



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12117

Entry Year 2018

Acreage: 792

County Iron

Management Area: Michigamme Reservoir

Revision Date: 2016-08-08

Stand Examiner: Ed Rice

Legal Description:

T45N R32W sections 12, 24, 25

Identified Planning Goals:

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Continue to sustainably balance the accessible aspen age class acres. Continue moving the hardwood stands towards regulation. Protect the riparian areas and transition zones during management activity.

Soil and topography:

Soils are generally silt loam areas with components of very fine sandy loams. The lowground areas consist of mucks and ponded histol soils. Rock outcrop complexes are included throughout. The topography consists mainly of flat to gently rolling. The north block of the compartment has small isolated areas of steep hills leading down to the Fence River.

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

The compartment is mainly contiguous state ownership in two blocks.. There is one private 40 acre inholding in the southern portion of the compartment. Large blocks of industrial private forest border the compartment. Active forest management has occurred and will continue within and surrounding the compartment.

Unique Natural Features:

none identified

Archeological, Historical, and Cultural Features:

none identified

Special Management Designations or Considerations:

none identified

Watershed and Fisheries Considerations:

The Fence River and its tributaries are cold water streams. The headwaters of Margesson Creek and the McCutcheon Creek are near this area.

Wildlife Habitat Considerations:

Species diversity and limited access provide a vast amount of life requisites for a variety of wildlife species. Featured species include: black bear, pileated woodpecker, northern goshawk, ruffed grouse, and white-tailed deer. Compartment includes state game fund lands and deer wintering complexes.

Mineral Resource and Development Concerns and/or Restrictions

Vehicle Access:

Little to none. Large expanses of ponded water prohibit vehicle access in most areas. The Deerfoot Lodge Roads runs through the south eastern portion of the compartment.

Survey Needs:

T45N R 32W S1/16 section 25

Recreational Facilities and Opportunities:

none

Fire Protection:

Due to the ponded water of the area and the fuel types this compartment is generally not prone to fire starts. Equipment access into the interior would be extremely limited. Fuels are generally aspen and hardwood types.

Additional Compartment Information:

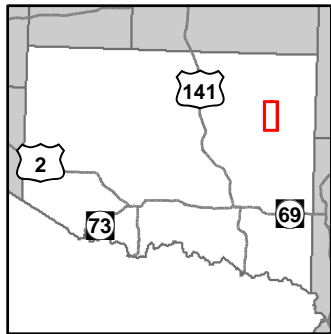
The following reports from the Inventory are attached:

- 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**

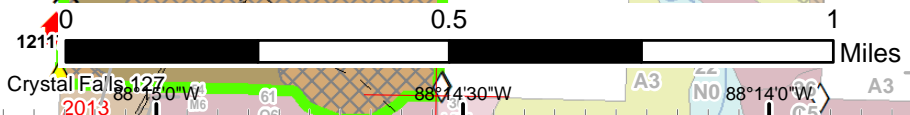
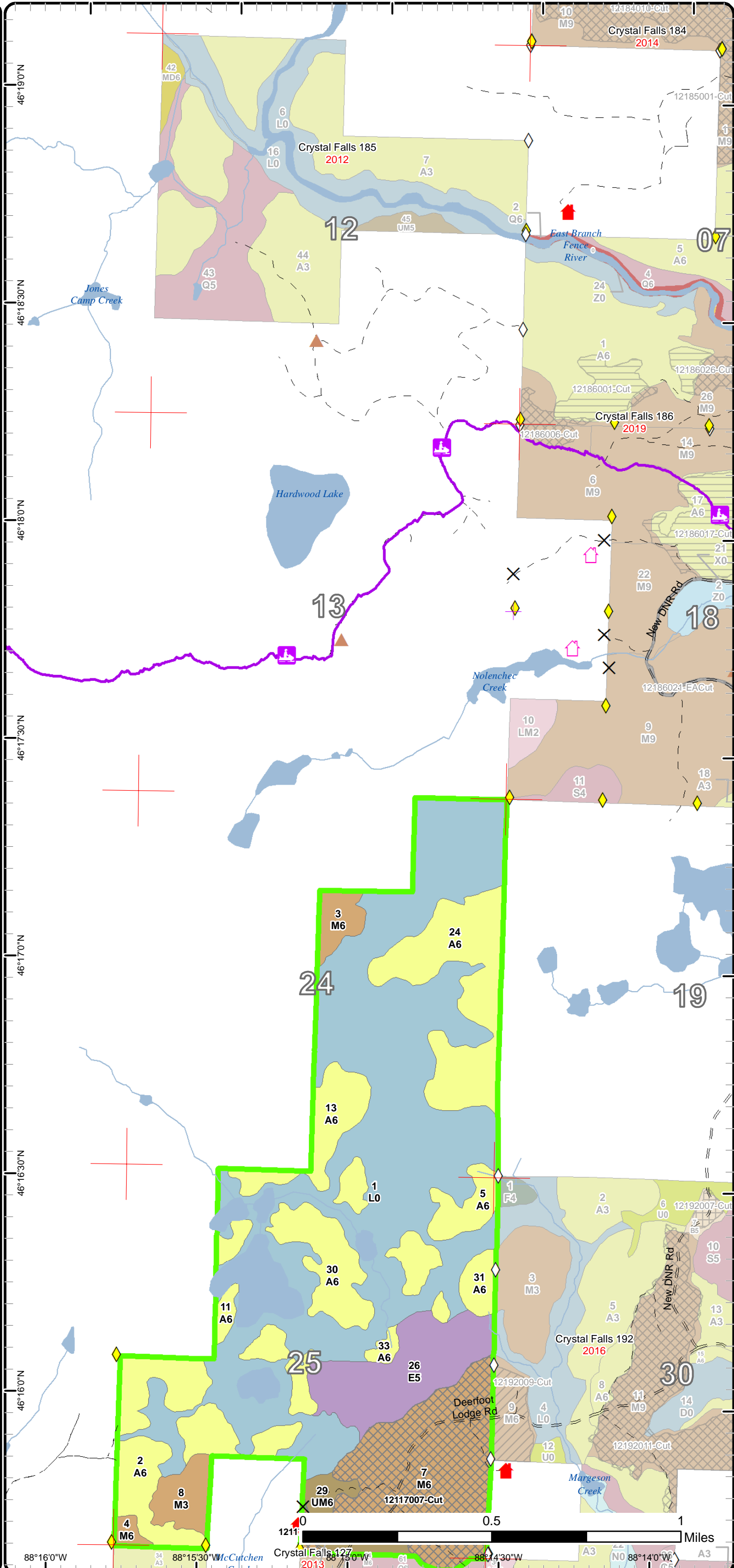
The following information is displayed, where pertinent, on the attached compartment maps:

- 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: 117
 T45N R32W Sec. 12, 24, 25
 County: Iron
 Unit: Crystal Falls
 Mgmt Area: Michigamme Reservoir
 YOE: 2018
 Acres: 792.4 GIS Calculated
 Examiner: Ed Rice
 Map Revised: 9/14/2017
 Map Phase: Post-Review

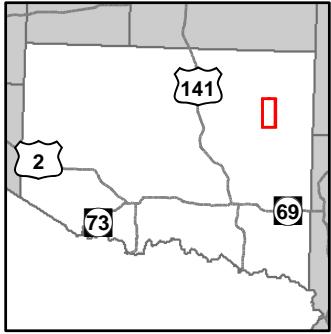


- Miris Corners
- Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Counties
- ✕ Gate
- ▲ Berms
- Unspecified Structure
- Cabin
- Snowmobile Trails
- Designated Snowmobile Trails
- Gravel Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Compartment Boundary
- Selection (Group, Single Tree)
- 411 - Northern Hardwood
- 413 - Aspen
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 622 - Lowland Shrub
- Lakes

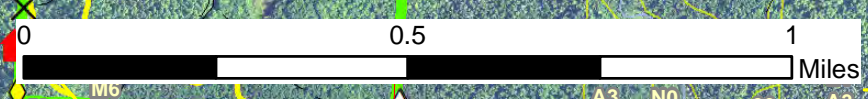
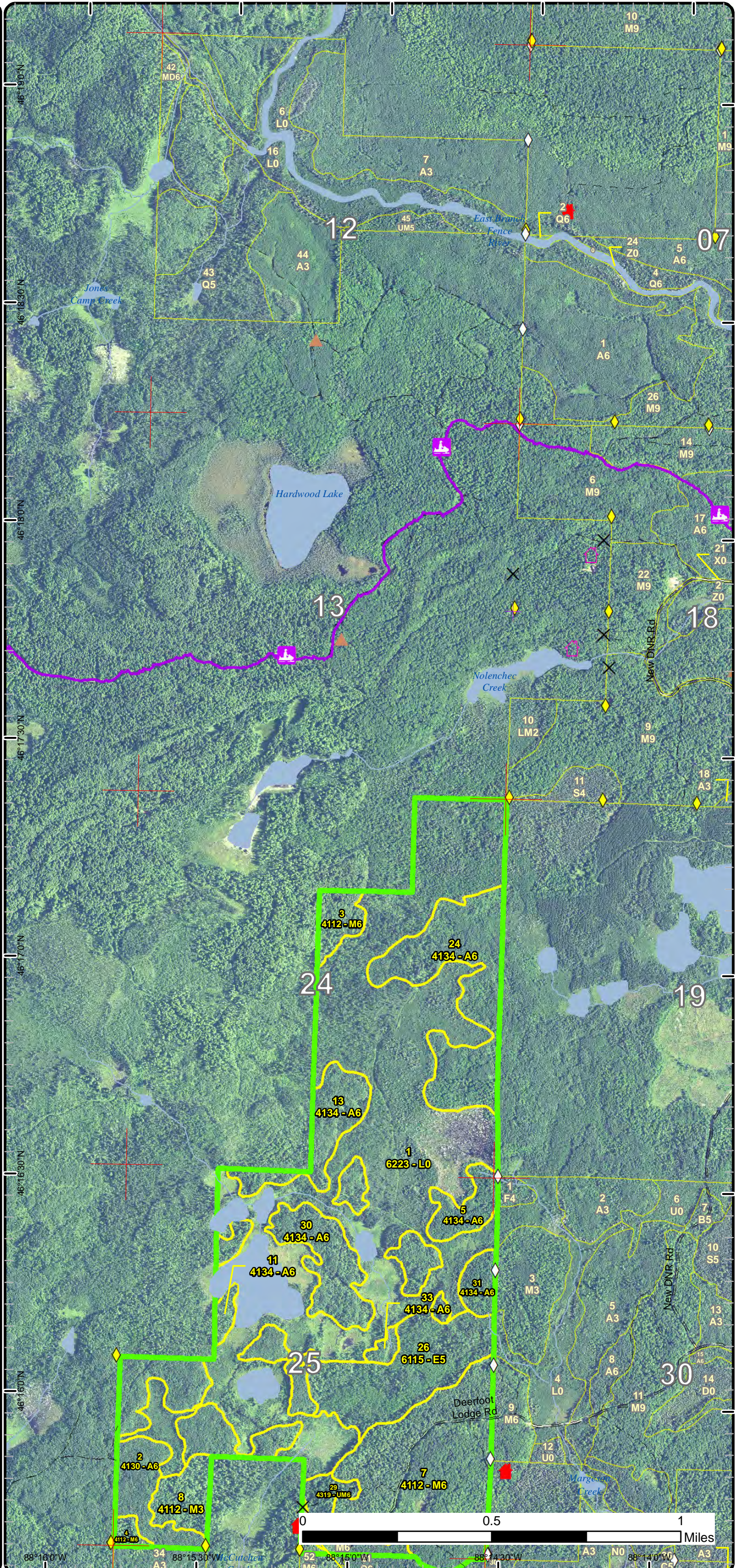


Stand Boundary Map

Compartment: 117
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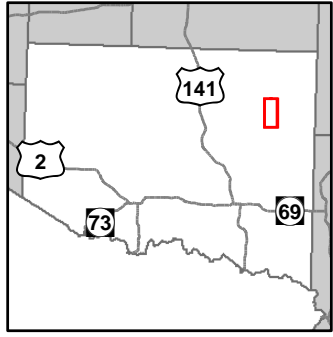
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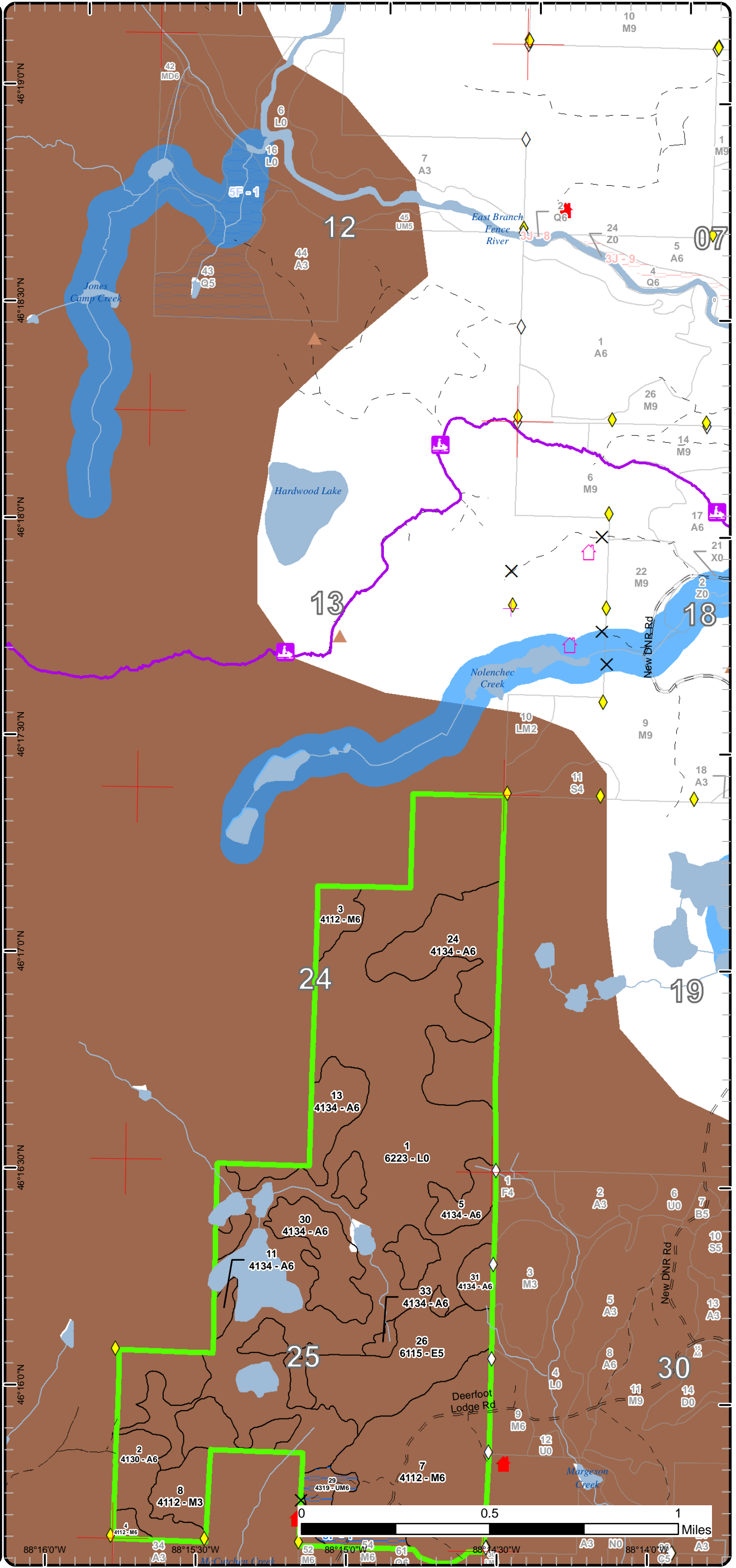
88°16'0" W 88°15'30" W 88°15'0" W 88°14'30" W 88°14'0" W
 46°18'0" N 46°17'30" N 46°17'0" N 46°16'30" N 46°16'0" N

Special Conservation Areas & Site Conditions Map

Compartment: 117
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- Streams
- Lakes and Rivers All
- 🟩 Compartment Boundary
- Available w/ Constraints
- Stand Boundaries
- 🟦 High Priority Trout Stream Buffer
- 🟤 Deer Winter Range



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	0	230	4	0	0	0	0	0	0	0	0	0	0	0	0	0	234
Lowland Deciduous	0	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	54
Lowland Shrub	357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	357
Northern Hardwood	0	0	0	15	0	0	0	116	0	0	0	0	0	0	0	0	0	0	131
Upland Mixed Forest	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	16
Total	357	0	0	245	4	54	16	116	0	0	0	0	0	0	0	0	0	0	792



Report 2 – Treatment Summary

Crystal Falls Mgt. Unit
Year of Entry: 2018

Compartment 117
Total Compartment Acres: 792

Acres of Harvest

Commercial Harvest - 101
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	101	0	0	0	0	0	0	0	101
	Total	0	101	0	0	0	0	0	0	0	101

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		101	0	0	0	0	0	0	0	0	101
Next Step		0	0	0	0	0	101	0	0	0	101
	Total	101	0	0	0	0	101	0	0	0	202

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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
7 12117007-Cut	101.2	4112 - Maple, Beech, Cherry Association	Poletimber Well	65	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription target BA 70. where possible create canopy gaps with adjacent large crowned seed tree maple. cut no yellow birch, hemlock or cedar. protect lowland/vernal inclusions.

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

Acceptable northern hardwood
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

Total Treatment Acreage Proposed: 101.2



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	5
Comments does not meet old growth criteria				
	Potential Old Growth		SCA Removal	162
Comments does not meet old growth criteria				
	Potential Old Growth		SCA Removal	761
Comments does not meet old growth 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 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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	Poletimber Well	68.8	29	Immature	stand just moving into poletimber size class
3	4112 - Maple, Beech, Cherry Association	Poletimber Well	11.0	62	81-110	higher stocking fir as stand transitions toward lowground. very difficult access across wet swamps.
4	4112 - Maple, Beech, Cherry Association	Poletimber Well	3.6	63	51-80	low quality. area has difficult access due to water
5	4134 - Aspen, Spruce/Fir	Poletimber Well	13.7	28	Immature	areas denser to fir along W side
7	4112 - Maple, Beech, Cherry Association	Poletimber Well	101.2	65	111-140	fair to good form overall. NE of stand has very scattered sawtimber 12 - 18" dbh. As stand progresses west, sawtimber becomes more prevalent.. Isolated inclusions of spruce/fir. small leatherleaf bog inclusion with hemlock at edges in S center of stand
8	4112 - Maple, Beech, Cherry Association	Sapling Well	15.4	29	Immature	very scattered w birch saplings/poletimber. scattered lowland pockets. r maple regen is mainly from stump sprouting
11	4134 - Aspen, Spruce/Fir	Poletimber Well	4.1	30	Immature	dense fir understory. stand just moving into poletimber size class. very difficult access
13	4134 - Aspen, Spruce/Fir	Poletimber Well	33.7	28	Immature	N end has interspersed lowland swales with tag alder. stand just transitioning from sapling to poletimber
24	4134 - Aspen, Spruce/Fir	Poletimber Well	63.6	28	Immature	areas of semi open scattered throughout - likely due to low aspen stocking in past cut. W edge transitions to lowland conifer and tag alder. extremely poor access due to very wet swamps
26	6115 - Lowland Ash	Poletimber Medium	53.8	42	Unspecified	extremely wet - very dense tag alder understory. scattered small upland islands with r maple, w birch and w spruce.
29	4319 - Mixed Upland Forest	Poletimber Well	16.4	54	Unspecified	r maple is very poor quality - twisted with seams. W edge of stand drops into lowland with cedar/b spruce/tag alder and wet ground
30	4134 - Aspen, Spruce/Fir	Poletimber Well	28.3	28	Immature	very similar to stand 31. extremely poor access due to multiple old beaver flowages with standing water.
31	4134 - Aspen, Spruce/Fir	Poletimber Well	19.0	28	Immature	aspen transitioning from sapling to poletimber. scattered upland cedar. stand is series of upland knobs among very wet, standing water swamp. extremely poor access
33	4134 - Aspen, Spruce/Fir	Poletimber Well	3.3	29	Immature	stand just moving into poletimber size class.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	6223 - Inundated Shrub Swamp	356.6	No	open marsh with dead standing trees. areas of dense tag alder thickets. standing water throughout with multiple drainages and creek courses.