



Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45105

Entry Year 2017

Acreage: 1,919

County Mackinac

Management Area: Carp River Red Pine

Revision Date: 2015-08-06

Stand Examiner: Cory Luoto

Legal Description:

T43N-R6W Section 22 - 24, Moran Township.

Identified Planning Goals:

The compartment is located 5 ½ miles north of Brevort and 5 ½ miles south of Trout Lake on the Carp River Truck Trail, Caffey and Dells Mills Roads. The compartment is composed of a variety of lowland and upland types and species. The eastern half of the compartment is mostly upland types of red pine, aspen, upland brush and grassy openings. The western half of the compartment is mostly upland types of northern hardwood, aspen, upland brush and grassy openings. The lowland types are cedar, hemlock and mixed swamp conifers with some ponds and marsh areas. The Carp River flows through Section 24. The Carp River is designated as a wild and scenic in the stretch downstream on the Hiawatha National Forest. The South Branch of Carp River flows through Section 22 and the south west corner of Section 23. The red pine stands within the compartment are being managed according to the red pine management guidelines and other available resources. Some of red pine will be final harvested to gain age class distribution in the red pine within the compartment and the surrounding lands. The young red pine stands will be monitored for regeneration, release needs, and insect and disease infestations. The area is heavily used by recreationists.

Soil and topography:

The majority of the compartment is on the outwash plain and lake plains on level to undulating ground. The higher ground soils are mostly Wallace Sand with Paquin Sand, and Paquin-Finch complex on the ridges in the lowland areas. The transition areas have Spot-Finch Complex and Finch Sand. The lowland areas mostly have the Markey-Spot-Finch Complex with some higher transition areas to the Paquin Sand and Wallace Sand. The other lowland soil types are Markey and Carbondale Muck, Finch-Dawson-Pullup Complex, Leafriver Mucky Peat, Leafriver-Croswell-Wainola Complex, Dinkey Muck in the Carp River and flooded Entisols are intermixed along the South Branch of Carp River drainages.

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

The north, west and south sections surrounding the compartment are in state ownership. The sections to the east, northeast, and southeast are in federal ownership on the Hiawatha National Forest.

Unique Natural Features:

Potential for raptors and Great Blue Herons to nest in the compartment exists and care will be taken to check stands for nests and take appropriate management action to protect the species. Northern Fen has been identified in the compartment. Any management in the surrounding area will follow the MNFI recommendations to protect the integrity of the Northern Fen. There is a potential for some rare, threatened, and special concern plant and animal species to inhabit the compartment. Stands to be managed will be checked for species of concern. Management will be modified if species are found within those stands per management guidelines for that species.

Archeological, Historical, and Cultural Features:

Most of the red pine plantation in this and adjacent compartments were originally planted in the 1930's under the Civilian Conservation Corp program. The Carp River was used for river log drives in the early lumbering days.

Special Management Designations or Considerations:

The Carp River has undergone stream bank restoration projects to reduce the amount of siltation into the river from the sandbanks. Conifer will be encouraged within the aspen stands along the banks of the Carp River and South Branch of Carp River and tributaries to decrease the amount of beaver habitat along the river. Snowmobile and ORV trails will need to have specifications in the timber sale contracts to protect the trail and provide for safety precautions around the trails.

Watershed and Fisheries Considerations:

This compartment is within the Carp River watershed, and contains portions of the Carp River, the South Branch of the Carp River, and some unnamed tributaries to the South Branch. All of these streams are Michigan Designated Trout Streams. This watershed supports populations of resident brown trout and brook trout, as well as anadromous species such as chinook salmon, pink salmon, coho salmon, and steelhead. Prescribed management activities are appropriate for

the protection of these waterbodies.

Wildlife Habitat Considerations:

This compartment lies within Carp River Red Pine Management Area, and featured species include blackburnian warbler, red-shouldered hawk, ruffed grouse, and snowshoe hare. This is a compartment composed primarily of red pine plantation, although northern hardwoods are well represented on the west side and aspen is scattered throughout. Red pine plantations and aspen stands cover a major portion of what probably was mixed hardwood/conifer forest at one time. Branches of the Carp River run through the compartment. Active management during this cycle will primarily focus on pine plantations. Final harvests will provide temporary openings for some species. Thinnings may promote diversity in the understory of other stands. Hemlock stands will be maintained, and northern hardwood stands will be left during this entry. These actions will benefit species including blackburnian warbler and red-shouldered hawk. Stream corridors and wetlands will be protected to maintain their integrity. Lowland conifer habitat is found in some, and will provide cover for hare and other wildlife.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Silurian Engadine Group subgroups below the glacial drift. The Engadine is quarried for stone/limestone three miles to the east. Gravel pits are not located in the area and potential may be limited. There is no current economic oil and gas production in the UP.

Vehicle Access:

This compartment has very good access except for the portion of Section 24 on the east side of the Carp River. No roads extend from the north into this portion of the compartment. The Ozark Creek is just on the east side of the Section 24 boundary. The area prescribed for management has a small volume of available products to remove. This will make harvesting these stands more difficult. The access from the Carp River Truck Trail, Caffey and Dells Mills Roads is very good which are all DNR roads. The Dells Mills Road is in good condition with some maintenance completed in the past except the western portion from the Caffey Road west across the section line. The road is drivable but is in need of grading and graveling. The Carp River Truck Trail and Caffey Road are in good shape except for the sandy areas of the roads in the very dry period in the summer. Periodic maintenance has been completed on both roads within the last 5 years with timber sale contract work and road and bridge funding on the south end of the Carp River Truck Trail. The two tracks are in good shape most of time with a few water holes - these should remain open.

Survey Needs:

No new survey projects are required for this compartment with adequate corners present.

Recreational Facilities and Opportunities:

The Carp River Truck Trail, Dells Mills Road, and Caffey Road are used as snowmobile trails and part of the ORV trail runs on the Caffey and Dells Mills Roads. The compartment is heavily used for all types of recreational activities including motorized vehicle use, fishing, hunting, trapping, berry picking and nature viewing.

Fire Protection:

The eastern half of the compartment has a potential for a moderate to higher intensity fire in the red pine area. The Thunder Alley Fire burned in 1999 through a portion of the compartment to the north. The west portion has lower fire intensity potential with the hardwood stands and lowlands. The problem of ground fire does exist in this portion of the compartment.

Additional Compartment Information:

None.

The following reports from the Inventory are attached:

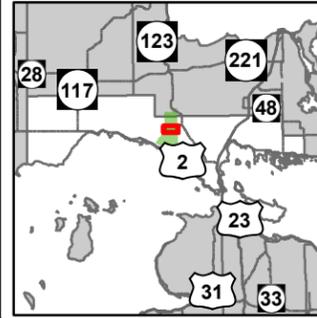
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

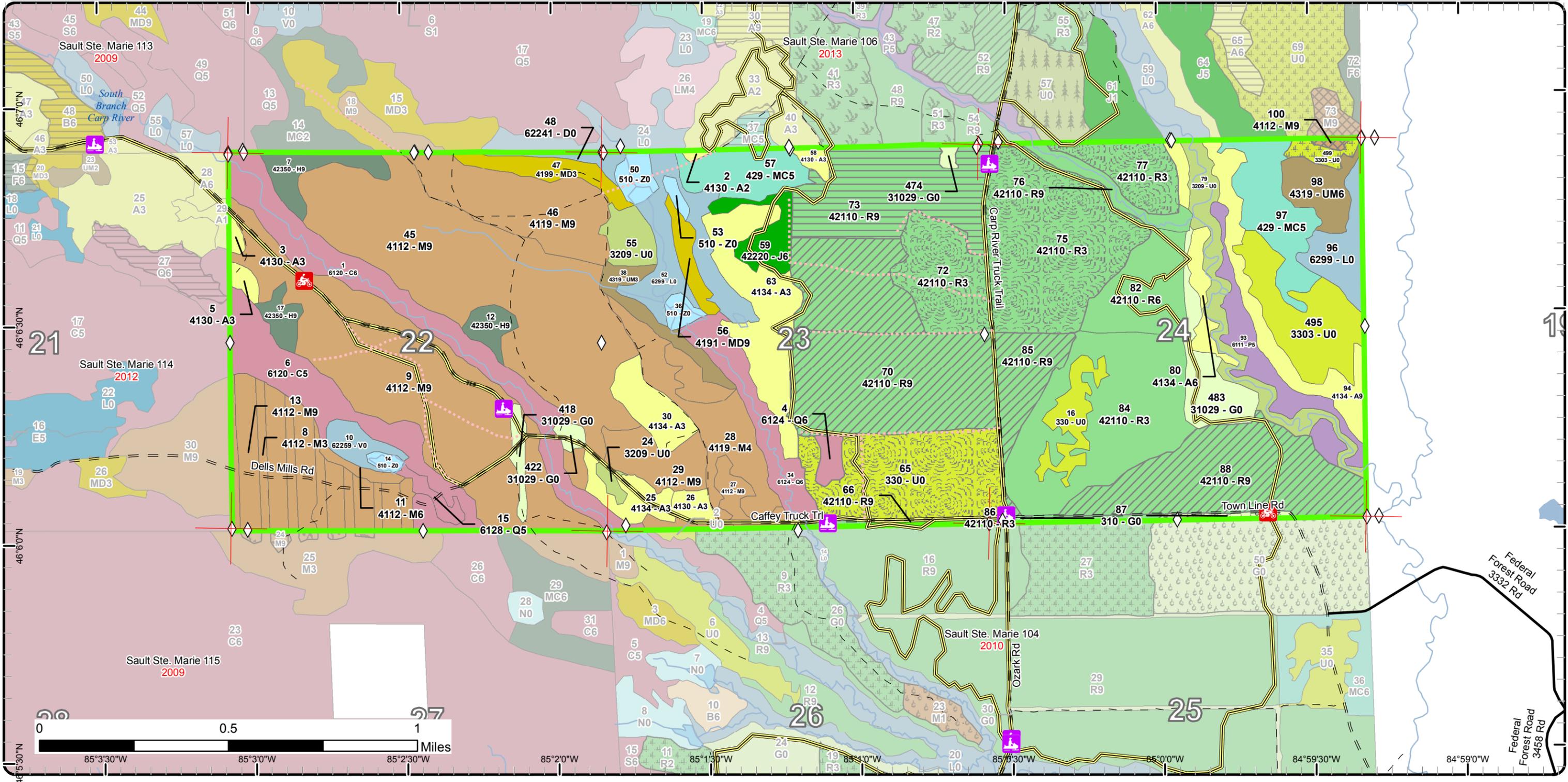
Compartment: 105
 T43N, R06W, Sec: 22-24
 County: Mackinac
 Unit: Sault Ste. Marie
 Mgmt Area: Carp River Red Pine
 YOE: 2017
 Acres: 1919 GIS Calculated
 Examiner: Cory Luoto
 Map Revised: 8/10/2015
 Map Phase: Review



- ◇ Field Grade GPS Corners
- Miris Corners
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Closed Roads
- 🏍 Motorcycle Trails (DNR License)
- 🛷 Snowmobile Trails
- Rivers
- Lakes

- Treatments
- ▨ Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- ▨ Other Treatment - See Comments
- ▨ Monitoring
- ▨ Prescribed Burn
- ▨ Thinning (Crown, Low, Systematic)
- Forest Covertype
- 411 - Northern Hardwood
- 413 - Aspen

- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forests
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Covertype
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub



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	59	29	3	0	13	0	0	0	30	0	0	0	0	0	0	0	0	134
Bog	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Cedar	0	0	0	0	0	0	0	0	0	0	0	64	49	0	0	0	0	0	113
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	29
Herbaceous Openland	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Jack Pine	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
Low-Density Trees	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	27
Lowland Conifers	0	0	0	0	0	0	0	0	0	34	5	0	0	0	0	0	0	0	39
Lowland Shrub	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
Mixed Upland Deciduous	0	0	0	0	14	0	0	0	0	9	0	0	0	0	0	0	0	0	23
Northern Hardwood	0	0	0	0	27	0	0	0	0	53	52	0	0	0	0	0	0	403	535
Red Pine	0	0	161	88	0	0	34	0	336	0	0	0	0	0	0	0	0	0	619
Treed Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Conifers	0	0	0	0	0	0	33	24	0	0	0	0	0	0	0	0	0	0	57
Upland Mixed Forest	0	0	0	13	0	0	0	0	17	0	0	0	0	0	0	0	0	0	30
Upland Shrub	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Water	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	298	59	190	104	41	28	67	24	353	153	57	64	49	0	0	0	0	432	1919



Report 2 – Treatment Summary

Sault Ste. Marie Mgt. Unit
Year of Entry: 2017

Compartment 105
Total Compartment Acres: 1,919

Acres of Harvest

Commercial Harvest - 321
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
Northern Hardwood	0	1	0	0	0	0	0	0	0	1
Red Pine	70	0	0	0	0	250	0	0	0	320
Total	70	1	0	0	0	250	0	0	0	321

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	321	0	0	0	4	0	228	0	5	558
Next Step	0	74	74	0	0	0	87	0	0	234
Total	321	74	74	0	4	0	315	0	5	793



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
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65	45105065-Monitor	70.3	330 - Low-Density Trees	Nonstocked	0	Unspecified	Monitoring	Herbicide Use	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Release planted red pine with proper herbicide and method as determined by the TMS. Monitor effects of release and treat as necessary.
Specs: Monitor for RHPS and if monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

70	45105070-Cut	92.3	42110 - Planted Red Pine	Sawtimber Well	78	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thin to around 120 Basal Area. Leave species diversity within the stand where present.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other There is an ORV trail within the stand. We will use our standard timber sale specification to protect the trail during harvest. Old next step
Comment: comments:

Proposed Start Date: 10/1 /2016

72	45105072-Monitor	38.1	42110 - Planted Red Pine	Sapling Well	13	Immatu re	Monitoring	Herbicide Use	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Release planted red pine with proper herbicide and method as determined by the TMS. Monitor effects of release and treat as necessary.
Specs: Monitor for RHPS and if monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

73	45105073-Cut	46.6	42110 - Planted Red Pine	Sawtimber Well	78	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thin to around 120 Basal Area. Leave species diversity within the stand where present.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other There is an ORV trail within the stand. We will use our standard timber sale specification to protect the trail during harvest. Old next step
Comment: comments:

Proposed Start Date: 10/1 /2016



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
73	45105073-Cut-CC	69.5	42110 - Planted Red Pine	Sawtimber Well	78	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Clearcut stand with retention of live trees on the edges of the treatment. Standing trees within the stand after harvest create a hazard for aerial spraying of the stand for release and pest management so all retention must be along the edges. Chip tops leaving 1/3 to 1/6.
Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Herbicide Use
Treatments:

Acceptable Regen: Red Pine

Other Comment: There is an ORV trail within the stand. We will use our standard timber sale specification to protect the trail during harvest. Old next step comments:

Proposed Start Date: 10/1 /2016

75	45105075-Monitor	95.8	42110 - Planted Red Pine	Sapling Well	13	Immature	Monitoring	Herbicide Use	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Release planted red pine with proper herbicide and method as determined by the TMS. Monitor effects of release and treat as necessary.
Specs: Monitor for RHPS and if monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Next Step
Treatments:

Acceptable Regen:

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

77	45105077-Monitor	23.3	42110 - Planted Red Pine	Sapling Well	13	Immature	Monitoring	Herbicide Use	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Release planted red pine with proper herbicide and method as determined by the TMS. Monitor effects of release and treat as necessary.
Specs: Monitor for RHPS and if monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Next Step
Treatments:

Acceptable Regen:

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

85	45105085-Cut	27.2	42110 - Planted Red Pine	Sawtimber Well	78	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thin to around 120 Basal Area. Leave species diversity within the stand where present.
Specs:

Next Step
Treatments:

Acceptable Regen:

Other Comment: There is an ORV trail within the stand. We will use our standard timber sale specification to protect the trail during harvest. Old next step comments:

Proposed Start Date: 10/1 /2016



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
87	45105087-Burn	4.0	310 - Herbaceous Openland	Nonstocked	0	Unspecified	Burn	Slash	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: Yes

Site Condition:

Prescription Stand may need to be burned to help planting process.

Specs:

Next Step Treatments: SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Herbicide Use; Monitoring, Artificial Regen(3yr)

Acceptable Regen: Red Pine

Regen:

Other Comment: Old next step comments:

Proposed Start Date: 12/1 /2014

88	45105088-Cut	84.2	42110 - Planted Red Pine	Sawtimber Well	78	171-200	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thin to around 120 Basal Area. Leave species diversity within the stand where present.

Specs:

Next Step Treatments:

Acceptable Regen:

Other Comment: There is an ORV trail within the stand. We will use our standard timber sale specification to protect the trail during harvest. Old next step comments:

Proposed Start Date: 10/1 /2016

100	45105100-cut-oi	1.5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	89	111-140	Harvest	Single Tree Selection	41199 - Northern Hardwood (OI)	Uneven-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Thin stand to 80 basal area. Aspen, cherry and all conifer should be left.

Specs:

Next Step Treatments:

Acceptable Regen: Acceptable regeneration includes maple, cherry, birch, pine, spruce, fir.

Other Comment: Harvest with adjacent stand. Old next step comments:

Proposed Start Date: 10/1 /2016

499	45105499-NF	5.4	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Chip stand to maintain the opening. Follow the WBRG by leaving 1/6 to 1/3 of the tops.

Specs:

Next Step Treatments:

Acceptable Regen:

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Total Treatment Acreage Proposed: 558.2

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Cory Luoto : Examiner

Compartment: 105

Year of Entry: 2017

Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available	Dominant Site Conditions		
Acres	Available	With Condition	Not Available	5C	3J	
134	104	0	30	Aspen		30
9	9	0	0	Bog		
113	113	0	0	Cedar		
29	29	0	0	Hemlock		
37	37	0	0	Herbaceous Openland		
15	15	0	0	Jack Pine		
132	132	0	0	Low-Density Trees		
27	0	0	27	Lowland Aspen/Balsam Poplar		27
39	0	5	34	Lowland Conifers	5	34
53	53	0	0	Lowland Shrub		
23	14	0	9	Mixed Upland Deciduous		9
536	536	0	0	Northern Hardwood		
619	603	5	12	Red Pine	5	12
5	5	0	0	Treed Bog		
57	57	0	0	Upland Conifers		
31	31	0	0	Upland Mixed Forest		
46	46	0	0	Upland Shrub		
16	16	0	0	Water		
1,919	1,797	10	111	Total Forested Acres	10	111
	94%	1%	6%	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	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	29	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Cory Luoto : Examiner

Compartment: 105

Year of Entry: 2017

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	27	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 7 – 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	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.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Poletimber Well	63.7	104	81-110	South Branch of the Carp River flows through the stand.
2	4130 - Aspen	Sapling Medium	1.0	12	Immature	Harvested 12 years ago. Motorcycle trail runs thru the stand.
3	4130 - Aspen	Sapling Well	2.1	19	Immature	Regeneration is doing great. Really nice aspen.
4	6124 - Lowland Spruce-Fir	Poletimber Well	5.1	85	81-110	
5	4130 - Aspen	Sapling Well	3.5	13	Immature	Nice aspen regeneration.
6	6120 - Lowland Cedar	Poletimber Medium	49.4	110	Unspecified	Very wet, poor quality stand of mainly cedar. 1 to 2 sticks. Small stream runs thru the stand to the bog and pond. Tamarack and black spruce are mixed in and some areas are more open.
7	42350 - Upland Hemlock	Sawtimber Well	14.2	152	171-200	Nice hemlock stand with a variety of species. Pretty nice hemlock regeneration.
8	4112 - Maple, Beech, Cherry Association	Sapling Well	27.0	34	Immature	Extremely dense mixed hardwood stand.
9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	147.4	84	51-80	Stand was harvested last entry. Basal area ranges from 50 to 90. Lots of regeneration.
11	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.0	97	111-140	Decided at the compartment review to leave stand as buffer for stand 10 as per MNFI comments.
12	42350 - Upland Hemlock	Sawtimber Well	7.6	152	171-200	Nice hemlock stand with a variety of species. Pretty nice hemlock regeneration.
13	4112 - Maple, Beech, Cherry Association	Sawtimber Well	51.8	89	81-110	This stand was thinned in 2011 with the compartment to the south.
15	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	4.9	90	1-50	Drainage from the pond with a mixture of trees.
17	42350 - Upland Hemlock	Sawtimber Well	7.4	152	171-200	Nice hemlock stand with a variety of species. Pretty nice hemlock regeneration.
25	4134 - Aspen, Spruce/Fir	Sapling Well	12.6	4	Immature	Stand was cut last entry. Regeneration is doing good. Mostly aspen but a wide variety of species.
26	4130 - Aspen	Sapling Well	5.2	13	Immature	Nice young aspen stand. Regeneration has filled in nicely since last entry.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4112 - Maple, Beech, Cherry Association	Sawtimber Well	17.5	86	51-80	Stand was thinned last entry. More cherry regeneration in the open spots.
28	4119 - Mixed Northern Hardwoods	Poletimber Poor	41.3	40	1-50	An old opening that is filling in with trees.
29	4112 - Maple, Beech, Cherry Association	Sawtimber Well	20.8	77	51-80	Stand was shelter wood cut last entry. Tons of regeneration.
30	4134 - Aspen, Spruce/Fir	Sapling Well	16.9	13	Immature	Nice regeneration.
34	6124 - Lowland Spruce- Fir	Poletimber Well	29.1	85	81-110	Stream cooridor within the floodplain are heavier to cedar.
38	4319 - Mixed Upland Forest	Sapling Well	13.1	29	Immature	Good regeneration, just starting to transition into a pole stand.
45	4112 - Maple, Beech, Cherry Association	Sawtimber Well	172.9	102	81-110	Stand was thinned last entry. Tons of regeneration.
46	4119 - Mixed Northern Hardwoods	Sawtimber Well	52.0	97	81-110	Select harvested on Pounding Hammer Hardwood #45-123-98-01. Some beech bark disease in the beech. Otherwise stand is looking good.
47	4199 - Other Mixed Upland Deciduous	Sapling Well	14.2	36	1-50	Real nice regeneration within the stand. Few low areas but mostly upland type and a few more open areas. Cut in 1983.
56	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	8.5	85	1-50	OPIC - FMD: A small ridge surrounded by lowland brush and beaver ponds. Will leave the stand for the BMP concerns with the wetland surrounding the stand.
57	429 - Mixed Upland Conifers	Poletimber Medium	23.7	65	81-110	Mackinac mix with some red and white pine and open areas within the stand. Hold for 10 years to allow adjacent stand to north that is scheduled for harvested to regenerate.
58	4130 - Aspen	Sapling Well	3.5	29	Immature	Harvested in 1996 on Timber Doodle Aspen. Good aspen regeneration.
59	42220 - Natural Jack Pine	Poletimber Well	14.5	45	1-50	Opening which has been filling in with trees.
63	4134 - Aspen, Spruce/Fir	Sapling Well	46.2	4	Immature	Regeneration is doing great. A few larger trees per acre were left during the harvest.
66	42110 - Planted Red Pine	Sawtimber Well	5.1	78	111-140	Trib to the south branch of Carp River is on the west side of the stand. Some balsam fir regen scattered in stand with more on west side along with a few red maple and beech. 1937 plantation.
70	42110 - Planted Red Pine	Sawtimber Well	92.3	78	141-170	Thin to 120 basal area.



Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42110 - Planted Red Pine	Sapling Well	38.1	13	Immature	Monitor for release and pests.
42110 - Planted Red Pine	Sawtimber Well	116.1	78	141-170	Clear cut the north part and thin the south.
42110 - Planted Red Pine	Sapling Well	95.8	13	Immature	Monitor for release and pests.
42110 - Planted Red Pine	Sawtimber Well	11.6	78	141-170	Buffer along drainage to the Carp River.
42110 - Planted Red Pine	Sapling Well	23.3	13	Immature	Monitor for release and pests.
4134 - Aspen, Spruce/Fir	Poletimber Well	12.9	45	111-140	Buffer for the Carp River and is down into the floodplain.
42110 - Planted Red Pine	Poletimber Well	34.1	51	111-140	This stand was thinned last entry. Look at another thinning in ten years.
42110 - Planted Red Pine	Sapling Well	87.6	21	Immature	OPIC - FMD: Harvested in 1992 on Dells Mills Pine II. Site was burned in 1992 and was planted in 1993 and 1994. Some replanting in 1997 by hand planting. Good red pine of 5 to 10 feet tall. May check for red head sawfly problems.
42110 - Planted Red Pine	Sawtimber Well	27.2	78	141-170	Thin to 120 BA.
42110 - Planted Red Pine	Sapling Well	3.8	17	Immature	1998 plantation. 10-20' tall trees which are good and healthy.
42110 - Planted Red Pine	Sawtimber Well	84.2	78	171-200	Thin to 140 basal area. ORV trail runs thru the stand. Small pocket of aspen in the east end of stand.
6111 - Lowland Balsam Poplar	Poletimber Medium	26.7	85	51-80	This is a stand of flood plain aspen/balsam poplar. Stand is open in some areas with good aspen regen. Ground is soft.
4134 - Aspen, Spruce/Fir	Sawtimber Well	30.4	85	111-140	This is a transitional stand located on the slope down to the flood plain of the Carp River. It has mature aspen with balsam and spruce. Stand could use some treatment.
429 - Mixed Upland Conifers	Poletimber Medium	33.3	55	51-80	Opening which is filling in with white pine, jack pine, spruce, balsam fir, aspen and red maple. Few wet area and some areas are open.
4319 - Mixed Upland Forest	Poletimber Well	17.4	71	111-140	This is a mixed stand with both high and low ground. The further east you go the wetter it gets. The southern portion of the stand is dominated by aspen, fir and spruce with ferns in the understory. The northern portion of the stand is dominated by spruce, white pine, fir and aspen with moss covering the ground. Most of the stand has small diameter poor quality trees.

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Sault Ste. Marie Mgt. Unit

Report 8 – Forested Stands

Compartment: 105
Year of Entry: 2017



S t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
100	4112 - Maple, Beech, Cherry Association	Sawtimber Well	1.4	89	111-140	Nice pocket of hardwoods surrounded by conifers and openings. Stand could use a thinning.



Stand	Cover Type	Acres	Managed Site	General Comments:
10	62259 - Bog (OI)	8.9	No	OPIC - FMD: Beaver pond is to the south east end. See locked box comments.
14	510- Water (OI)	2.4	No	OPIC - FMD: Small pond within the bog.
16	330 - Low-Density Trees	15.5		
24	3209 - Upland Shrub (OI)	2.9	Yes	OPIC - FMD: Treat with stand 25 when it is treated.
36	510- Water (OI)	4.1	No	OPIC - FMD: small pond with beaver activity.
48	62241 - Treed Bog (OI)	5.1	No	OPIC - FMD: OI Stand Year Origin was
50	510- Water (OI)	7.2	No	OPIC - FMD: small pond with beaver activity.
52	6299 - Lowland Shrub (OI)	34.2	No	OPIC - FMD: OI Stand Year Origin was
53	510- Water (OI)	2.3	No	OPIC - FMD: small pond with beaver activity.
55	3209 - Upland Shrub (OI)	11.5	No	OPIC - FMD: Opening which has been filling in with cherry, aspen, balsam fir and maple.
65	330 - Low-Density Trees	70.3		ORV trail runs thru the stand. Stand was planted in 2014.
79	3209 - Upland Shrub (OI)	31.2	No	OPIC - FMD: Carp River cooridor with mostly brush and some aspen clones.
87	310 - Herbaceous Openland	4.0		Stand was clearcut in 2013.
96	6299 - Lowland Shrub (OI)	18.7	No	OPIC - FMD: Beaver flooded stand filling in with tag alder.
418	31029 - Grass (OI)	5.5	Yes	OPIC - FMD: Part of this opening is included in the harvesting on stand 19.
422	31029 - Grass (OI)	3.1	Yes	OPIC - FMD: Treat with stand 20.
474	31029 - Grass (OI)	1.7	No	OPIC - FMD: Small grassy opening should be treated with stand 73.
483	31029 - Grass (OI)	22.4	No	OPIC - FMD: ORV trails runs thru the stand. Some cherry, aspen and jack pine filling in the opening.



Stand	Cover Type	Acres	Managed Site	General Comments:
495	3303 - Mixed Low Density Trees	40.3	Yes	Stand is filling in with spruce, jack pine, red pine, white pine and aspen. Lots of old burnt stumps.
499	3303 - Mixed Low Density Trees	5.4	Yes	Stand is filling in with spruce, jack pine, cherry and aspen.