54	Total Forested Acres	12	35	8
	96%		4%	Relative Percent			

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Potential to harvest at least some portions when stand 58 in compartment 91 is prescribed.							

**Report 4 – Site Conditions**

**Escanaba Mgt. Unit**  
**Dan Racine : Examiner**

**Compartment: 92**  
**Year of Entry: 2020**

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	17	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
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Comments

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**Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

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

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4134 - Aspen, Spruce/Fir	Poletimber Well	19.0	42	81-110	Mixed stand with lowland drainage to the south with tag alder and black ash and dbh range from 6-10 inches on the aspen. East side of stand is almost pure aspen, West side contains more fir.
2	4135 - Aspen, Cedar	Sapling Well	8.7	2	Immature	This stand was cut as a supplement to the Bourdeau Creek Hardwoods sale completed in 2016.
3	6120 - Lowland Cedar	Poletimber Well	495.3	108	81-110	Poor quality Cedar. Some areas are heavier to ash, R. maple Mix, others have a mix of spruce and Tamarack. There are high knobs of fir, White birch and R. Maple but they are scattered and would not be feasible to cut. This area is best left alone for wildlife cover.
6	6111 - Lowland Balsam Poplar	Sapling Poor	8.4	5	Immature	Cut under Plum Creek ownership estimating 5 years of age. Allow to fill in with additional balm and balsam fir. Potential plant to spruce if its not continuing to become fully stocked. Mix between 0-25 and 25-50% cover type for now.
8	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	70.5	108	51-80	OI Stand Year Origin was 1910. Trace amount of Tamarack in the overstory.
9	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	23.3	118	81-110	OI Stand Year Origin was 1900. Same data for stand 8 and 9. There are a couple small upland islands.
10	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	22.8	81	81-110	Not the best quality, crooked, stunted, yellow birch is dying. Access is tough. Have to go through approx. 1/2 of a 40 of Cedar to get to it. Pockets of lowland Ash here. Stand is blocked by physical obstruction.
13	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.6	81	51-80	Treated in 2013 under contract 330031001, Newborn Fawn Sale. Trace amounts of hemlock and black ash in the overstory. The paper birch and yellow birch is a mix of pole sized and 10-20 feet.
14	6120 - Lowland Cedar	Poletimber Well	5.1	87	81-110	
15	4112 - Maple, Beech, Cherry Association	Poletimber Well	5.3	83	51-80	2020 Inventory comments: This is an island stand within cedar deer winter complex. There is currently regeneration here but moving to an F stand. Can treat now with stand 1 but best is to wait until existing red maple is beyond deer browse. Other option is to let it go and convert to F type. Previous timber sale harvest comments=> This stand was cut and added as a supplement to the 93 North Deadhorse sale in compartment 93. This stand was accessed through the cedar swamp to get into the 93 North Deadhorse sale. A diameter limit spec used to harvest.
16	4319 - Mixed Upland Forest	Sawtimber Well	8.3	81	81-110	Heavy to hemlock on west side of stand. Heavy understory of fir. This stand is moving to an upland conifer stand. Clearcut to enhance the maple regeneration.
17	4110 - Sugar Maple Association	Sawtimber Well	5.0	81	51-80	This stand was cut under Plum Creek Ownership maybe about 5-10 years ago. Averaging about 60-80 BA roughly.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4112 - Maple, Beech, Cherry Association	Sawtimber Well	27.2	81	51-80	Treated in 2013 under contract 330031001, Newborn fawn sale. Some pockets of hemlock within stand. Previous inventory comments: This stand could be a good candidate for underplanting of hemlock and pine. Before any planting check soils and Kotar Habitat type to see if feasible. Wildlife Division will decide if they want to plant this area, if they do they will fill out FTP and consult with FMFM on how to plant.
19	4110 - Sugar Maple Association	Sawtimber Well	15.6	81	81-110	Treated in 2013 under contract 330031001, Newborn Fawn Sale. This stand may be ready next treatment period.
20	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.9	81	51-80	Treated in 2013 under contract 330031001, Newborn Fawn sale. Averages about 80-100 BA. The aerial imagery depicts the location of the previous land ownership harvest on the southern portion. This area is a little less BA.
21	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	18.3	103	81-110	OI Stand Year Origin was 1925. About 40% of the stand is hemlock and cedar with an additional 15% older wildlife tree yellow birch. This stand is a drainage and within the deer winter complex.
22	4134 - Aspen, Spruce/Fir	Poletimber Well	15.3	36	81-110	I had ages from 32-26. Used the 36 age here. This stand is not ready yet but should be next treatment period.
23	4199 - Other Mixed Upland Deciduous	Sapling Well	8.7	8	Immature	This stand was cut under Plum Creek Ownership about 5-10 years ago.
25	4130 - Aspen	Sapling Well	5.7	5	Immature	This stand was harvested under previous Plum Creek Ownership.
26	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.1	81	81-110	This stand was harvested in 1992.
27	4139 - Aspen, Mixed Deciduous	Sawtimber Well	24.5	53	81-110	Some scattered cedar on the edge of stand. Leave retention along the boundary of 3-10% of the stand acreage.
28	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	12.2	81	81-110	The residual Maple, Cedar, Hemlock is older than the Aspen and fir. The stand is very mixed with red maple, black ash, balm, aspen, yellow birch, trace black spruce, cedar, balsam fir, hemlock. Hard to pick a dominate species but go with red maple.
29	4113 - R.Maple, Conifer	Sawtimber Well	14.2	81	81-110	
33	4113 - R.Maple, Conifer	Sawtimber Well	4.7	83	111-140	South end contains some aspen and Balsam fir. Quality of hardwoods is not that good. Access is about 3-4 chains through the cedar.
34	4112 - Maple, Beech, Cherry Association	Poletimber Well	23.9	81	81-110	The area being treated is previous state land ownership.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6118 - Lowland Deciduous with Cedar	Poletimber Poor	4.9	55	1-50	BLACK ASH WILL NEVER AMOUNT TO MUCH. LOTS OF DEAD STANDING CEDAR AND LOWLAND BRUSH. COULD BE CALLED LOWLAND BRUSH(L0).
38	4134 - Aspen, Spruce/Fir	Poletimber Well	14.8	36	1-50	Aged one aspen at 47 but overall 36 years old. The north end is heavy to 5-7 inch red maple, balsam fir, paper birch, scattered aspen. SW portion is more of an F type and 6-9 inch aspen on East/Southeast.
42	4112 - Maple, Beech, Cherry Association	Sawtimber Well	23.2	81	51-80	There was previously noted a hawk nest found within this stand, along the edge of the U-type. Most likely a goshawk nest. Stand was cut to 70 BA under the sale name Boudreau Creek HDWD and was ready for sale closure on 02/18/2016.
45	4199 - Other Mixed Upland Deciduous	Sapling Medium	7.2	14	Immature	This stand was harvested during the winter of 2004 under contract #33-012-00-01 "Running Bobcat". Partially a C4-C5 with some hemlock left. Some stump sprouts of red maple, but deer are browsing it. Raspberries are heavy in places. Some balsam fir is filling in.
46	4130 - Aspen	Poletimber Poor	16.6	31	Immature	
47	4319 - Mixed Upland Forest	Sapling Well	22.7	14	Immature	This stand was harvested during the winter of 2004 under contract #33-012-00-01 "Running Bobcat". There was residual balsam fir left from harvest that is older but overall majority of stand age is regenerating species including a mix of the canopy. Hemlock is in very bad shape (tops are dying). Some thick clumps of balsam fir.
48	6120 - Lowland Cedar	Poletimber Well	12.2	118	81-110	OI Stand Year Origin was 1900. Cedar stand I looked at from the edge.
50	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.0	81	51-80	Stand was cut to 70 BA under the sale name Boudreau Creek HDWD and was ready for sale closure on 02/18/2016.
51	4113 - R.Maple, Conifer	Sawtimber Well	2.3	79	51-80	This stand was cut under bordeau creek hardwoods sale. Separated out due to treatment applied.
60	6120 - Lowland Cedar	Poletimber Well	26.1	110	81-110	
62	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	11.8	93	1-50	POOR-MAINLY BLACK ASH. POCKETS OF DEAD TIMBER TO THE NORTH.
63	4134 - Aspen, Spruce/Fir	Poletimber Medium	11.9	36	1-50	Stand was harvested in 1980's. Aspen and fir on the upland portions, lowland brush with scattered black ash on the lowland areas. South tip of stand is heavier to spruce-fir.
64	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.4	81	51-80	Stand was cut to 70 BA under the sale name Boudreau Creek HDWD and was ready for sale closure on 02/18/2016.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>65</b>	4134 - Aspen, Spruce/Fir	Poletimber Well	25.3	33	1-50	OI Stand Year Origin was 1985. The stand runs between 6 inches to 9 inches dbh. There are some lowland brush types within the stand area. There is some black ash, yellow birch along the edge and in minor amounts.
<b>66</b>	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	19.6	98	81-110	Stand along the Rapid River. Riparian corridor stand. Age from previous inventory I did not get age on black ash. Pockets of L type.
<b>67</b>	4139 - Aspen, Mixed Deciduous	Poletimber Medium	7.1	33	51-80	This stand is variable with lowland areas that are tag alder, red maple in places and aspen and balm. The cover type percentage is from 0-25 to 75 to 100 with mostly tag alder in the 0-25 percentage areas. There are a couple of spots with some 6-9 inch aspen.
<b>71</b>	4119 - Mixed Northern Hardwoods	Poletimber Well	21.4	81	51-80	Stand was cut to 70 BA under the sale name Boudreau Creek HDWD and was ready for sale closure on 02/18/2016. The stand is combined with what used to be stand 70. Old stand 70 did have more ash in places but overall more like stand 71. Treat it all next time stand gets cut.
<b>74</b>	6120 - Lowland Cedar	Poletimber Well	47.7	108	111-140	70% CEDAR AND BLACK ASH. SIGNIFICANT DEER ACTIVITY THROUGH THIS STAND.



Stand	Cover Type	Acres	Managed Site	General Comments:
5	6229 - Mixed lowland shrub	10.5	No	North Deadhorse Creek and flooded/shrub area.
7	6239 - Mixed Emergent Wetland	22.3	No	Beaver flooded area on the Deadhorse. Mostly dead Cedar.
11	6239 - Mixed Emergent Wetland	6.1	No	Its a flooded out area with dead timber and some scattered paper birch, willow, tag alder, buckthorn and cedar.
12	6229 - Mixed lowland shrub	1.8	No	
24	500 - Water	6.1	No	
31	3102 - Grass	0.3	Yes	Previous OPIC comments- FMD: W33664 - As a cooperative project with a local sportsmen club, these openings will be planted into a wildlife mix if funds and personnel are available. The two track will also be planted that connects these two openings. All forest certification rules and policies that apply will be followed. Yearly maintenance that consists of fertilizing, frost seeding in spring and mowing in August will be conducted if funds and personnel are available. In 2010, there was no interest from sportmen clubs to plant these openings. OI Stand Year Origin was
44	500 - Water	1.4	No	OPIC - FMD: "Rapid River"
52	6229 - Mixed lowland shrub	25.0	No	Old beaver flooding, lowland brush.
58	622 - Lowland Shrub	4.8	No	OPIC - FMD: OI Stand Year Origin was
68	330 - Low-Density Trees	2.7	No	Scattered trees similar to stand 73 with willows in the lower spots. Around perimeter, it is U-type with raspberry, some thistle, mixed forbs, and cherry.
73	330 - Low-Density Trees	2.3	No	: Seasonally wet. Some scattered trees of white spruce, balsam fir, red maple, balm and aspen. There is high and low spots. Low spots - willow/alder. High spots - strawberry, grasses, mixed forbs, thistle. Deer beds within this stand.
99	622 - Lowland Shrub	7.8	No	WET AREAS AND POOR-MAINLY BLACK ASH WITH DEAD TIMBER.
401	3102 - Grass	0.6	Yes	Previous Inventory comments: As a cooperative project with a local sportsmen club, this opening will be planted into a wildlife mix if funds and personnel are available. The two track will also be planted that connects this opening to a 0.5 acre opening that will be delineated out and planted also. W33664 - As a cooperative project with a local sportsmen club, these openings will be planted into a wildlife mix if funds and personnel are available. The two track will also be planted that connects these two openings. All forest certification rules and policies that apply will be followed. Yearly maintenance that consists of fertilizing, frost seeding in spring and mowing in August will be conducted if funds and personnel are available. In 2010, there was no interest from sportmen clubs to plant these openings.



Stand	Cover Type	Acres	Managed Site	General Comments:
402	3302 - Low Density Conifer Trees	1.1	No	This stand is filling in with balsam fir, spruce, tamarack. The stand will be an F stand some eventually.
403	3102 - Grass	1.1	No	Old food plot. Mostly grasses. Clumps of birdsfoot trefoil, ox-eyed daisies, trace of clover.
404	3102 - Grass	3.4	No	Old food plot. Grasses, birdsfoot trefoil, goldenrod?, thistle. Scattered trees similar to stand 73 and stand 68.
405	3102 - Grass	1.8	No	Believed to be previously planted into a rye field by private landowner. Old disk and drag located in southeast corner. Lots of F type filling into this stand. This will be an F type in the near future. Scattered balsam fir, maple, spruce, aspen on edge.
406	3102 - Grass	1.4	No	\Thistle, goldenrod?, hawkweed, ox-eyed daisies. Believed to be previously planted into a rye field by private landowner. Old disk and drag located in southeast corner. Lots of F type filling into this stand. This will be an F type in the near future. Scattered balsam fir, maple, spruce, aspen on edge.