



Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 33110

Entry Year 2019

Acreage: 120

County Delta

Management Area: Dead Horse Moraines

Revision Date: 2017-06-30

Stand Examiner: Jacob Siler

Legal Description:

Compartment 110: Section 15, T40N R23W, Delta County

Identified Planning Goals:

The proposed treatment within compartment 110 is a red pine thinning designed to enhance the existing stand quality.

Soil and topography:

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

Level to sloping. Soils range from poorly drained sands and loams in depressions on outwash plains and lake plains. Major soil series include Dawson and Greenwood peats, Kinross, Roscommon, Tawas and Emmet soils.

Unique Natural Features:

Reno Creek flows through this compartment.

Archeological, Historical, and Cultural Features:

None Known.

Special Management Designations or Considerations:

Rare plants along the Escanaba River not within the current compartment.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Ecological Context: This compartment is within a broad plain of loamy ground moraine. Historically the uplands were covered with northern hardwood forests of sugar maple, beech, hemlock, cedar, and yellow birch. Lowlands were swamps of cedar, tamarack, black spruce, or bog. Small knolls within wetlands were often dominated by hemlock and white pine. Wind throw was the most common natural disturbance regime. During the past 100 years much of this landscape was converted to agriculture. Aspen forest increased greatly and hemlock and white pine declined due to early-day logging practices.

Recommendations: A red pine thinning is the only treatment proposed.

Mineral Resource and Development Concerns and/or Restrictions

Compartment 110: Section 15, T40N R23W, Delta County

There is no known metallic mineral potential in this area, and there is no recent history of leasing. Limestone/dolostone potential appears to be good within the compartment due to shallow bedrock. Limestone quarries are located approximately one mile to the southwest and southeast of the compartment. Sand/gravel pits are also located in the area and there may be some potential for sand and gravel within the compartment. No economic oil and gas production has been found in the UP.

Vehicle Access:

The parcel of state land in Section 15 can be easily accessed by a good gravel road.

Survey Needs:

Property line establishment will be required for the proposed treatment.

Recreational Facilities and Opportunities:

Undeveloped recreational opportunities include canoeing, fishing, hunting and trapping.

Fire Protection:

In the event a fire should start in this area the access is attainable.

Additional Compartment Information:

The following reports from the Inventory are attached:

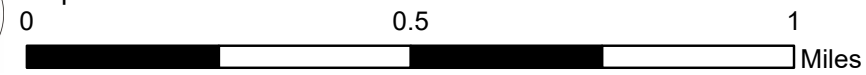
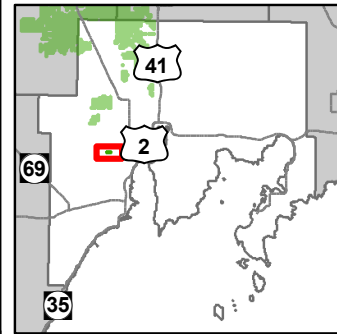
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

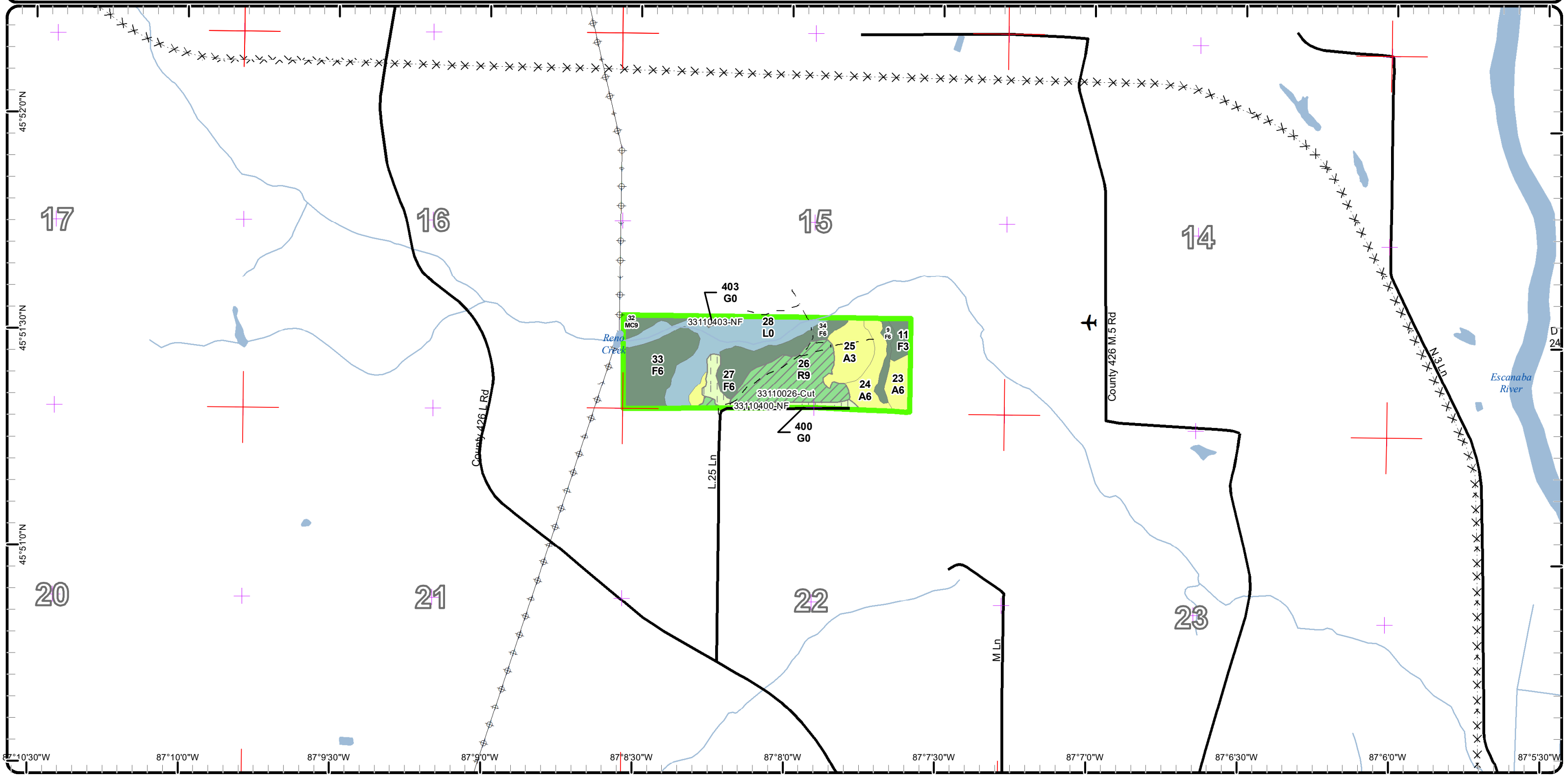
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 110
 T40N-R23W Sec. 15
 County: Delta
 Unit: Escanaba
 Mgmt Area: Dead Horse
 Moraines
 YOE: 2019
 Acres: 120 GIS Calculated
 Examiner: Jacob Siler
 Map Revised: 7/5/2017
 Map Phase: Web-Post

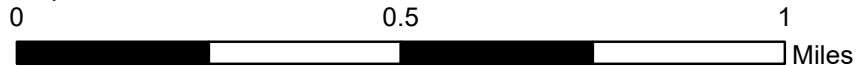
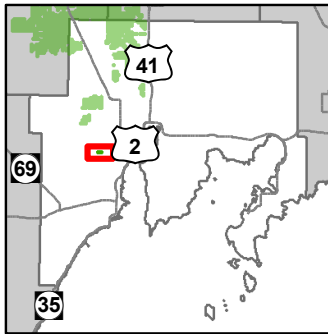


- Miris Corners
- + Remonumented Section Corners
- Counties
- ✈ Airport
- Paved Roads
- Poor Dirt Roads
- Abandoned Railroads
- Streams
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- Opening Maintenance
- Thinning (Crown, Low, Systematic)
- 413 - Aspen Types
- 421 - Planted Pines
- 423 - Other Upland Conifers
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- Lakes

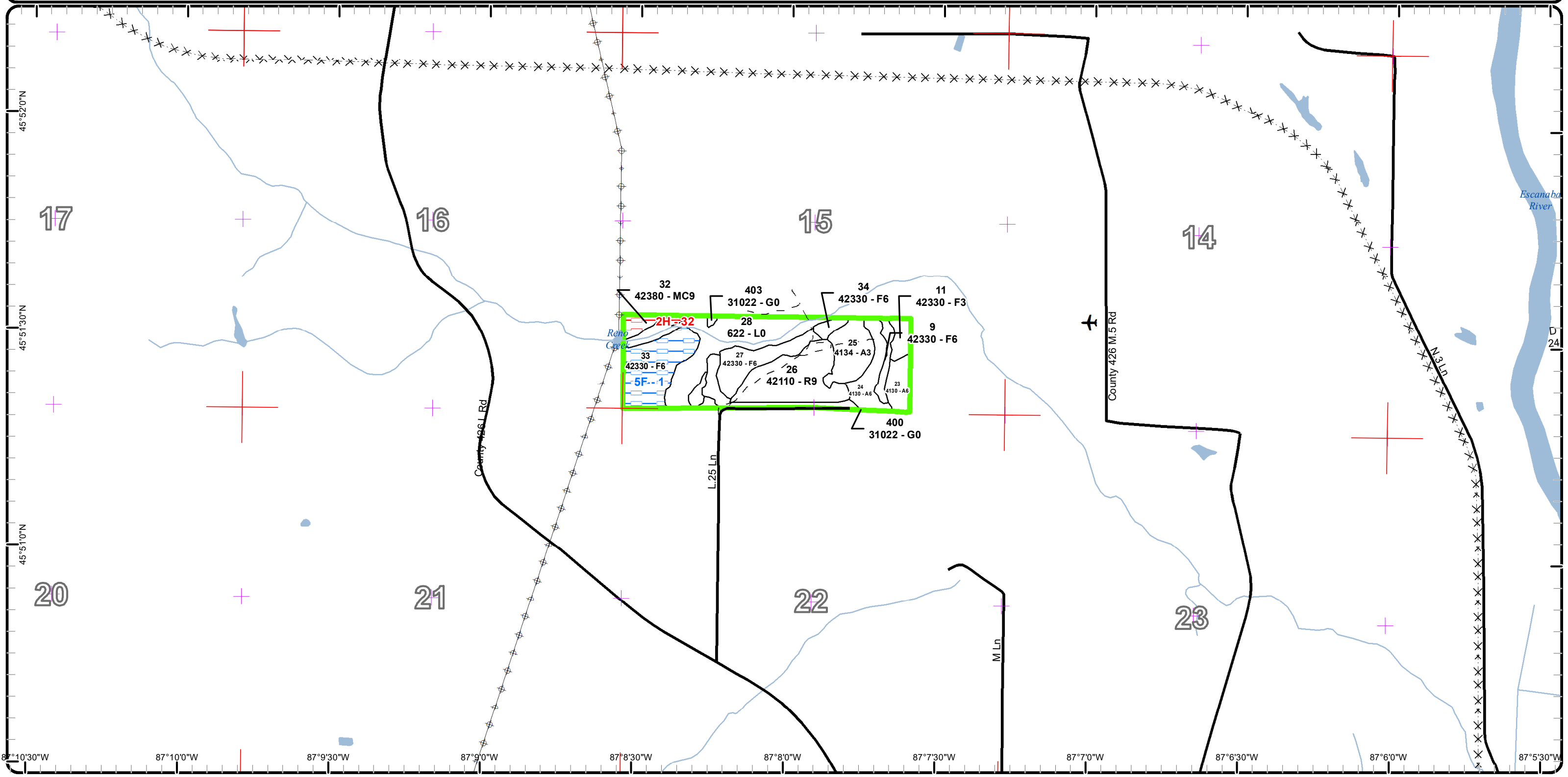


Special Conservation Areas & Site Conditions Map

Compartment: 110
 T40N-R23W Sec. 15
 County: Delta
 Unit: Escanaba
 Mgmt Area: Dead Horse
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- Miris Corners
- + Remonumented Section Corners
- Counties
- Airport
- Paved Roads
- Poor Dirt Roads
- ✕ Abandoned Railroads
- Streams
- Lakes and Rivers All
- ⊕ Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	10	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Red Pine	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
Upland Conifers	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Upland Spruce/Fir	0	0	0	0	35	0	2	0	0	0	0	0	0	0	0	0	0	0	37
Total	33	0	10	0	50	21	0	2	4	0	0	0	0	0	0	0	0	0	120



Report 2 – Treatment Summary

Escanaba Mgt. Unit

Year of Entry: 2019

Acres of Harvest

Compartment 110

Total Compartment Acres: 120

Commercial Harvest - 21
 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
Red Pine		0	0	0	0	21	0	0	0		21
	Total	0	0	0	0	21	0	0	0		21

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		21	0	0	0	0	0	0	7		28
	Total	21	0	0	0	0	0	0	7		28



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
26	33110026-Cut	21.3	42110 - Planted Red Pine	Sawtimber Well	47	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Retain approximately 100 to 110 BA throughout the stand.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

400	33110400-NF	6.7	31022 - Warm Season Grass	Nonstocked		Unspec ified	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: 10/01/2018

403	33110403-NF	0.4	31022 - Warm Season Grass	Nonstocked		Unspec ified	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: 10/01/2018

**Total Treatment
Acreage Proposed: 28.4**

Report 4 – Site Conditions

Escanaba Mgt. Unit

Jacob Siler : Examiner

Compartment: 110

Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5F	2H
		With Condition	Not Available			
25	25	0	0	Aspen		
7	7	0	0	Herbaceous Openland		
26	26	0	0	Lowland Shrub		
21	21	0	0	Red Pine		
4	0	0	4	Upland Conifers		4
36	19	18	0	Upland Spruce/Fir	18	
120	98	18	4	Total Forested Acres	18	4
	82%	15%	3%	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 Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5F: Evaluated for Forest Health Considerations	18	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This stand was evaluated for SBW. Any spruce and fir is located along Reno Creek and rest of stand is red maple. and aspen.							
32	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
	Potential Old Growth		SCA Removal	31
Comments Does not meet SCA criteria.				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
9	42330 - Upland Fir	Poletimber Well	3.0	34	1-50	<p>OPIC - FMD: This stand was harvested in 1983. Harvested under contract 43-80A, Reno Creek Aspen. This is the East slope of the ridge and contractor must have left a lot of 1 stick balsam. There is also some young aspen containing -12 sticks in this stand.</p> <p>Stand is mostly balsam fir saplings under sparse pole sized aspen, red maple and balsam fir. Trace amounts of cedar.</p>
11	42330 - Upland Fir	Sapling Well	3.4	32	Immature	<p>OPIC - FMD: Young balsam fir, spruce and some tamarack is also included.</p> <p>Stand is mostly high density balsam fir saplings with scattered pole sized trees. Trace amounts of cedar, balsam poplar and spruce.</p>
23	4130 - Aspen	Poletimber Well	5.4	32	81-110	<p>OPIC - FMD: Stand was cut in 1985 under permit #33-83-1 "Reno Creek Aspen".</p> <p>Basal area can be noted as variable with some areas having considerably more BA than others. East side of stand is wet with lots of tag alder, some small BF saplings and scattered aspen. The amount of red maple saplings is also variable with some areas having more sub-merchantable red maple than aspen. Red maple sapling percentage is factored in with the red maple pole percentage for canopy; Red maple sapling 10% red maple pole 2%</p>
24	4130 - Aspen	Poletimber Well	9.5	34	81-110	<p>OPIC - FMD: Stand was cut under permit 43-80A "Reno Creek Aspen" in 1983. Stand has variable BA. Southern half of stand has large amount of red maple saplings and less aspen. Northern half of stand has larger aspen and less red maple than southern half. Red maple sapling percentage is 20% of red maples 22% canopy cover. Trace amounts of white birch, cherry and northern red oak. Far west portion of stand has pole sized aspen, red maple and balsam fir. Medium to high density balsam fir and red maple saplings</p>
25	4134 - Aspen, Spruce/Fir	Sapling Well	10.3	17	Immature	<p>OPIC - FMD: This stand was harvested spring of 2000. Harvested under permit #33-006-99-01 "Reno Creek Sale"</p> <p>Southern peninsula of stand 25 that juts into red pine stand 26 is a conifer and red maple mix. It was formally part of stand 26.</p>
26	42110 - Planted Red Pine	Sawtimber Well	21.3	47	141-170	<p>OPIC - FMD: This stand was harvested for the second time in 2009 under contract 330040901, Reno Creek Pine. This stand was planted in 1970. First thinning was done during 2000. Harvested under permit #33-006-99-01 "Reno Creek Sale". There is no understory in this stand. Part of stand north of road has greater amount of red maple saplings than south of the road. Density medium/low.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	42330 - Upland Fir	Poletimber Well	10.5	34	111-140	<p>OPIC - FMD: Stand was cut in 1983 under permit #43-80A "Reno Creek Aspen".</p> <p>Stand is mostly pole/sap sized balsam fir ranging from 4 to 10 inches. Scattered pole/log paper birch, cherry, white spruce and aspen. Some trace amount of oak. Southwest portion of stand contains more sapling and pole sized red maples with some pole sized aspen. North end of stand slopes to creek and has some small sparse openings.</p> <p>Far north end of stand across road and bordering stand 25 and Reno creek:</p> <p>OPIC - FMD: Small pocket of timber that was left when Reno Creek Aspen sale (33-006-99-01) was put up. It was due to it's proximity to Reno Creek it is being listed as SCA.</p> <p>Lots of DDW. Mostly pole sized balsam fir with some pole sized red maple, cedar, cherry and paper birch. BA around 80.</p>
32	42380 - Non Pine Upland Conifer, Mixed Deciduous	Sawtimber Well	3.7	76	51-80	<p>OPIC - FMD: Small area of high ground on north side of Reno Creek. Access is difficult and the amount of wood is not enough to compensate the placement of a culvert or bridge. SCA included as riparian buffer along Reno creek.</p> <p>Lots of large balsam fir that is falling down. Large balsam fir is mixed with paper birch, red maple and trace amounts of white spruce. Red maple saplings are coming up under current overstory. East portion of stand is mostly cedar.</p>
33	42330 - Upland Fir	Poletimber Well	17.8	31	51-80	<p>OPIC - FMD: A3-Big Island-cut in 1986 under permit #12-85-2 "Reno Creek West Island Sale".</p> <p>Stand is mostly balsam fir saplings with pockets of pole sized aspen and red maple. Trace amounts of pole sized white spruce and cherry. Some scattered large balsams fir.</p>
34	42330 - Upland Fir	Poletimber Well	1.8	66	81-110	<p>OPIC - FMD: Small pocket of timber that was left when Reno Creek Aspen sale (33-006-99-01) was put up. It was due to it's proximity to Reno Creek it is being listed as SCA.</p> <p>Lots of DDW. Trace amount of log sized aspen.</p>



Stand	Cover Type	Acres	Managed Site	General Comments:
28	622 - Lowland Shrub	25.8	No	OPIC - FMD: SCA. Lowland area surrounding Reno Creek-mostly tag alder with larch.
400	31022 - Warm Season Grass	6.7	No	OPIC - FMD: Power line right of way.
403	31022 - Warm Season Grass	0.4	No	OPIC - FMD: Powerline Right of Way.