

# **Compartment Review Presentation**

**Crystal Falls Forest Management Unit** 

Compartment 12124 Entry Year 2020 Acreage: 1,457 County Iron

Management Area: Amasa Plains

Revision Date: 2018-07-31 Stand Examiner: Ed Rice

**Legal Description:** 

T45N R32W sections 30 - 33

#### **Identified Planning Goals:**

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Continue moving the aspen timber types towards acreage regulation. Work the hardwood stands into a 20 year alternating cutting cycle, moving the stands toward regulation. Protect the riparian areas and transition zones during management activity.

## Soil and topography:

This area is underlain mainly by sandy and silt loams. There are small pockets of muck soils along the Deer River and associated with the lowland areas in the compartment. Landforms range from short steep hills to flat.

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

The compartment is contiguous with several parcels of private lands within the interior of the compartment area. Private lands are mainly private hunting camp lands with a small acreage of industrial forest ownership present. Active forest management has occurred both within the compartment and adjacent to it.

#### **Unique Natural Features:**

None

#### Archeological, Historical, and Cultural Features:

Several sites within the sections - not impacted by management activities.

# **Special Management Designations or Considerations:**

Much of the compartment lies within deer wintering area

#### **Watershed and Fisheries Considerations:**

Deer River is a cold water trout stream. Compartment contains Camp Eight Creek, Johnson Creek, Deer River, Shenky Creek, and small portion of Otter Lake. With Otter Lake as an exception, all creeks are Type 1 trout streams, so a 300' buffer is recommended for the areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, a 100' plus 5' per 1% increase in slope.

#### Wildlife Habitat Considerations:

Deer actively use much of the compartment as winter range. Maintaining conifer components is desired. Promote aspen age class and species diversity for grouse and woodcock.

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

Sand/gravel pits are not located in this area, but there appears to be good sand & gravel potential within the compartment. Abandoned iron mines are located four miles to the west, but there does not appear to be iron ore potential within the compartment. There has been past metallic mineral leasing in the area, but we have no record of any exploration completed on these leases. There is no known potential for economic oil and gas production in the UP. The state does not own all of the mineral rights within the compartment. Private mineral rights owners must be allowed reasonable access to the land should they choose to explore and/or develop the minerals.

#### **Vehicle Access:**

Overall there is good vehicle access throughout the compartment. The Deer Lake Road and DNR Roads are both maintained good roads. There exist many two track woods roads throughout.

#### **Survey Needs:**

Multiple survey corners needed.

# **Recreational Facilities and Opportunities:**

The DNR Road and a short section of the Deer Lake Road also serve as a snowmobile trail.

#### **Fire Protection:**

The fuel types in this compartment do not lend readily to fire starts or high intensity fires. Equipment access would be good with multiple woods roads throughout.

### **Additional Compartment Information:**

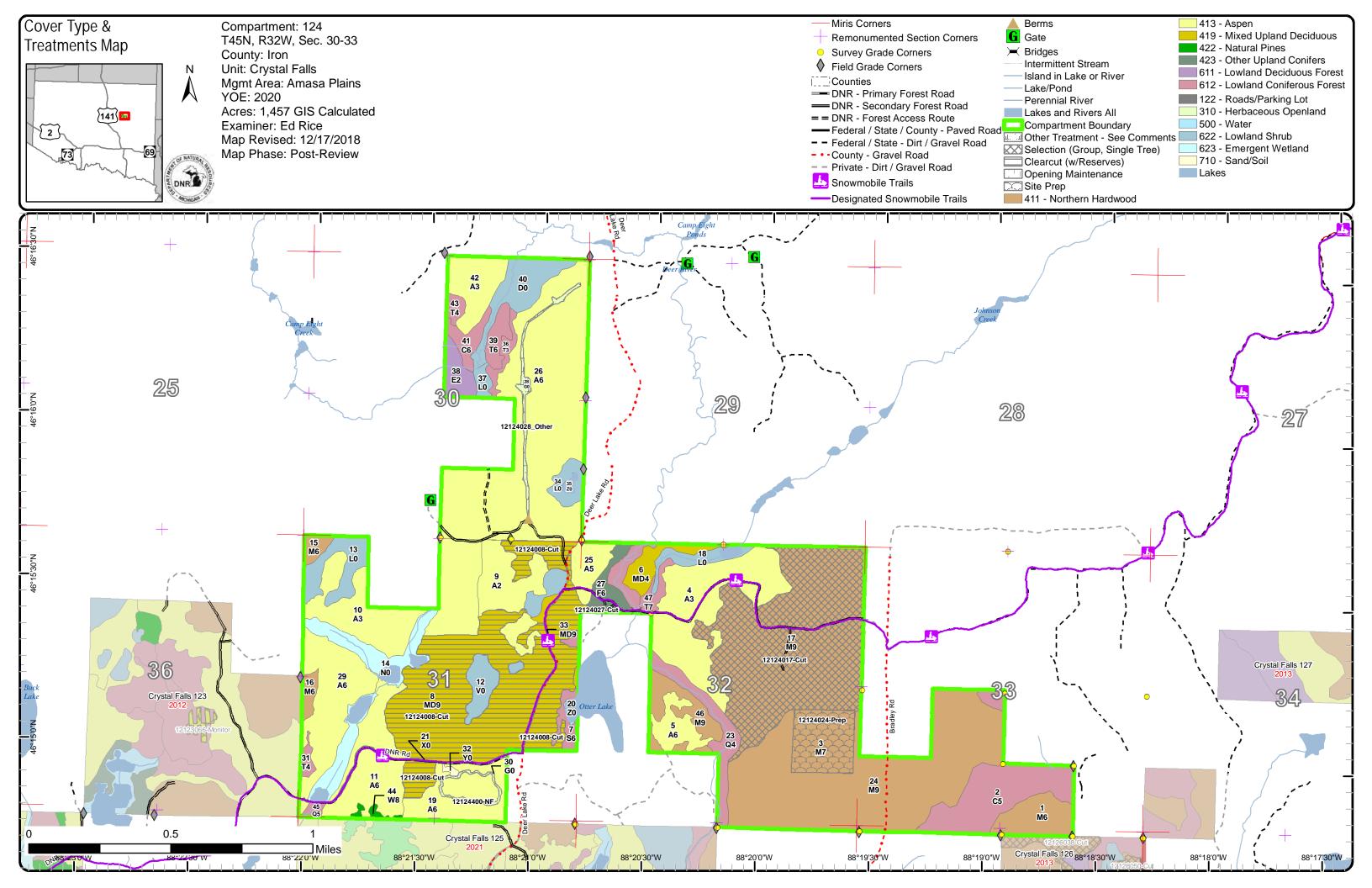
The following reports from the Inventory are attached:

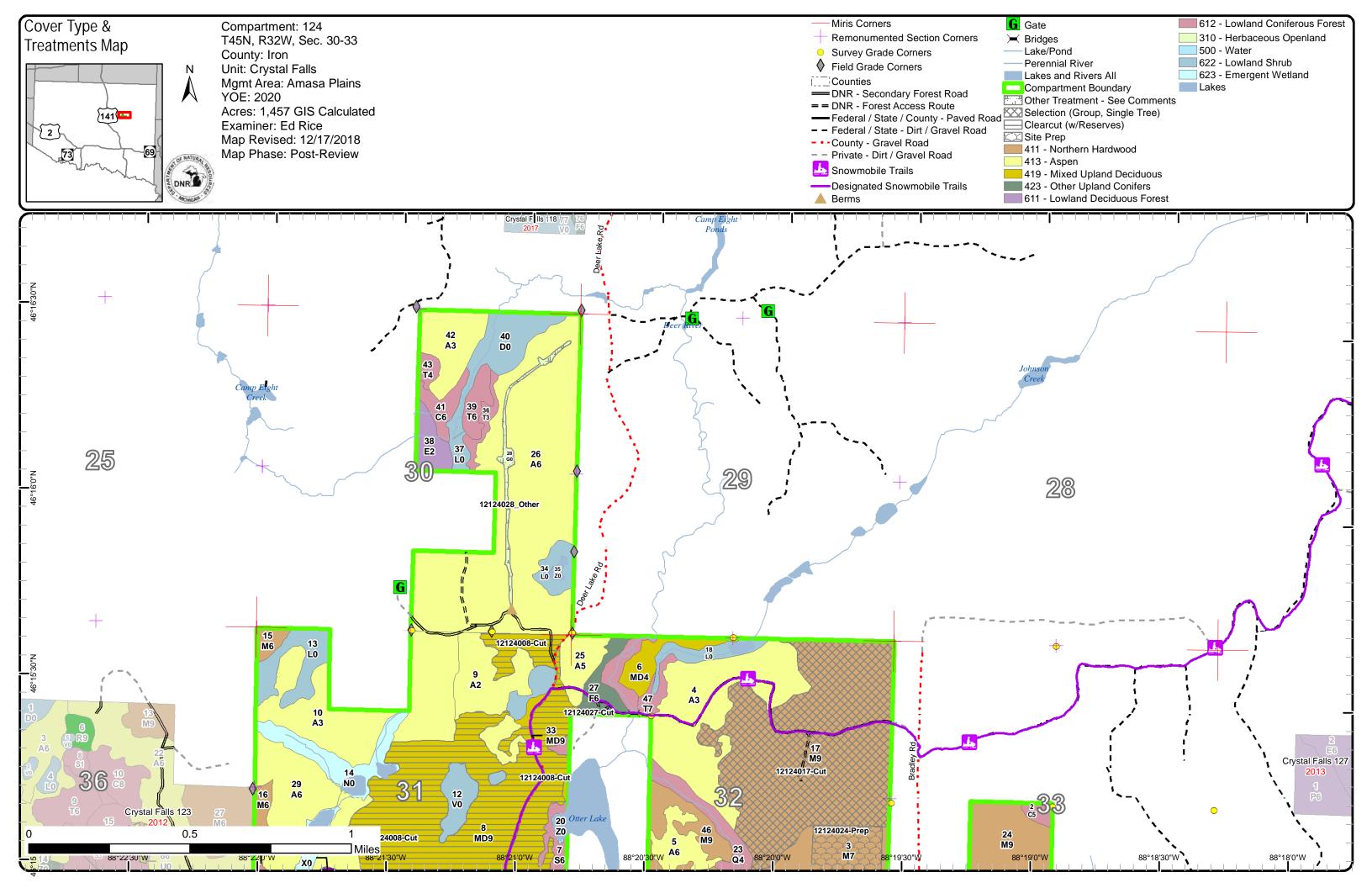
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

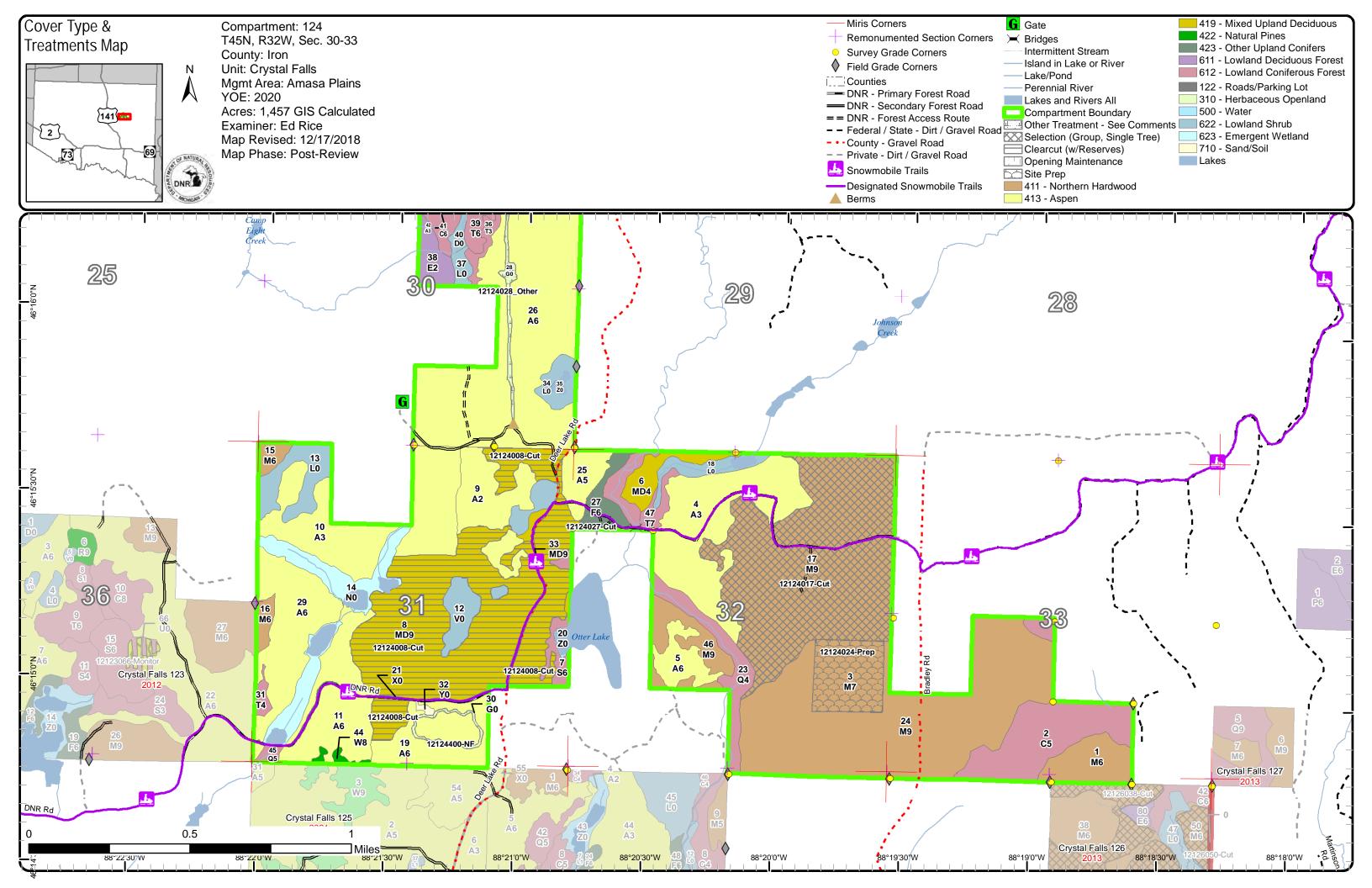
The following information is displayed, where pertinent, on the attached compartment maps:

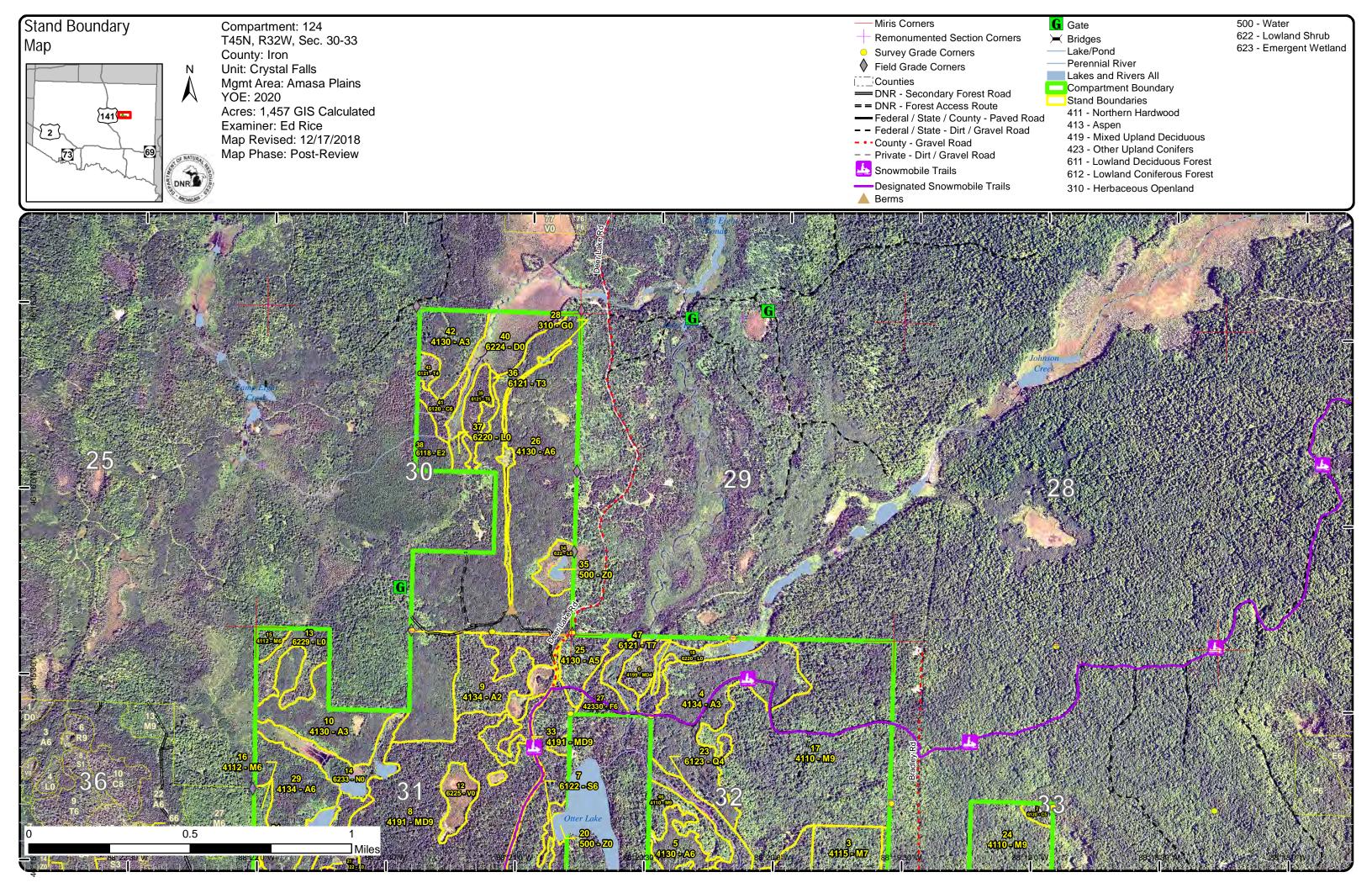
Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries

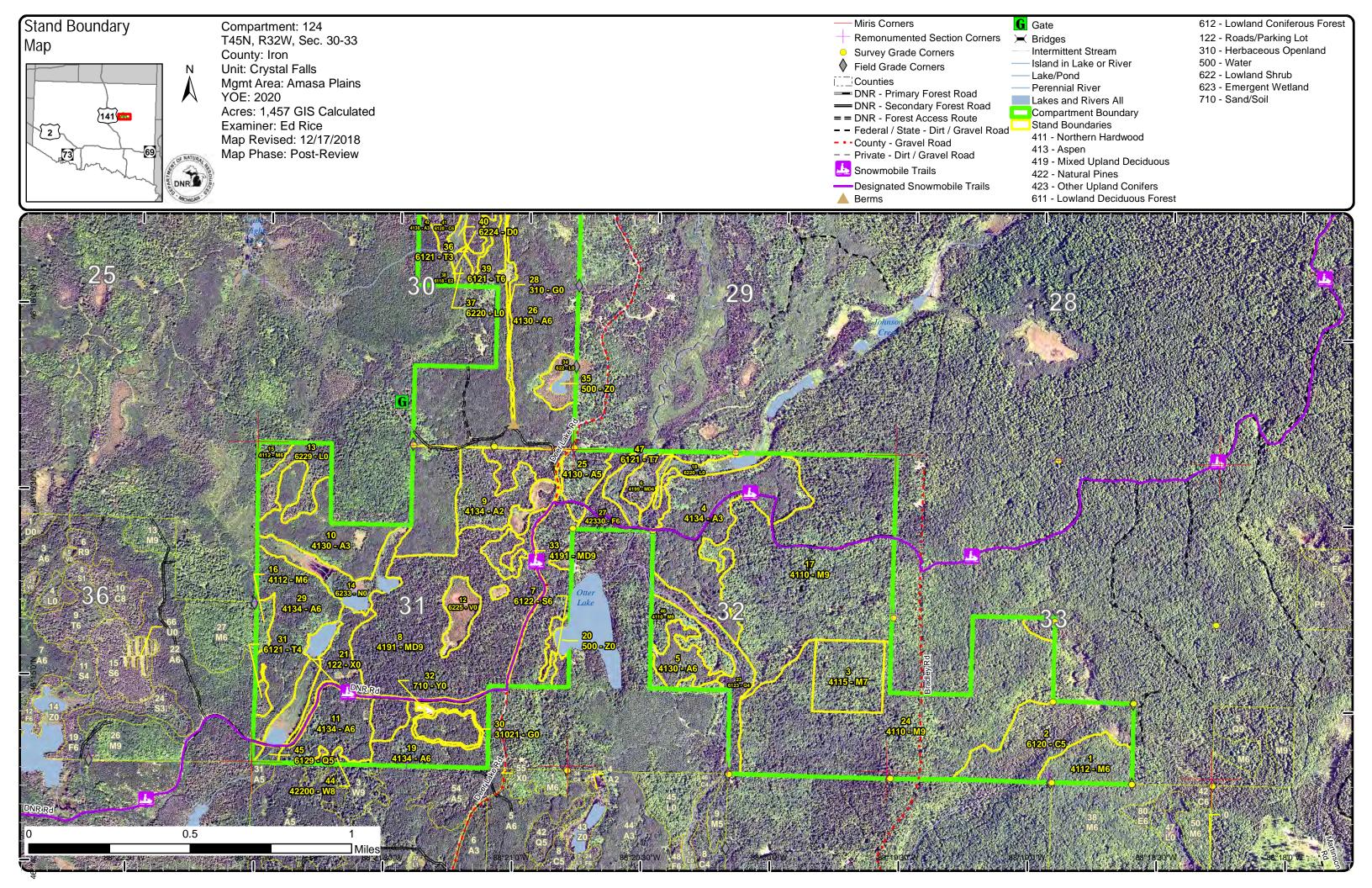
Details on the road access system

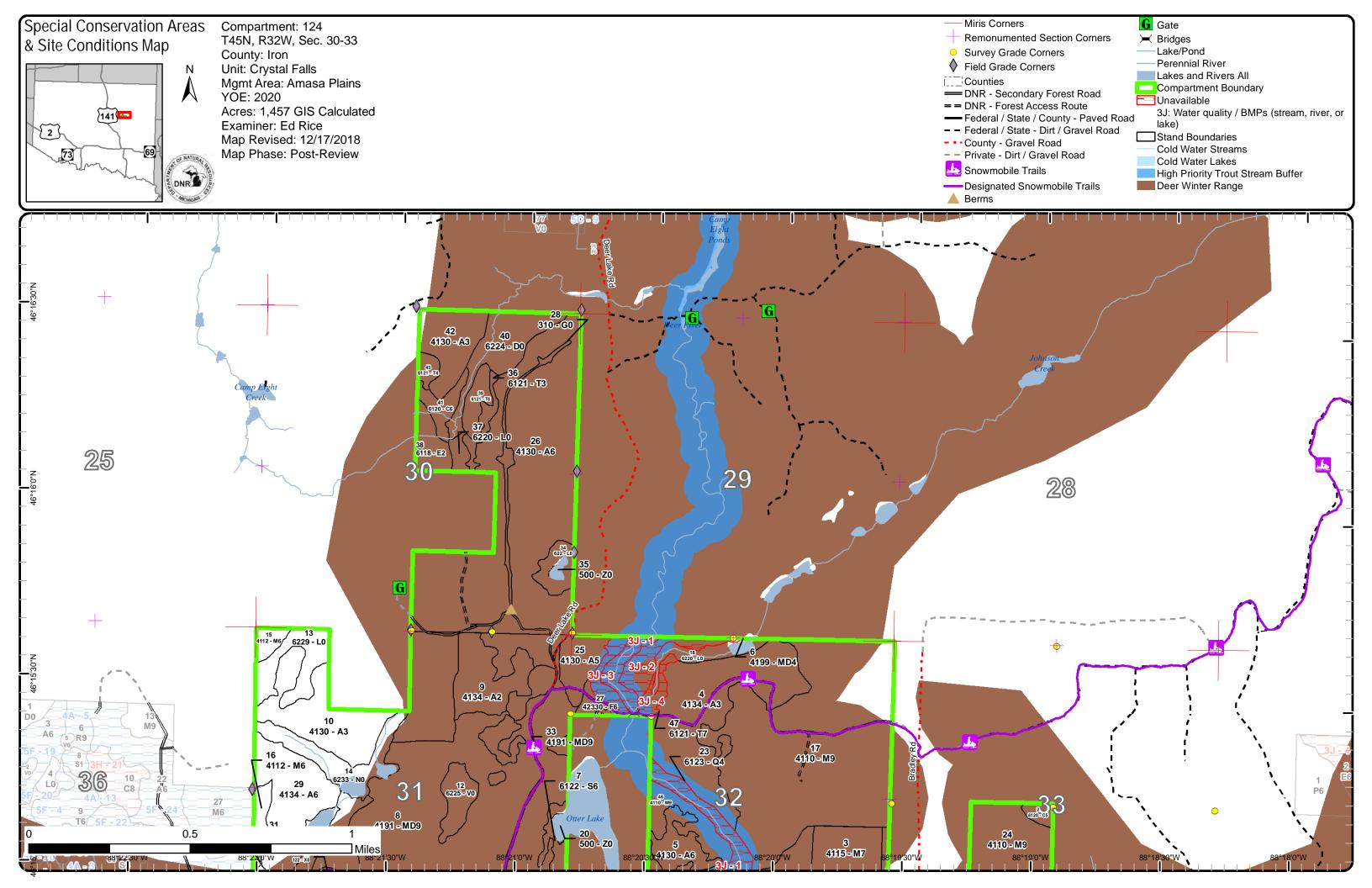


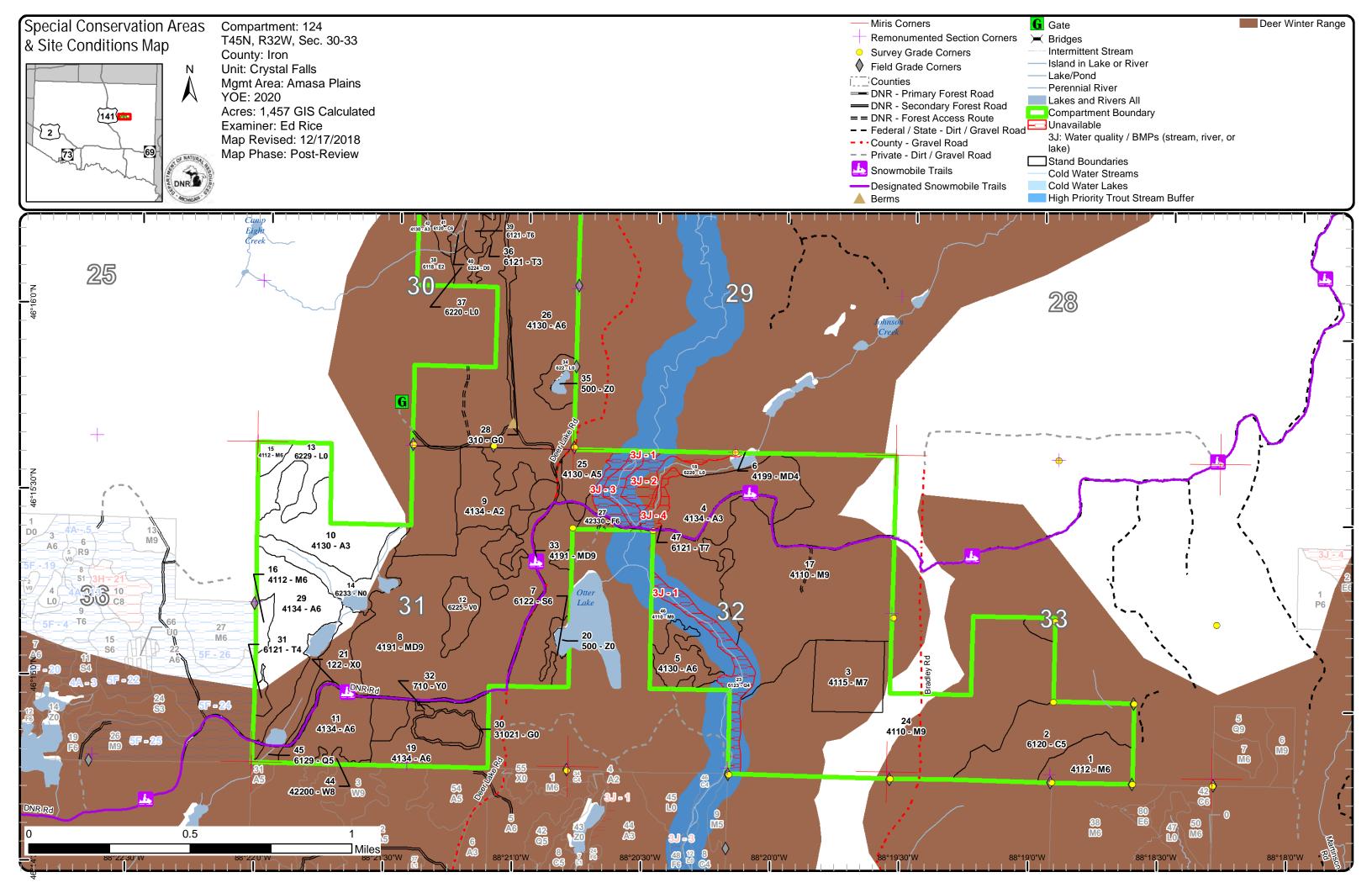












# Report 1 - Total Acres by Cover Type and Age Class

Crystal Falls Mgt. Unit

Ed Rice : Examiner

Compartment 124 Year of Entry 2020



# Age Class

	Age Age	A DE LES	2 / K	,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	8 /\$	No. 100	3/8	\$ / K	,	8 8	8/6	00,00,00	, , , , , , , , , , , , , , , , , , ,	, S.	1 25 K	LE LE	g <sup>x</sup> Jre	LA LOS
Aspen	0	0	107	288	95	50	0	0	0	0	0	0	0	0	0	0	0	0	540
Bog	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Cedar	0	0	0	0	0	0	0	0	0	0	52	8	0	0	0	0	0	0	60
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	29	0	2	0	0	0	0	0	0	0	0	0	0	0	31
Lowland Deciduous	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Shrub	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Lowland Spruce/Fir	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
Marsh	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Mixed Upland Deciduous	0	0	0	0	0	0	199	0	0	0	0	0	0	0	0	0	0	0	199
Northern Hardwood	0	0	0	0	0	0	5	54	21	0	0	0	0	0	0	0	0	350	430
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tamarack	0	0	0	5	0	3	8	0	0	9	0	0	0	0	0	0	0	0	25
Treed Bog	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Upland Spruce/Fir	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
White Pine	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2
Total	140	0	107	293	124	76	214	62	21	9	55	8	0	0	0	0	0	350	1457



# **Report 2 – Treatment Summary**

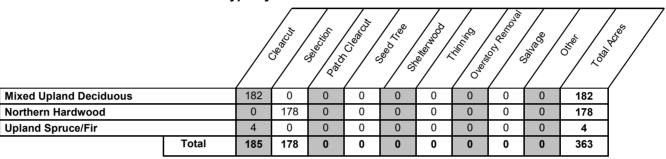
Crystal Falls Mgt. Unit Year of Entry: 2020

#### **Acres of Harvest**

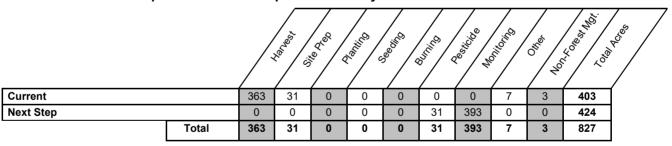
Compartment 124
Total Compartment Acres: 1,457

Commercial Harvest - 363 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



# **Proposed and Next Step Treatments by Method**



Stand

CoverType

4191 - Mixed

Report 3 -- Treatments Compartment: 124

**Treatment** 

Type

Harvest

**Treatment** 

Method

Clearcut with

Retention

Year of Entry: 2020 **Cover Type** Age **Approval** Objective Structure **Status** 

Even-Aged

Draft Field

Boundary

4319 - Mixed

**Upland Forest** 

**Upland Deciduous** with Conifer

**Site Condition:** 

Prescription cut merchantable aspen, spruce, fir, maple, w birch, and cherry. leave 1 w birch and/or cherry per cruise point where available, create small reserve areas within sale area to break up large expanse of cut. protect submerchantable conifers as much as possible. buffer any vernal/low Specs:

BA

Range

111-

140

areas, follow BMP guidelines. if logging operations occur during snowmobile season, follow trail guidelines.

Stand

Age

55

Size

Density

Sawtimber

Well

Monitoring, Natural Regen (Re-Inventory) Next Step

Acres

181.5

Treatments:

Acceptable aspen, spruce, fir

**Treatment** 

Name

12124008-Cut

**Habitat Cut: No** 

Regen:

s

t а

n

d 8

Other move up treatment YOE due to windthrow from 2017.

N end has pockets of advanced aspen regeneration 1-2" dbh from 2005 windtrhow, very scattered elm. small inclusions of leatherleaf bog Comment:

openings. S and E end of stand has heavy windthrow from April 2017 storm

Proposed Start Date: 10/1 /2018

12124017-Cut 177.5 4110 - Sugar Maple Sawtimber 70 81-110 Harvest Single Tree 411 - Northern Uneven-Draft Field Association Well Selection Hardwood Aged Boundary

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

Prescription thin to 60 BA. manage for best tree in place while utilizing value of larger diameter h maple, r maple and cherry. keep all species represented in

stand, avoid, advanced maple regeneration pockets and vernal areas, cut no cedar, hemlock or oak, if logging operations occur during Specs:

snowmobile season, follow trail guidelines.

Monitoring, Natural Regen (Re-Inventory) Next Step

**Treatments:** 

Acceptable n hardwoods

Regen:

**Other** H maple 18-22" dbh is prevalent throughout stand - fair/good form. scattered log sized w spruce and upland cedar. Along mid/South boundary of Comment:

stand is an obvious vernal area with higher stocking of r maple, cedar and b ash. small scattered vernal areas throughout. spruce/fir inclusion along mid - W boundary. Just S of snowmobile trail stand has areas slighter more open with higher stocking of h maple saplings, inclusions of

M3, A3, F4 and hazel.

**Proposed Start Date:** 10/1 /2019

12124024-30.6 4115 - Y.Birch. 66 1-50 411 - Northern Draft Field Sawtimber SitePrep Scarification Uneven-Hemlock NH Poor Hardwood Aged Boundary Prep

**Habitat Cut: No Site Condition:** 

**Prescription** Specs:

Pesticide, Hand Application; ; Monitoring, Natural Regen (Intermediate) Next Step

**Treatments:** 

Acceptable maple

Regen:

Other Percent to Treat = 100%

Comment:

**Proposed Start Date:** 8 /8 /2018

12124027-Cut 3.8 42330 - Upland Fir Poletimber 40 Unspec Harvest Clearcut with 4319 - Mixed Even-Aged Draft Field Well ified Retention **Upland Forest** Boundary

**Habitat Cut: No Site Condition:** 

Prescription outside of 300 foot buffer to Deer River: cut aspen spruce, fir, r maple 1 stick tall and larger. if during sale set up w birch is found to be a very Specs:

minor component, leave. If found to be prevalent cut 1 stick and larger, leaving 1 healthy w birch per cruise plot where present.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce, fir

Regen: Other

move up YOE for treatment so it can be attached to adjacent treatment.

very scattered w birch. larger w spruce is predominately standing dead from SBW. very scattered w pine. cut portion of stand of stand that lies Comment:

outside of 300 buffer to Deer River

Proposed Start Date: 10/1 /2018

Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 124 s Year of Entry: 2020 t а **Cover Type Treatment** Acres Stand Size Stand BA **Treatment Treatment** Age **Approval** n Density Method Objective Status d Name CoverType Age Range Type Structure 6.5 310 - Herbaceous Other Other 310 -Draft Field 28 12124028 Oth Nonstocked Unspec Herbaceous Openland ified Boundary er Openland **Habitat Cut: No Site Condition:** Prescription seed hunter walking trail for maintanence Specs: Next Step Treatments: <u>Acceptable</u> Regen: <u>Other</u> Old next step comments: close trail to vehicle/ORV access Comment: **Proposed Start Date:** 10/1 /2013 4134 - Aspen, 2.7 Poletimber 43 111-NonForestMgt Herbaceous/Crop 3102 - Grass Draft Field 12124400-NF Spruce/Fir Well 140 /Grass Planting Boundary **Habitat Cut: No Site Condition:** Prescription Hunter walking trail opening maintenance Specs: Next Step Treatments: <u>Acceptable</u> Regen:

Total Treatment Acreage Proposed:

**Proposed Start Date:** 

Other Comment:

402.6

10/1 /2009

Crystal Falls Mgt. Unit

Ed Rice: Examiner

Compartment: 124
Year of Entry: 2020

#### **Availability for Management** Total Acres Acres Avail Acres **Dominant Site Conditions** Available With Condition Not Available 3J Acres Aspen Bog Cedar Herbaceous Openland **Lowland Conifers Lowland Deciduous** Lowland Shrub Lowland Spruce/Fir Marsh **Mixed Upland Deciduous** Northern Hardwood Sand, Soil Tamarack Treed Bog Upland Spruce/Fir Urban Water

4%

White Pine

**Total Forested Acres** 

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 Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

1,457

1,403

96%

# Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Ed Rice : Examiner

Compartment: 124 Year of Entry: 2020

Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
	Comments:  Unavailable  Comments:	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs (stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs (stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs 8 5E: Long-Term Retention  Comments:  Unavailable 3J: Water quality / BMPs 5 Unspecified (stream, river, or lake)	Comments:  Unavailable 3J: Water quality / BMPs 8 5E: Long-Term Retention  Comments:  Unavailable 3J: Water quality / BMPs 8 Retention  Unspecified Unspecified Unspecified (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs 8 5E: Long-Term Retention  Comments:  Unavailable 3J: Water quality / BMPs 5 Unspecified

Mgt. Unit

Compartment: #Type! Year of Entry:



# Report 5 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Crystal Falls Mgt. Unit Compartment: 124
Year of Entry 2020



# 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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable by are relatively deep, have substantial the state. Such lakes are established by				
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial				
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, openings and savannas. Habitat areas are distinct from critical habitat designated for recove endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that general in nature, are not primarily associated with threatened or endangered species, and a 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 influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high documentities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well				

s t	Crystal Falls	Mgt. Unit		Report 7	- Forested	Stands Compartment: 124 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4112 - Maple, Beech, Cherry Association	Poletimber Well	21.4	79	81-110	stand thinned in winter 2017 under 4 Wheeler Hardwoods2
2	6120 - Lowland Cedar	Poletimber Medium	51.5	98	Unspecified	very scattered hemlock 14-16" dbh along edges. wet, springy. headwater of Shenky Creek
3	4115 - Y.Birch, Hemlock NH	Sawtimber Poor	30.4	66	1-50	cut as a seed tree/shelterwood under MWR sale in winter 2018
4	4134 - Aspen, Spruce/Fir	Sapling Well	74.8	26	Immature	E edge along hardwoods have scattered raspberry openings. Aspen 3-6" dbh, stand just beginning to produce 1-2 stick trees.
5	4130 - Aspen	Poletimber Well	14.2	24	Immature	aspen with small inclusions of fir interspersed. High prevalence of maple saplings in areas
6	4199 - Other Mixed Upland Deciduous	Poletimber Poor	12.0	58	1-50	high ridge between Deer River and Johnson Creek. areas of advanced aspen regeneration from 2005 windstorm. scattered windthrow from April 2017. no access.
7	6122 - Black Spruce	Poletimber Well	7.7	64	51-80	wet - small creek drains into Otter Lake
8	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	184.3	55	111-140	N end has pockets of advanced aspen regeneration 1-2" dbh from 2005 windtrhow. very scattered elm. small inclusions of leatherleaf bog openings.
9	4134 - Aspen, Spruce/Fir	Sapling Medium	33.2	12	1-50	large areas of advanced A3 1-2" dbh originating from 2005 windstorm windthrow. scattered elm and w pine. much of sawtimber sized w spruce has suffered mortality from SBW.
10	4130 - Aspen	Sapling Well	73.6	15	Immature	large diameter w pine component in NE end of stand. scattered small pockets of fir
11	4134 - Aspen, Spruce/Fir	Poletimber Well	46.0	33	Unspecified	pockets of well stocked w pine saplings 2-3" dbh. small vernal/bog ponds scattered.
15	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.8	59	51-80	stand on rock knob, difficult access
16	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.8	64	81-110	H maple is fair quality, r maple is low quality. scattered sawtimber h maple 14-16" dbh. slight cherry component
17	4110 - Sugar Maple Association	Sawtimber Well	177.7	70	81-110	H maple 18-22" dbh is prevalent throughout stand - fair/good form. scattered log sized w spruce and upland cedar. small scattered vernal areas throughout. spruce/fir inclusion in SW corner. Just S of snowmobile trail stand has areas slighter more open with higher stocking of h maple saplings, inclusions of M3, A3, F4 and hazel.
19	4134 - Aspen, Spruce/Fir	Poletimber Well	35.7	43	111-140	very scattered aspen 12-14" dbh. very scattered r maple poletimber 6-8" dbh component

s t	Crystal Falls	Mgt. Unit		Report 7	- Forested	Stands Compartment: 124 Year of Entry: 2020		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
23	6123 - Lowland Fir	Poletimber Poor	28.8	30	Immature	Deer River corridor. heavy tag alder with open grown lowland conifers. scattered open areas with swamp grass.		
24	4110 - Sugar Maple Association	Sawtimber Well	172.1	70	81-110	H maple 18-22" dbh is prevalent throughout stand - fair/good form. scattered log sized w spruce and upland cedar. Along mid/South boundary of stand is an obvious vernal area with higher stocking of r maple, cedar and b ash. small scattered vernal areas throughout.		
25	4130 - Aspen	Poletimber Medium	13.9	40	Unspecified	very little understory, nearly pure aspen stand. short, rolling hills. Aspen in good shape.		
26	4130 - Aspen	Poletimber Well	175.5	29	Unspecified	about a pure aspen stand 2 - 7" dbh with scattered 1 stick trees. small pockets of upland b spruce scattered throughout. widely scattered fir saplings.		
27	42330 - Upland Fir	Poletimber Well	11.5	40	Unspecified	very scattered w birch. larger w spruce is predominately standing dead from SBW. very scattered w pine. cut portion of stand of stand that lies outside of 300 buffer to Deer River		
29	4134 - Aspen, Spruce/Fir	Poletimber Well	48.9	33	Unspecified	very dense hazel and maple understory. scattered vernal/bog ponds		
31	6121 - Tamarack	Poletimber Poor	3.0	47	Unspecified	seasonal standing water, sphagnum. N end is sparsely timbered - heavy tag alder. very scattered cedar		
33	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	3.0	55	111-140	N end has pockets of advanced aspen regeneration 1-2" dbh from 2005 windtrhow. very scattered elm. small inclusions of leatherleaf bog openings.		
36	6121 - Tamarack	Sapling Well	5.3	29	Unspecified	mix of upland and lowland. very thick tamarack and b spruce regen. Cut in past when adjacent A3 was cut.		
38	6118 - Lowland Deciduous with Cedar	Sapling Medium	10.5	48	Unspecified	b ash 1 - 4" dbh. scattered cedar and trace fir. wet - drainages throughout		
39	6121 - Tamarack	Poletimber Well	8.1	57	Unspecified	good tamarack poletimber. hold for increase in diameter. heavier to b spruce along E edge.		
41	6120 - Lowland Cedar	Poletimber Well	8.1	101	Unspecified	widely spaced cedar and tamarack with tag alder. Scattered 1/10th - 1/4 acre pockets of well stocked b spruce 7 -10" dbh interspersed with F3, tag alder and windthrow. Tamarack heavier on E end of stand in transition to Camp 8 Creek marsh. S end of stand is more heavily stocked to cedar. Camp 8 Creek runs through stand.		
42	4130 - Aspen	Sapling Well	23.7	20	Unspecified	aspen 16 - 20' tall. scattered spruce/fir throughout. isolated large w pine		
43	6121 - Tamarack	Poletimber Poor	3.6	80	Unspecified	extensive windthrow throughout stand. fairly open throughout with tag alder and scattered tamarack. good spruce sapling establishment in open areas - natural patch cut occurring. widely scattered cedar		

S t	Crystal Falls		Report 7	′ – Forested S	Vear of Entry: 2020	NR OURCE	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	1.	CHIGAN
44	42200 - Natural White Pine	Sawtimber Medium	2.5	91	51-80		
45	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	2.0	56	Unspecified	very wet, multiple drainages from flowage to the N	
46	4110 - Sugar Maple Association	Sawtimber Well	19.6	64	81-110	sawtimber component of 14-18" dbh, lower quality with she boles. portion of stand is adjacent to Deer River	ort
47	6121 - Tamarack	Sawtimber Poor	5.2	85	Unspecified	multiple feeder creeks into Deer River, overall wet.	

Compartment: 124 Year of Entry: 2020



Stand	Cover Type	Acres	Managed Site	General Comments:
12	6225 - Bog	19.3	No	open leatherleaf bog with scattered, stunted b spruce, tamarack, w pine saplings. depending on the year and season, stand will be flooded
13	6229 - Mixed lowland shrub	18.3	No	tag alder with scattered tamarack and b spruce. NE corner has a small inclusion of Q5. very wet
14	6233 - Wet Meadow	37.7	No	old beaver meadows with tag alder, swamp grass. dead snags. stand is still flooded in areas and is seasonally ponded.
18	6220 - Alder/willow	10.0	No	tag alder with scattered lowland conifers. areas of old beaver meadows/water. creek drainage
20	500 - Water	2.2	No	W arm of Otter Lake
21	122 - Road/Parking Lot	4.8	No	DNR Rd
28	310 - Herbaceous Openland	6.5	Yes	old hunter walking trail. many areas growing into spruce/fir saplings
30	31021 - Cool Season Grass	2.7	Yes	Hunter walking trail. freshly dozed, rye
32	710 - Sand, Soil	0.9	No	gravel pit
34	622 - Lowland Shrub	8.3	No	stunted b spruce and tamarack. non productive forest land surrounding a small bog pond
35	500 - Water	1.3	No	small bog pond
37	6220 - Alder/willow	3.6	No	tag alder with widely scattered b spruce, tamarack and cedar. drainages leading into Camp 8 Creek
40	6224 - Treed Bog	24.1	No	areas of open bog with pockets of scattered poletimber. S end of stand has heavy tag alder with scattered b spruce, cedar and tamarack