

# **Compartment Review Presentation**

**Crystal Falls Forest Management Unit** 

Compartment 12128
Entry Year 2019
Acreage: 1,681
County Iron

Management Area: Michigamme Reservoir

Revision Date: 2017-08-17 Stand Examiner: Ed Rice

**Legal Description:** 

T44N R32W sections 10, 11, 12, 13, 14, 15, 22, 23

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

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Continue the hardwood stands on 20 year alternating cutting cycles, moving the stands toward regulation. Continue managing the aspen in multiple age classes, promoting regulated harvest acres for sustainability. Protect the riparian areas and transition zones during management activity.

#### Soil and topography:

Fine sandy loams to silt loams and rock outcrop. Lowlands have muck complexes. The terrain within the compartment varies from flat, sandy areas to steep ridge/rock outcrop.

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

Private land holdings with hunting camps intermix with this compartment. Some areas of the compartment are entirely accessed through private land.

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

The entire compartment lies within a heavily used deer wintering complex.

## Archeological, Historical, and Cultural Features:

None

#### **Special Management Designations or Considerations:**

None

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

Moccasin Lake, feeder trout stream to McCutcheon Creek which is a cold water trout stream. 100 foot buffers on lakes and non trout streams. 300 foot buffers should be implemented on trout streams in riparian areas susceptible to aspen regeneration. For all other riparian areas, BMPs should be followed to maintain canopy cover and prevent erosion into waterbodies.

#### Wildlife Habitat Considerations:

This compartment has a great diversity of stands, providing optimal habitat for a variety of wildlife species. Featured species include American woodcock, black bear, pileated woodpecker, northern goshawk, ruffed grouse, and white-tailed deer. The area includes state game fund lands and is a deer wintering complex.

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

Sand/gravel pits are not located in the area, but there appears to be some potential within the compartment. Some of the bedrock formations may have value as dimension stone. There has been no metallic mineral production within five miles of the compartment. There does not appear to be any iron ore potential in the compartment. Other metallic minerals have been documented in the vicinity but not in concentrations of economic significance. There has been metallic mineral leasing in this area in the past. There is no economic oil and gas production in the UP. The state does not own the mineral rights beneath parts of this compartment.

#### **Vehicle Access:**

WPA road is a well maintained, county gravel road. Off of this, two track roads are present but limited.

### **Survey Needs:**

E1/16 section 10 SE1/16 section 10 E1/16 section 11 N1/16 section 11,12 W1/16 section 1, 12 N1/16 section 12 N 1/16 section 14,15 SE1/16 section 15 W1/16 section 14, 23 NE1/16 section 22

## **Recreational Facilities and Opportunities:**

None

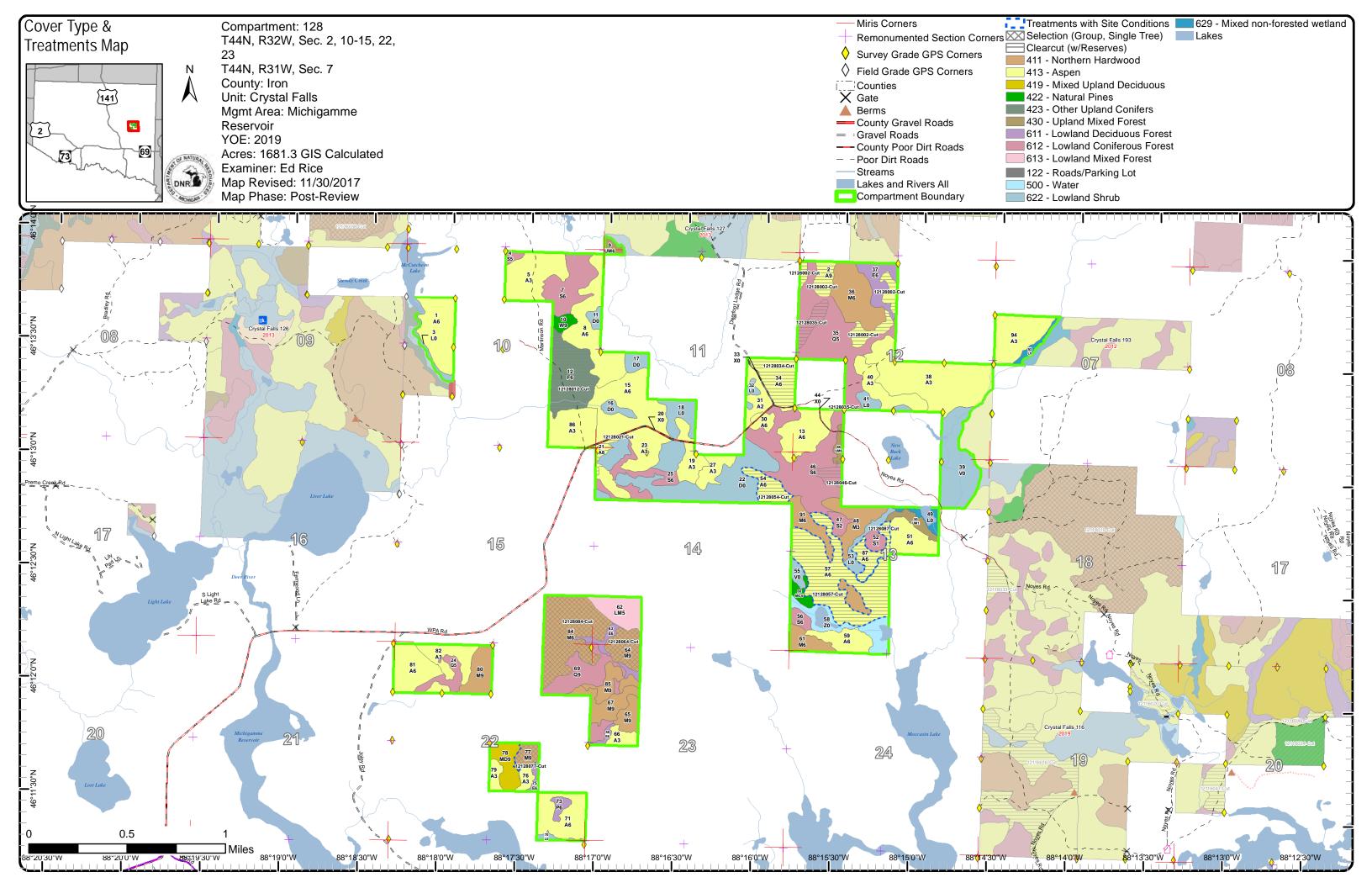
**Fire Protection:** 

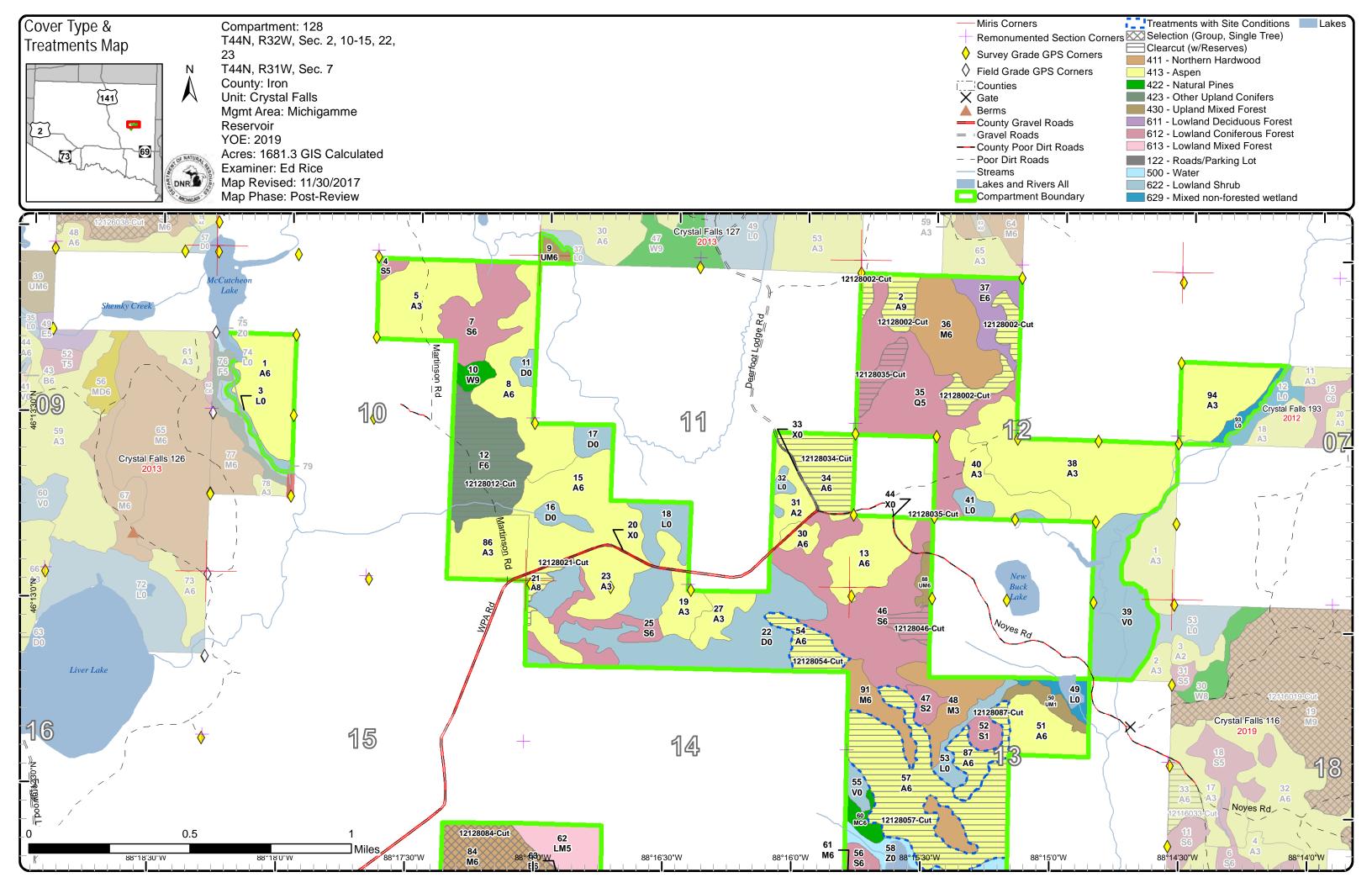
## **Additional Compartment Information:**

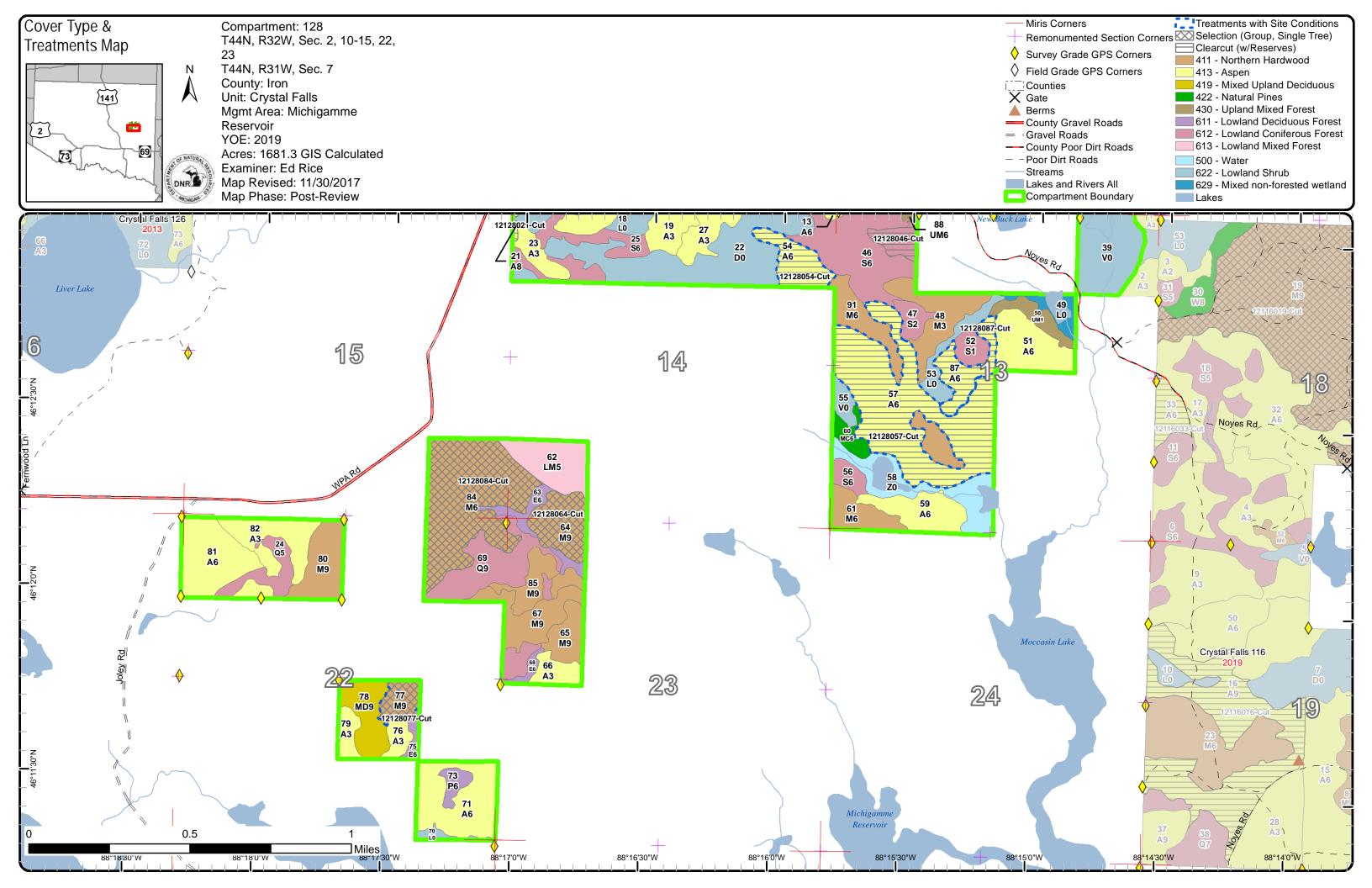
The following reports from the Inventory are attached:

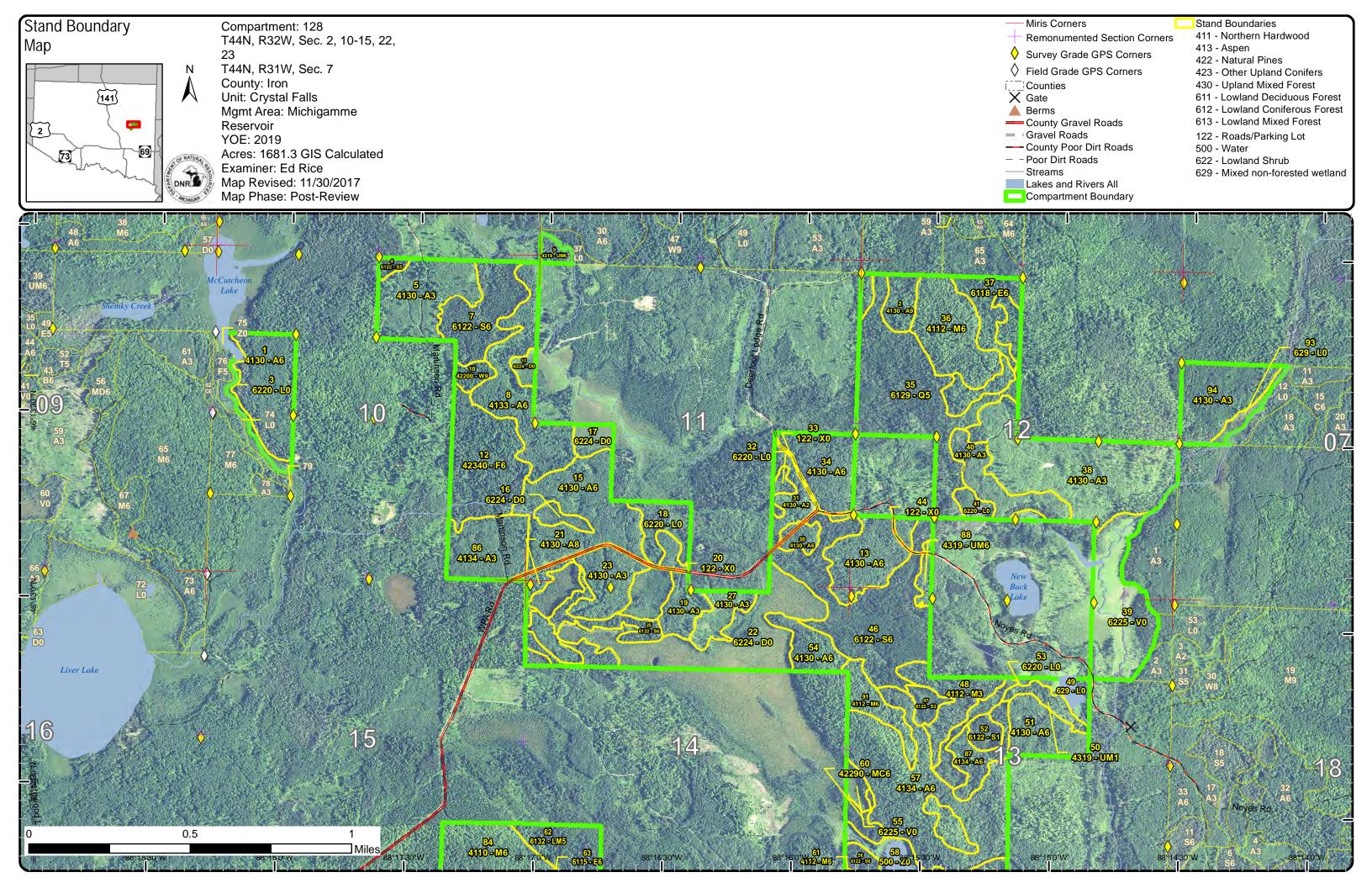
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

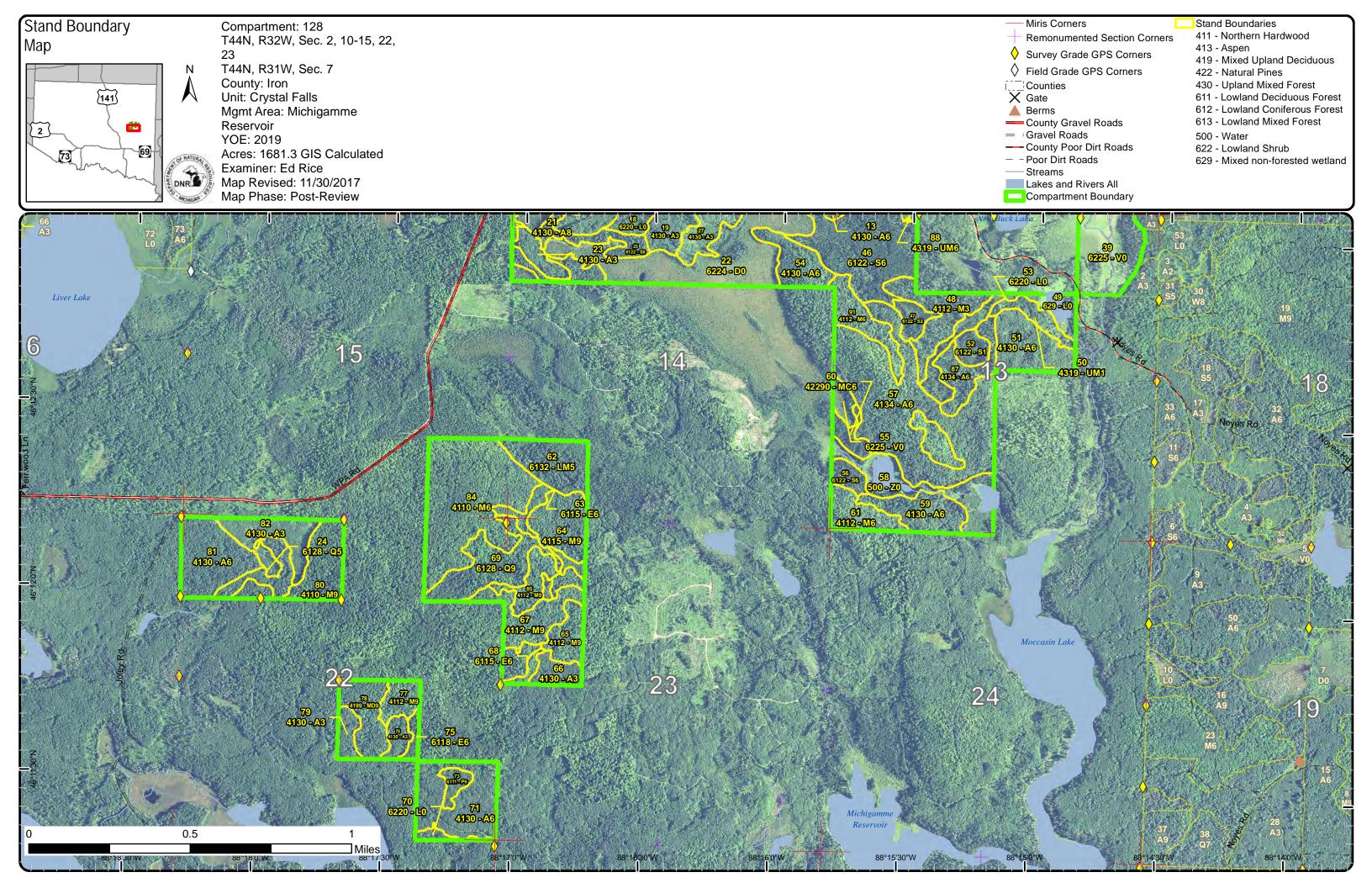
The following information is displayed, where pertinent, on the attached compartment maps:
Base feature information, stand boundaries, cover types, and numbers
Proposed treatments
Site condition boundaries
Details on the road access system

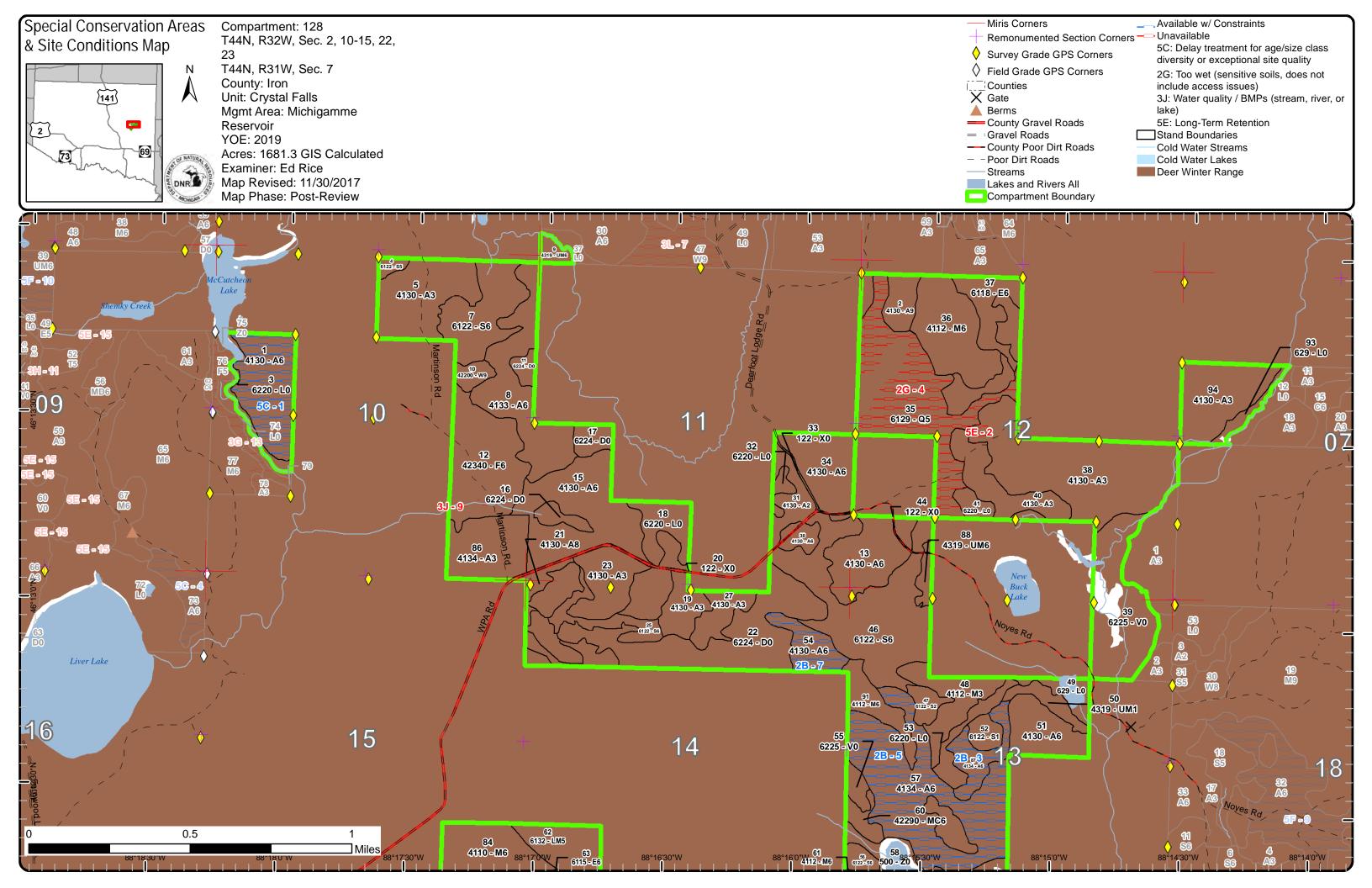


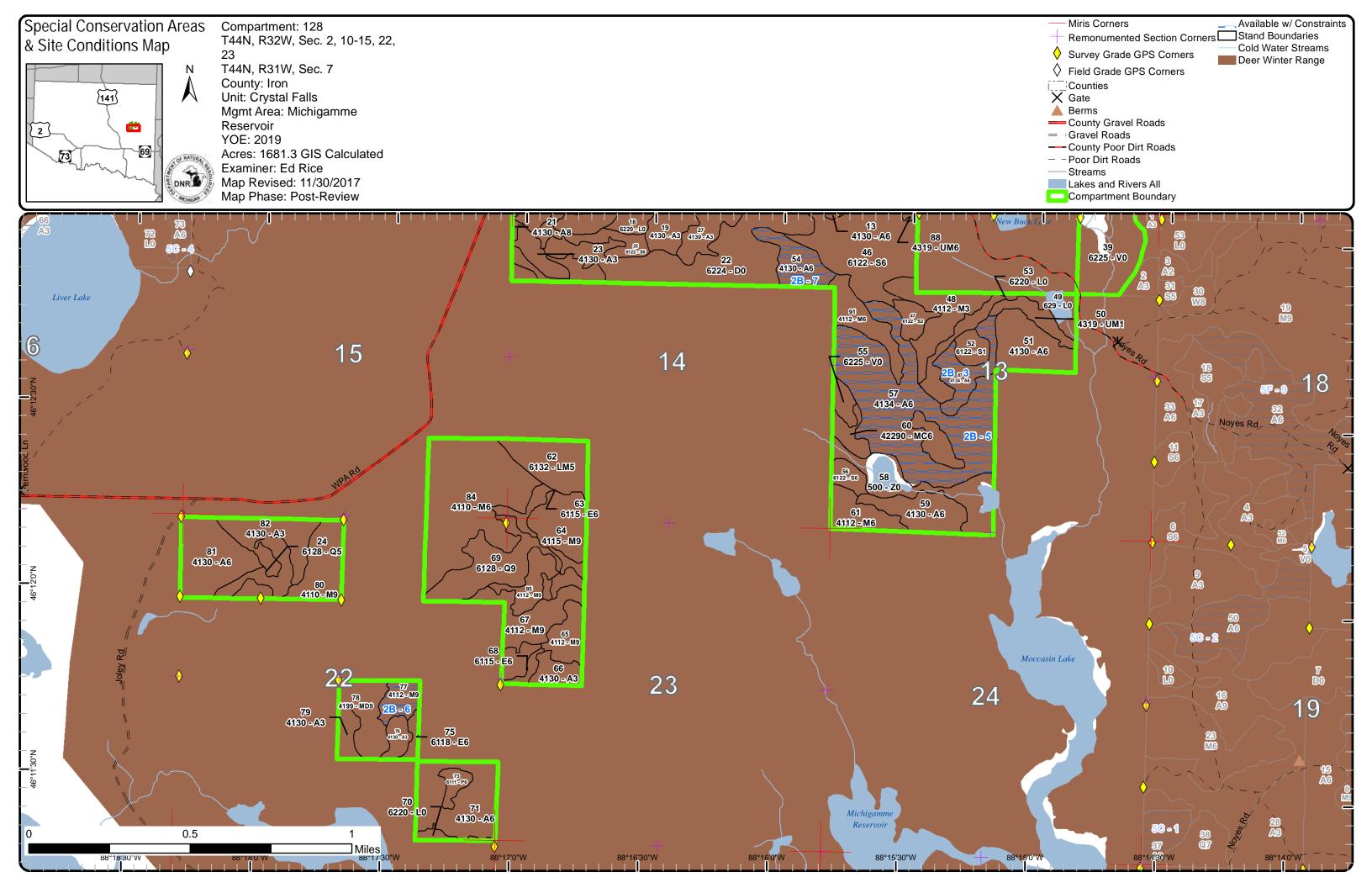












# Report 1 – Total Acres by Cover Type and Age Class

Crystal Falls Mgt. Unit

Ed Rice : Examiner

Compartment 128 Year of Entry 2019



## Age Class

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Aspen	0	116	78	155	75	160	138	50	0	0	0	0	0	0	0	0	0	0	770
Bog	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Lowland Aspen/Balsam Poplar	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Conifers	0	0	0	0	0	11	0	0	33	0	76	0	0	0	0	0	0	0	120
Lowland Deciduous	0	0	0	0	0	22	8	0	0	0	0	0	0	0	0	0	0	0	30
Lowland Mixed Forest	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Shrub	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Lowland Spruce/Fir	0	0	0	0	6	38	23	76	0	0	0	0	0	0	0	0	0	0	143
Mixed Upland Deciduous	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	16
Natural Mixed Pines	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Northern Hardwood	0	0	21	0	0	0	0	216	13	0	0	0	0	0	0	0	0	0	250
Treed Bog	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
Upland Mixed Forest	0	0	0	8	0	9	0	0	0	0	0	0	0	0	0	0	0	0	17
Upland Spruce/Fir	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	48
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
White Pine	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Total	243	116	99	168	81	261	185	396	46	5	76	0	0	0	0	0	0	0	1673



# **Report 2 – Treatment Summary**

# Crystal Falls Mgt. Unit Year of Entry: 2019

## **Acres of Harvest**

Compartment 128
Total Compartment Acres: 1,681

Commercial Harvest - 211 Harvests with Site Condition - 124 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**

		/		To			DOM SHOW	ou o	Keyono Vo.	88		
Aspen		178	0	0	0	0	0	0	0	0	178	ĺ
Lowland Conifers		10	0	0	0	0	0	0	0	0	10	
Lowland Spruce/Fir		7	0	0	0	0	0	0	0	0	7	1
Northern Hardwood		0	94	0	0	0	0	0	0	0	94	
Upland Spruce/Fir		46	0	0	0	0	0	0	0	0	46	
	Total	241	94	0	0	0	0	0	0	0	335	]

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

		/:	\$50,000 / 150	\$ \$ \d	Simo o			o o o	ouioino nuivina	No. No.	4 / w	, S. J. S.
Current		335	0	0	0	0	0	0	0	0	335	
Next Step		0	0	0	0	0	0	335	0	0	335	1
	Total	335	0	0	0	0	0	335	0	0	670	]

Monitoring, Natural Regen (Re-Inventory)

Compartment: 128

Year of Entry: 2019

S t a n

**Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** Method Objective Name CoverType Density Age Range Type Structure **Status** d 2 12128002-Cut 29.8 4130 - Aspen Clearcut with 4319 - Mixed Sawtimber 67 Unspec Harvest Even-Aged Approved Well ified Retention **Upland Forest** Proposal

Habitat Cut: No Site Condition:

<u>Prescription</u> cut aspen, spruce, fir, w birch and r maple 1 stick tall and larger. do not cut any hemlock, w pine, oak, or upland cedar. leave a component of <u>Specs:</u> healthy w birch - 1 tree per cruise point where available. exclude any wet ground b ash inclusions.

Thould y the brist of those por states point who to a tallable. Should be any thot ground be as

Next Step Treatments:

Acceptable aspen, spruce, fir, maple

Regen:
Other
Comment:

Proposed Start Date: 10/01/2018

Poletimber Unspec 12 12128012-Cut 46.3 42340 - Upland 62 Harvest Clearcut with 4212 - Planted Even-Aged Approved Spruce/Fir Well ified Retention Jack Pine Proposal

Habitat Cut: No Site Condition:

Prescription cut aspen, upland tamarack, spruce, balsam fir, w birch 1 stick tall and larger. Do not cut w pine, r pine or oak. reserve/buffer tag alder drainage

Specs: that runs through S end of stand

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable jack pine, spruce fir, small pockets of aspen

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

12128021-Cut 5.1 4130 - Aspen Sawtimber 68 Unspec Clearcut with 4319 - Mixed Harvest Even-Aged Approved Retention **Upland Forest** Proposal Medium ified

Habitat Cut: No Site Condition:

Prescription cut aspen, spruce, fir, r maple, w birch 1 stick tall and larger. leave component of healthy w birch 1 tree per cruise point where available. leave

Specs: any associated w pine or r pine

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce fir

Regen:
Other
Comment:

Proposed Start Date: 10/01/2018

12128034-Cut 26.5 4130 - Aspen Poletimber 47 Unspec Clearcut with 4319 - Mixed Harvest Even-Aged Approved Well ified Retention **Upland Forest** Proposal

Habitat Cut: No Site Condition:

Prescription cut aspen, spruce, fir, cherry, r maple, w birch 1 stick tall and larger. do not cut r pine, w pine. leave a component of healthy w birch and/or

Specs: cherry where available - 1 tree per cruise point.

Next Step Monitoring, Natural Regen (Re-Inventory)

<u>Treatments:</u>

Acceptable aspen, spruce, fir, maple

Regen: Other

Comment:

Proposed Start Date: 10/01/2018

Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 128 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Name CoverType Density Age Range Type Objective Structure **Status** d 12128035-Cut 10.2 6129 - Mixed 98 Clearcut with 6121 - Tamarack Even-Aged Approved 35 Poletimber Unspec Harvest Coniferous Lowland Medium ified Retention Proposal Forest **Habitat Cut: No Site Condition:** Prescription cut tamarack, b spruce, and balsam fir 1 stick and larger. leave cedar, balm and w brich Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable tamarack, b spruce, cedar Regen: Other Comment 10/01/2018 **Proposed Start Date:** 12128046-Cut 7.3 6122 - Black Spruce Poletimber 62 Unspec Clearcut with 6121 - Tamarack Even-Aged Harvest Approved ified Retention Proposal **Habitat Cut: No Site Condition:** Prescription cut tamarack and b spruce 1 stick tall and larger. Specs: leave associated cedar and w pine Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable tamrack, b spruce Regen: Other Comment: **Proposed Start Date:** 10/01/2018 12128054-Cut 14.5 4130 - Aspen Poletimber 54 Unspec Harvest Clearcut with 4319 - Mixed Even-Aged Approved Well ified Retention **Upland Forest** Proposal **Habitat Cut: No** Site Condition: Unknown Access Prescription cut aspen, spruce, balsam fir, maple and w birch 1 stick tall and larger. Do not cut w pine, any adjacent cedar or oak. leave a component of Specs: healthy w birch where available - 1 tree per cruise point

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable aspen, spruce fir

Regen: Other Comment:

10/01/2018 **Proposed Start Date:** 

12128057-Cut 86.9 4134 - Aspen, Poletimber 54 Unspec Harvest Clearcut with 4319 - Mixed Even-Aged Approved Spruce/Fir Well ified Retention **Upland Forest** Proposal

Site Condition: Unknown Access

**Habitat Cut: No** 

Prescription cut aspen, spruce, fir, maple, and w birch 1 stick tall and larger. do not cut w pine, hemlock or oak. where available, leave a component of

Specs: healthy w birch or h maple - 1 tree per cruise point.

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

Acceptable aspen, spruce, fir, maple

Regen:

Other check MNFI and wildlife for potential occurrence that is adjacent.

Comment:

**Proposed Start Date:** 10/01/2018

Compartment: 128

Year of Entry: 2019

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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
64	12128064-Cut	18.7	4115 - Y.Birch, Hemlock NH	Sawtimber Well	67	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Approved Proposal

**Habitat Cut: No Site Condition:** 

Prescription mark to 50 BA - target removals on quality r maple to capture the value of sawtimber/veneer.. mark only defective y birch. leave all hemlock, Specs:

oak, w pine, and upland cedar. reserve/buffer all vernal areas identified

Monitoring, Natural Regen (Re-Inventory) Next Step

**Treatments:** 

Acceptable n hardwoods

Regen: Other Comment:

**Proposed Start Date:** 10/01/2018

12128077-Cut 8.3 4112 - Maple. Sawtimber 64 81-110 Harvest Single Tree 411 - Northern Uneven-Approved Beech, Cherry Well Selection Hardwood Aged Proposal

Association

**Habitat Cut: No** Site Condition: Unknown Access

Prescription mark to 70 BA. remove high risk trees and utilize value of sawtimber/veneer if present. remove all trees with eutypella. do not cut hemlock,

Specs: upland cedar or oak. resever/buffer any vernal areas identified.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable n hardwoods

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2018

66.9 4110 - Sugar Maple Poletimber 411 - Northern 12128084-Cut 111-Harvest Single Tree Uneven-Approved Association Well 140 Selection Hardwood Aged Proposal

**Habitat Cut: No Site Condition:** 

Prescription mark to 70 BA - remove high risk trees and utilize the value of higher quality sawtimber/veneer. create canopy gaps. leave all hemlock, oak, w

pine, and upland cedar. reserve/buffer all vernal areas identified. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable n hardwoods

Regen: Other Comment:

**Proposed Start Date:** 10/01/2018

12128087-Cut 14.7 4134 - Aspen, Poletimber 67 Unspec Harvest Clearcut with 4319 - Mixed Even-Aged Approved Spruce/Fir Well ified Retention **Upland Forest** Proposal

Site Condition: Unknown Access

Prescription cut aspen, spruce, fir, w birch, r maple and tamarack 1 stick tall and larger. do not cut w pine, r pine or oak. leave component of healthy w birch

Specs: where available - 1 tree per cruise point.

Monitoring, Natural Regen (Re-Inventory) Next Step

**Treatments:** 

**Habitat Cut: No** 

Acceptable aspen, spruce, fir

Regen: Other

Comment:

**Proposed Start Date:** 10/01/2018

**Total Treatment Acreage Proposed:** 

335.2

Crystal Falls Mgt. Unit

Ed Rice : Examiner

Compartment: 128
Year of Entry: 2019

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	De	ominar	nt Site	e Con	dition	s
Acres	Available	With Condition	Not Available		2B	5C	2G	3J	5E
772	617	153	2	Aspen	116	37			2
55	55	0	0	Bog					
4	4	0	0	Lowland Aspen/Balsam Poplar					
120	54	0	66	Lowland Conifers			66		
30	30	0	0	Lowland Deciduous					
21	21	0	0	Lowland Mixed Forest					
67	67	0	0	Lowland Shrub					
149	149	0	0	Lowland Spruce/Fir					
16	16	0	0	Mixed Upland Deciduous					
6	6	0	0	Natural Mixed Pines					
249	241	8	0	Northern Hardwood	8				
89	89	0	0	Treed Bog					
17	17	0	0	Upland Mixed Forest					
48	46	0	1	Upland Spruce/Fir				1	
5	5	0	0	Urban					
27	27	0	0	Water					
5	5	0	0	White Pine					
1,681	1,450	161	70	Total Forested Acres	124	37	66	1	2
	86%	10%	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	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	37	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
2	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Ed Rice : Examiner

Compartment: 128
Year of Entry: 2019

3	Available	2B: Unknown if access through adjacent landowner(s) is possible	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	66	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	2B: Unknown if access through adjacent landowner(s) is possible	87	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	2B: Unknown if access through adjacent landowner(s) is possible	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	2B: Unknown if access through adjacent landowner(s) is possible	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments: small drainage						

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: 128
Year of Entry 2019



# 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.

Conservation	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 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 wildle and Waterfowl Production Areas, deer wintering complexes in loopenings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more rendangered species, and are not						

S	Crystal Falls	s Mgt. Unit		Report 7	- Forested	Stands Compartment: 128 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Poletimber Well	36.9	50	Unspecified	aspen is mainly 6 - 7" dbh. NE end has narrow inclusion of low quality r maple 7 - 8" dbh, mature aspen 12" + dbh and spruce/fir.
2	4130 - Aspen	Sawtimber Well	29.8	67	Unspecified	
4	6122 - Black Spruce	Poletimber Medium	2.8	52	Unspecified	wet, sphagnum b spruce swamp. high ground transition holds higher stocking of fir and w pine. very scattered w birch
5	4130 - Aspen	Sapling Well	38.0	15	Immature	
7	6122 - Black Spruce	Poletimber Well	32.3	48	Unspecified	
8	4133 - Aspen, Mixed Pine	Poletimber Well	46.9	41	Unspecified	small groves of large diameter w pine
9	4319 - Mixed Upland Forest	Poletimber Well	4.3	45	Unspecified	
10	42200 - Natural White Pine	Sawtimber Well	5.4	85	51-80	
12	42340 - Upland Spruce/Fir	Poletimber Well	47.8	62	Unspecified	south end of stand has tag alder drain running E - W. small groves of large diameter w pine along E side of the stand. N end had areas of higher stocked aspen. Aspen is poor form - off site, ground really is a pine site. very scattered cherry and w birch
13	4130 - Aspen	Poletimber Well	31.7	46	Unspecified	w spruce sawtimber sized trees impacted by SBW from previous years
15	4130 - Aspen	Poletimber Well	53.3	33	Immature	Aspen approx. 3 sticks tall
19	4130 - Aspen	Sapling Well	17.0	25	Immature	
21	4130 - Aspen	Sawtimber Medium	5.1	68	Unspecified	aspen, w birch and spruce are old age and falling out of stand
23	4130 - Aspen	Sapling Well	28.7	25	Immature	
24	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	10.8	47	Unspecified	very wet, intermittent creek. scattered fir poletimber
25	6122 - Black Spruce	Poletimber Well	20.4	51	Unspecified	semi lowland stand - areas transitioning to uplands
27	4130 - Aspen	Sapling Well	12.1	5	Immature	

s t	Crystal Falls	Crystal Falls Mgt. Unit			- Forested	Stands Compartment: 128 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4130 - Aspen	Poletimber Well	5.9	45	Unspecified	
31	4130 - Aspen	Sapling Medium	12.4	15	Immature	W edge has b spruce transition to tag alder. Mid to N end of stand has inclusion of 8 - 9" dbh aspen and b cherry
34	4130 - Aspen	Poletimber Well	26.5	47	Unspecified	scattered 12 - 14" dbh aspen. larger w spruce are in poor shape due to past SBW. scattered fir 7 - 10" dbh. low quality b cherry in N end
35	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	76.3	98	Unspecified	semi open areas heavier to tag alder. center of stand has higher stocking of cedar. N to NE end has higher stocking of b ash saplings and small poletimber
36	4112 - Maple, Beech, Cherry Association	Poletimber Well	37.8	64	81-110	H maple is fair quality, scattered 16 - 20" dbh sawtimber. r maple has heavy defect overall. w birch is more prevalent along edges of stand in transition. slight w pine component of large diameter trees 18 - 20" dbh
37	6118 - Lowland Deciduous with Cedar	Poletimber Well	16.8	47	Unspecified	scattered b ash 10 - 12" dbh. E end of stand is slightly higher ground yet still having tag alder, cedar, b ash.
38	4130 - Aspen	Sapling Well	84.5	4	Immature	
40	4130 - Aspen	Sapling Well	22.8	16	Immature	
46	6122 - Black Spruce	Poletimber Well	75.9	62	Unspecified	variable stand - areas with low stocking heavier to tag alder, areas very highly stocked to smaller diameter b spruce poletimber, areas heavier to tamarack. Mature tamarack inclusion along W line of stand 8 - 11" dbh, 70 yrs old.no winter deer use in interior of stand
47	6122 - Black Spruce	Sapling Medium	6.1	36	Unspecified	center of stand is leatherleaf bog with stunted b spruce saplings. edges of stand prevalent to b spruce small diameter poletimber
48	4112 - Maple, Beech, Cherry Association	Sapling Well	20.9	15	Immature	r maple saplings 20 - 25'. regeneration under scattered large aspen, spruce/fir that has fallen out
50	4319 - Mixed Upland Forest	Sapling Poor	7.8	25	Immature	stand was previously cut in 1981 and regenerated to aspen. beavers then cut aspen off of marsh edge converting stand to upland brush/open grown fir and b cherry saplings.
51	4130 - Aspen	Poletimber Well	22.1	36	Unspecified	aspen 4 - 5 sticks tall. scattered pockets of spruce/fir
52	6122 - Black Spruce	Sapling Poor	6.1	35	Unspecified	b spruce pot hole bog - low SI, stunted trees, leatherleaf. N edge has narrow strip of b spruce poletimber 6 - 7" dbh
54	4130 - Aspen	Poletimber Well	14.5	54	Unspecified	

s t	Crystal Falls	s Mgt. Unit		Report 7	' - Forested	Stands Compartment: 128 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	6122 - Black Spruce	Poletimber Well	5.5	41	Unspecified	along old beaver meadow/pond
57	4134 - Aspen, Spruce/Fir	Poletimber Well	86.9	54	Unspecified	aspen 6 - 10" dbh with scattered 12 - 14" trees. spruce/fir in small sapling pockets and poletimber is scattered throughout. W end of stand has areas heavier to w birch and r maple adjacent to rock outcrops
59	4130 - Aspen	Poletimber Well	17.7	47	Unspecified	
60	42290 - Natural Mixed Pine	Poletimber Well	5.9	61	51-80	very scattered w birch poletimber 7 - 8"dbh
61	4112 - Maple, Beech, Cherry Association	Poletimber Well	12.6	72	81-110	h maple sawtimber 20" dbh with low to fair quality. small inclusion of aspen in very SW corner of stand
62	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	21.0	45	Unspecified	scattered small higher ground inclusions where aspen has fallen out resulting in r maple sapling regeneration. overall low ground, very wet with multiple drainages. scattered b ash 12" dbh
63	6115 - Lowland Ash	Poletimber Well	7.8	58	Unspecified	very wet stand. scattered log size b ash 14 - 16" dbh. entire stand is a drainage
64	4115 - Y.Birch, Hemlock NH	Sawtimber Well	18.7	67	111-140	scattered upland cedar and vernal areas. very S edge has A3/Me inclusion 2 - 3" dbh
65	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.0	63	81-110	vernal ponds throughout stand. upland cedar and hemlock in small groves. component of r maple that is sawtimber size 16 - 20" dbh
66	4130 - Aspen	Sapling Well	7.6	20	Immature	S half heavier component of r maple saplings. maple poletimber 7 - 8" throughout. very scattered cherry
67	4112 - Maple, Beech, Cherry Association	Sawtimber Well	18.8	63	81-110	scattered, small vernal ponds with hemlock adjacent. very scattered y birch and b cherry
68	6115 - Lowland Ash	Poletimber Well	2.5	42	Unspecified	
69	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	33.0	75	Unspecified	scattered pockets of denser tag alder with b ash.
71	4130 - Aspen	Poletimber Well	31.7	24	Immature	multiple intermittent creeks flowing south. areas of wet ground.
73	6111 - Lowland Balsam Poplar	Poletimber Well	4.5	24	Immature	wet ground. cut with adjacent stand - similar species composition but wet ground prevalent with flowing drainages
75	6118 - Lowland Deciduous with Cedar	Poletimber Well	3.0	40	Unspecified	very wet stand

S t a n d	Crystal Falls Mgt. Unit			Report 7	- Forested	Stands Compartment: 128 Year of Entry: 2019
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
76	4130 - Aspen	Sapling Well	5.4	16	Immature	
77	4112 - Maple, Beech, Cherry Association	Sawtimber Well	8.3	64	81-110	H maple sawtimber trees 14 - 16" dbh, fair to good quality. very scattered fir along transition areas
78	4199 - Other Mixed Upland Deciduous	Sawtimber Well	16.4	57	Unspecified	scattered aspen 11 - 14" dbh. small vernal areas interspersed through stand
79	4130 - Aspen	Sapling Well	6.1	24	Immature	very scattered 1 stick aspen component
80	4110 - Sugar Maple Association	Sawtimber Well	18.5	65	81-110	scattered, small vernal ponds throughout with drainage in SW of stand flowing N - S. y birch component in this area. very scattered large w pine 24" dbh +
81	4130 - Aspen	Poletimber Well	30.9	43	Unspecified	scattered, small vernal ponds throughout and lower ground inclusions with tag alder. 10 - 11" dbh aspen component. cherry prevalent in SW of stand. 12" dbh w spruce intermittent throughout stand
82	4130 - Aspen	Sapling Well	19.6	5	Immature	
84	4110 - Sugar Maple Association	Poletimber Well	66.9	64	111-140	scattered pockets of h maple regen 3 - 5' tall that is heavily browsed. fair to good h maple and basswood sawtimber
85	4112 - Maple, Beech, Cherry Association	Sawtimber Well	10.3	64	81-110	small component of large w pine 20" dbh +
86	4134 - Aspen, Spruce/Fir	Sapling Well	29.7	26	Immature	scattered aspen 1 stick tall. Stand just beginning to move into poletimber diameter classes
87	4134 - Aspen, Spruce/Fir	Poletimber Well	14.7	67	Unspecified	r maple saplings heavily browsed
88	4319 - Mixed Upland Forest	Poletimber Well	4.6	45	Unspecified	S 1/2 heavier stocked to aspen
91	4112 - Maple, Beech, Cherry Association	Poletimber Well	22.3	63	81-110	very scattered, small vernal ponds throughout areas, notably along E edge are higher stocked to aspen. sawtimber that is present is low quality, with poletimber trying to grow into some quality. r maple is poor with defects. scattered h maple 16 - 20" dbh wolf trees. W edge has higher stocking of w birch in decline. N end has highest percent of sawtimber of any quality. scattered upland cedar

4130 - Aspen

94

Sapling Well

33.7

21

Immature

areas of low - swamp grass with b ash in center of stand. small inclusion of large diameter cedar 20"+ along W edge

Compartment: 128 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
3	6220 - Alder/willow	5.9	No	tag alder bottom land along McCutcheon Creek. Portion of McCutcheon Lake also included
11	6224 - Treed Bog	4.1	No	leatherleaf bog with stunted b spruce and tamarack
16	6224 - Treed Bog	5.2	No	bog - leatherleaf, scattered b spruce and tamarack
17	6224 - Treed Bog	6.9	No	leatherleaf bog with stunted b spruce and tamarack
18	6220 - Alder/willow	26.6	No	tag alder thicket with scattered tamarack poletimber and b spruce
20	122 - Road/Parking Lot	3.3	No	WPA Road - county improved gravel
22	6224 - Treed Bog	73.0	No	open leatherleaf bog with stunted b spruce and tamarack. isolated bog ponds
32	6220 - Alder/willow	3.2	No	tag alder with scattered b spruce/tamarack
33	122 - Road/Parking Lot	1.0	No	Deerfoot Lodge Road - improved gravel
39	6225 - Bog	49.8	No	open bog - leatherleaf/swamp grass. Margesson Creek
41	6220 - Alder/willow	5.2	No	ponded tag alder with scattered b spruce and tamarack
44	122 - Road/Parking Lot	0.8	No	Noyes Road
49	629 - Mixed non-forested wetland	8.5	No	open marsh - swamp grass, alder, ponded water and creek. small, narrow strip of upland spruce/fir immediately adjacent to the lowlands.
53	6220 - Alder/willow	10.0	No	tag alder with scattered balm
55	6225 - Bog	4.8	No	open bog - leatherleaf/swamp grass
58	500 - Water	26.9	No	series of old beaver flowages with areas of tag alder in w end
70	6220 - Alder/willow	2.7	No	tag alder with intermittent creeks and flowing drainages
93	629 - Mixed non-forested wetland	5.2	No	Magesson Creek - beaver flowages, tag alder, scattered b spruce