

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12035
Entry Year 2019
Acreage: 2,352
County Dickinson

Management Area: Ralph Ground Moraine

Revision Date: 2017-08-10

Stand Examiner: Deb Goupell

Legal Description:

T43N R28W Sec 1-4, 9 T44N R28W Sec 28,33,34

Identified Planning Goals:

Maintain sustainable aspen age classes, encourage diversity within stands, promote best tree selection for site. Protect all water bodies.

Soil and topography:

Primarily upland with rolling hills.

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

Predominantly State land within and around this compartment. A few private parcels on the south end of compartment.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

One located but unaffected as no treatment in location area.

Special Management Designations or Considerations:

Trout streams need buffering.

Watershed and Fisheries Considerations:

The North Branch of the North Branch of the Ford River and the North Branch of the Ford River conjoin at the far east end of this compartment.

Wildlife Habitat Considerations:

Featured species include American woodcock, black bear, northern goshawk, ruffed grouse, and white-tailed deer. This compartment has many stands with a high density of hazel, providing great bear habitat. Various grass openings will be managed by WLD to keep as openings. This compartment also contains state game fund lands.

Mineral Resource and Development Concerns and/or Restrictions

There has been some minor sand and gravel production in the area, and there appears to be some potential within the compartment on the uplands. There has been no metallic mineral mining within ten miles of the compartment. There has been recent metallic mineral leasing in the area and there could be some potential within the compartment. There is no economic oil and gas production in the UP.

Vehicle Access:

Vicenzie Rd is a two-track that serves as a main artery into this compartment. Various other two-tracks are found throughout.

Survey Needs:

None needed this entry.

Recreational Facilities and Opportunities:

Hunting, fishing, camping, trapping are common activities in this compartment.

Fire Protection:

Felch protection area

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

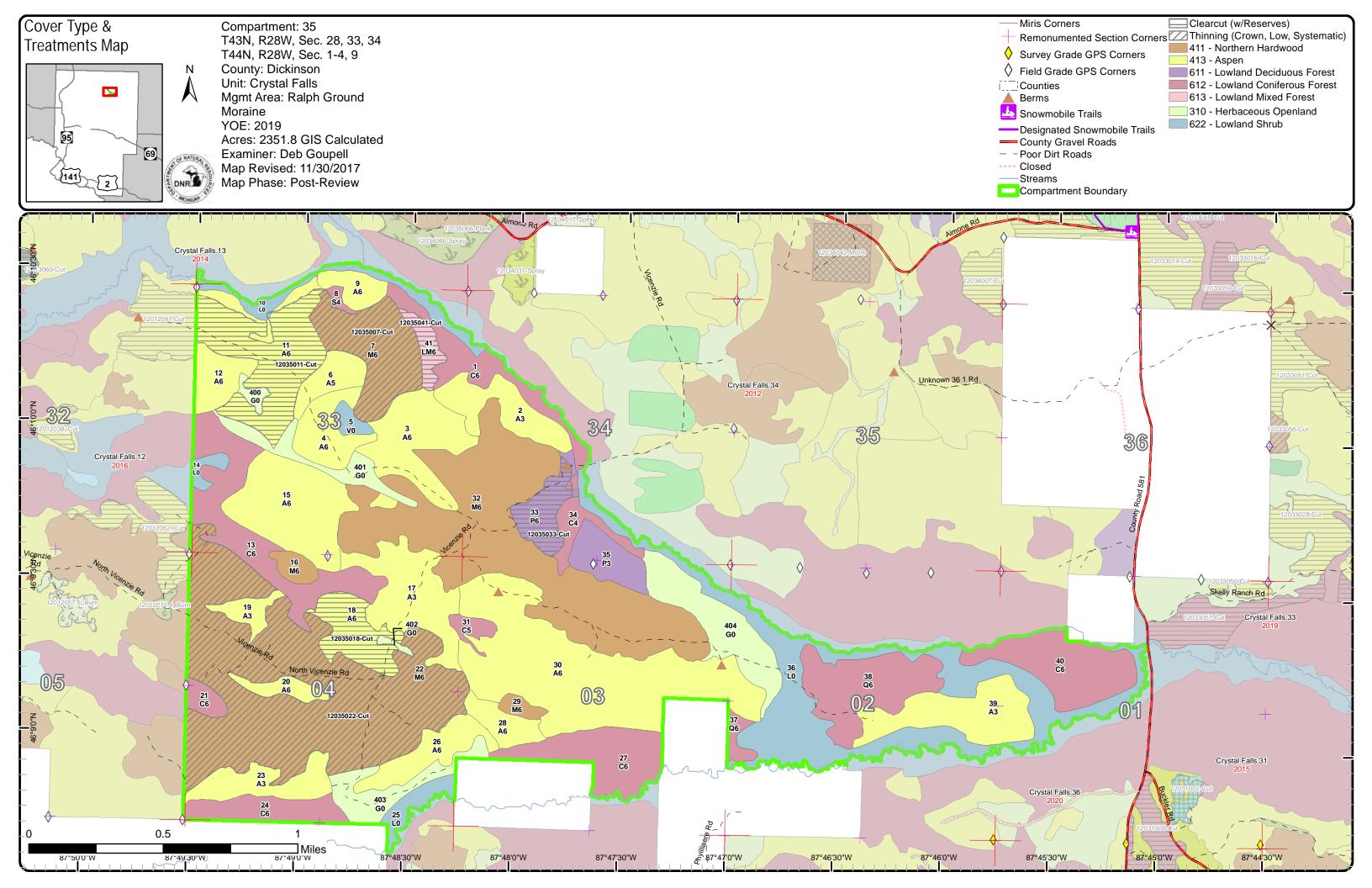
The following information is displayed, where pertinent, on the attached compartment maps:

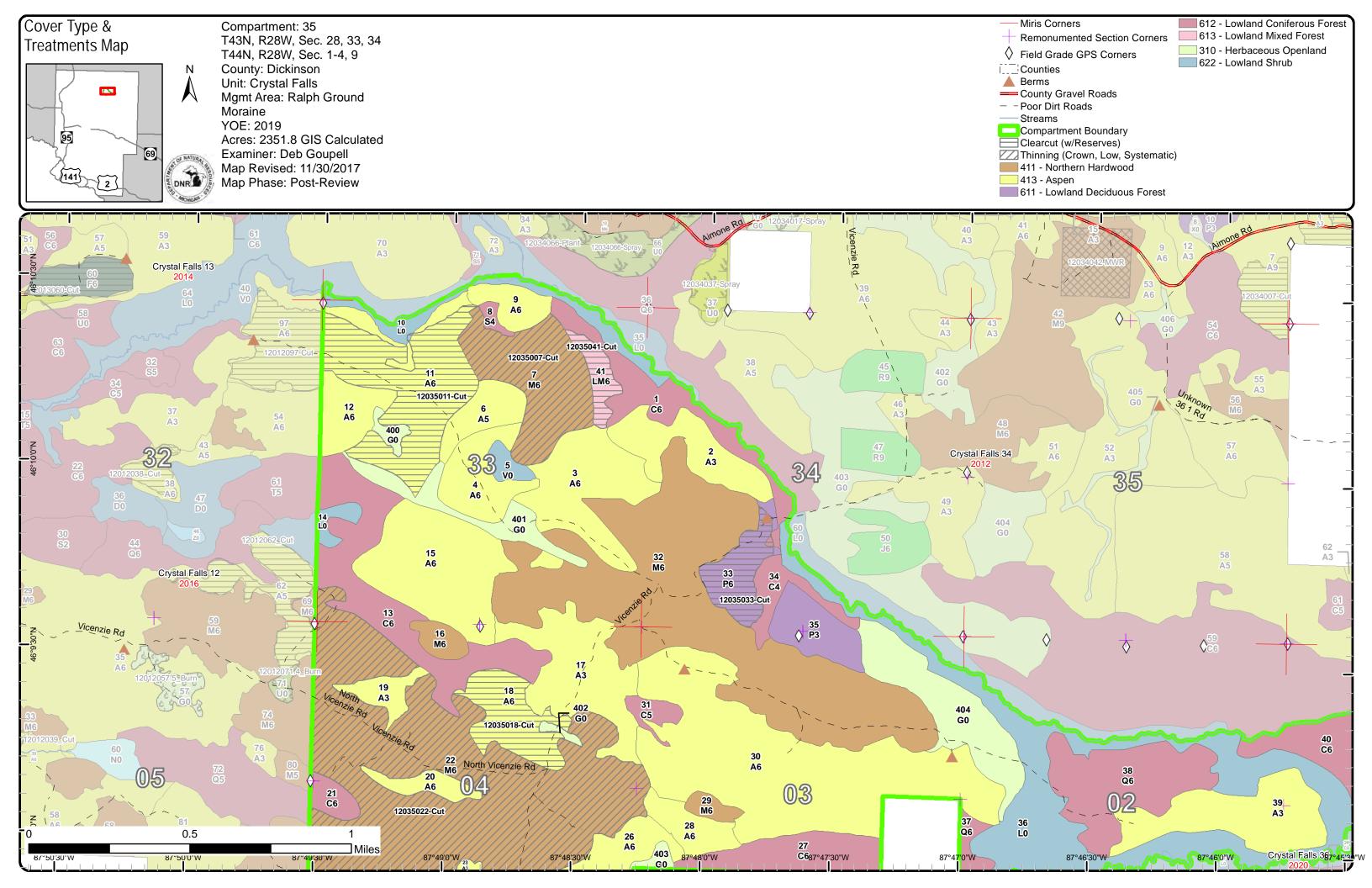
Base feature information, stand boundaries, cover types, and numbers

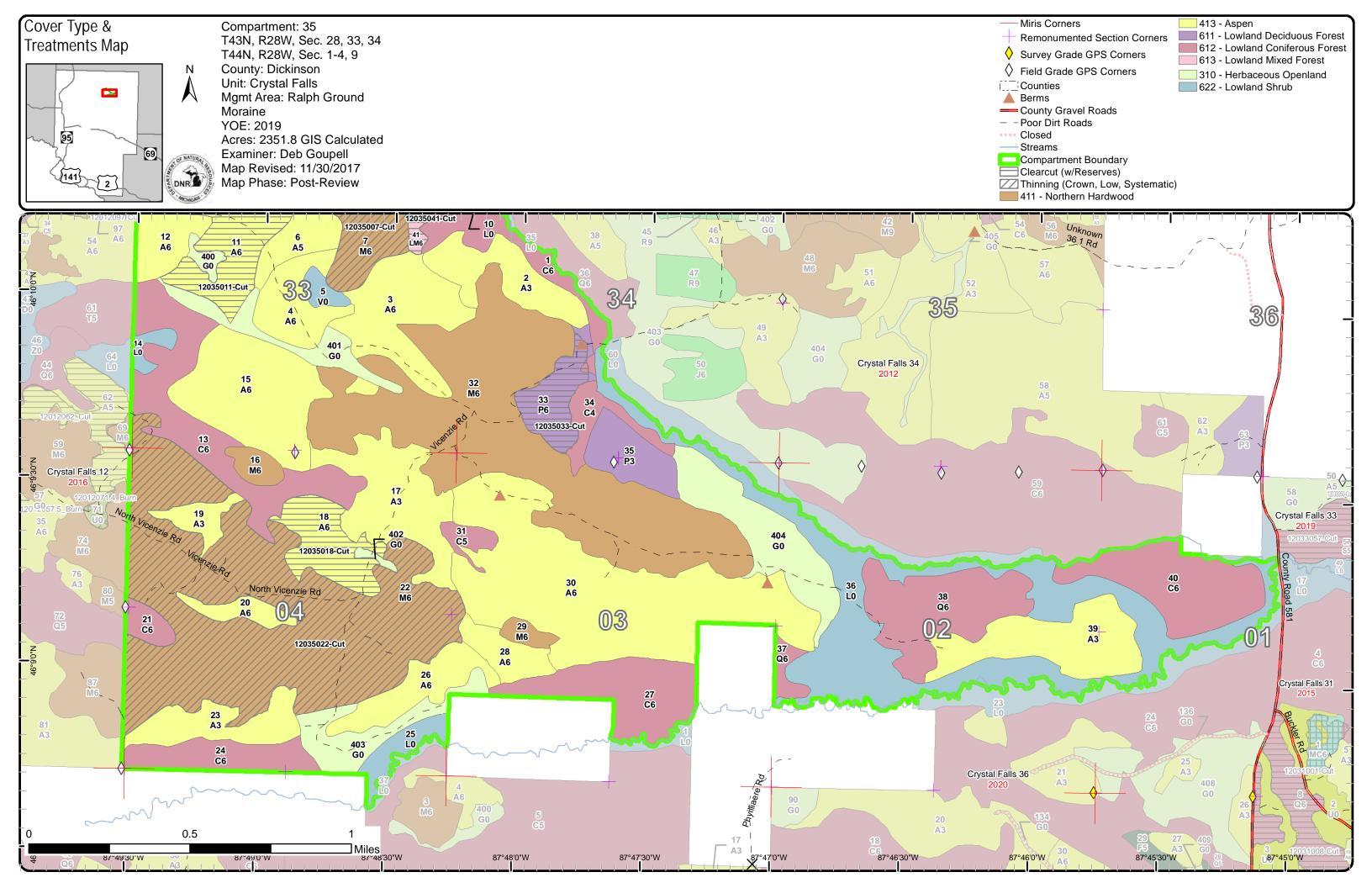
Proposed treatments

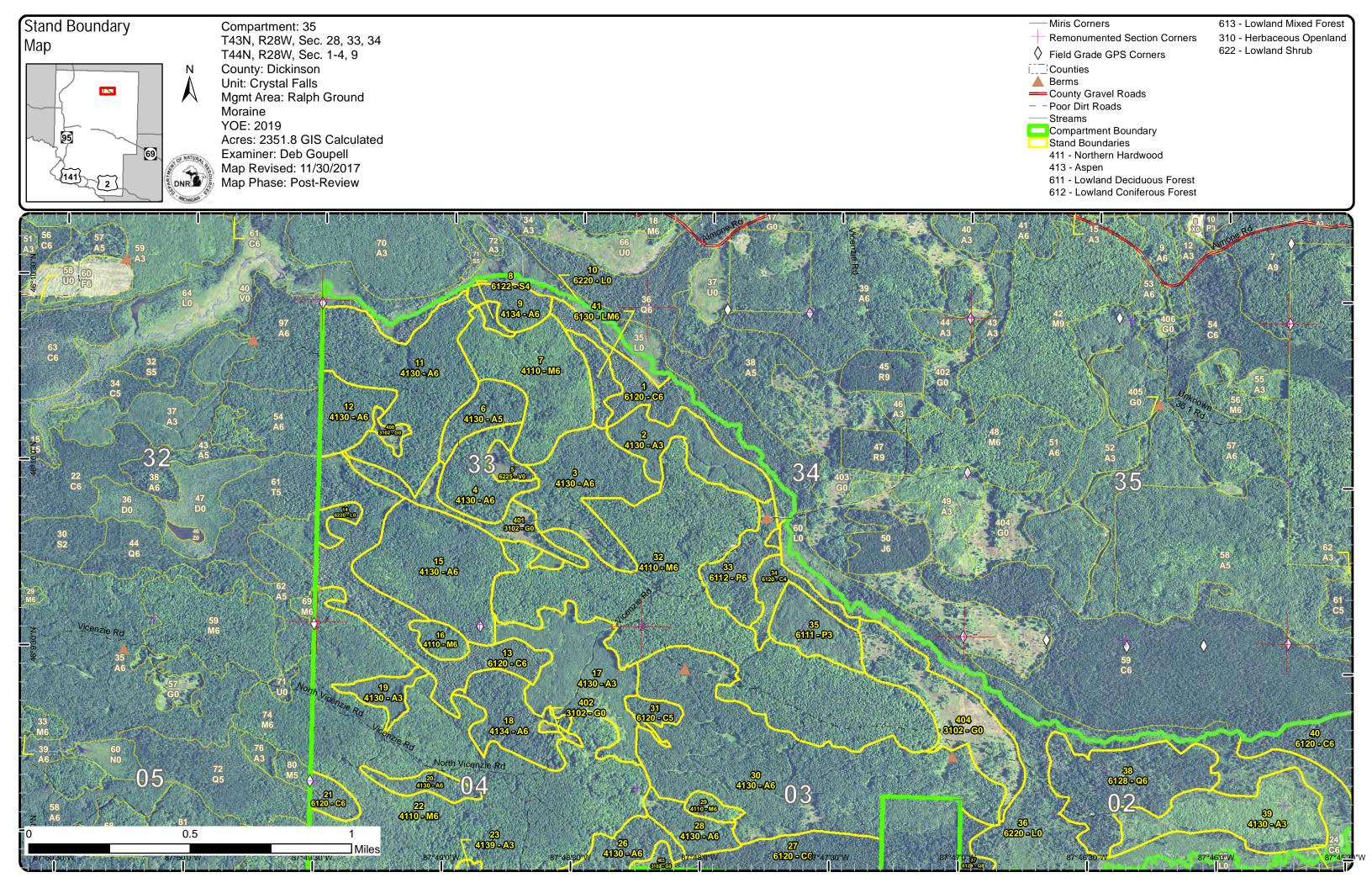
Site condition boundaries

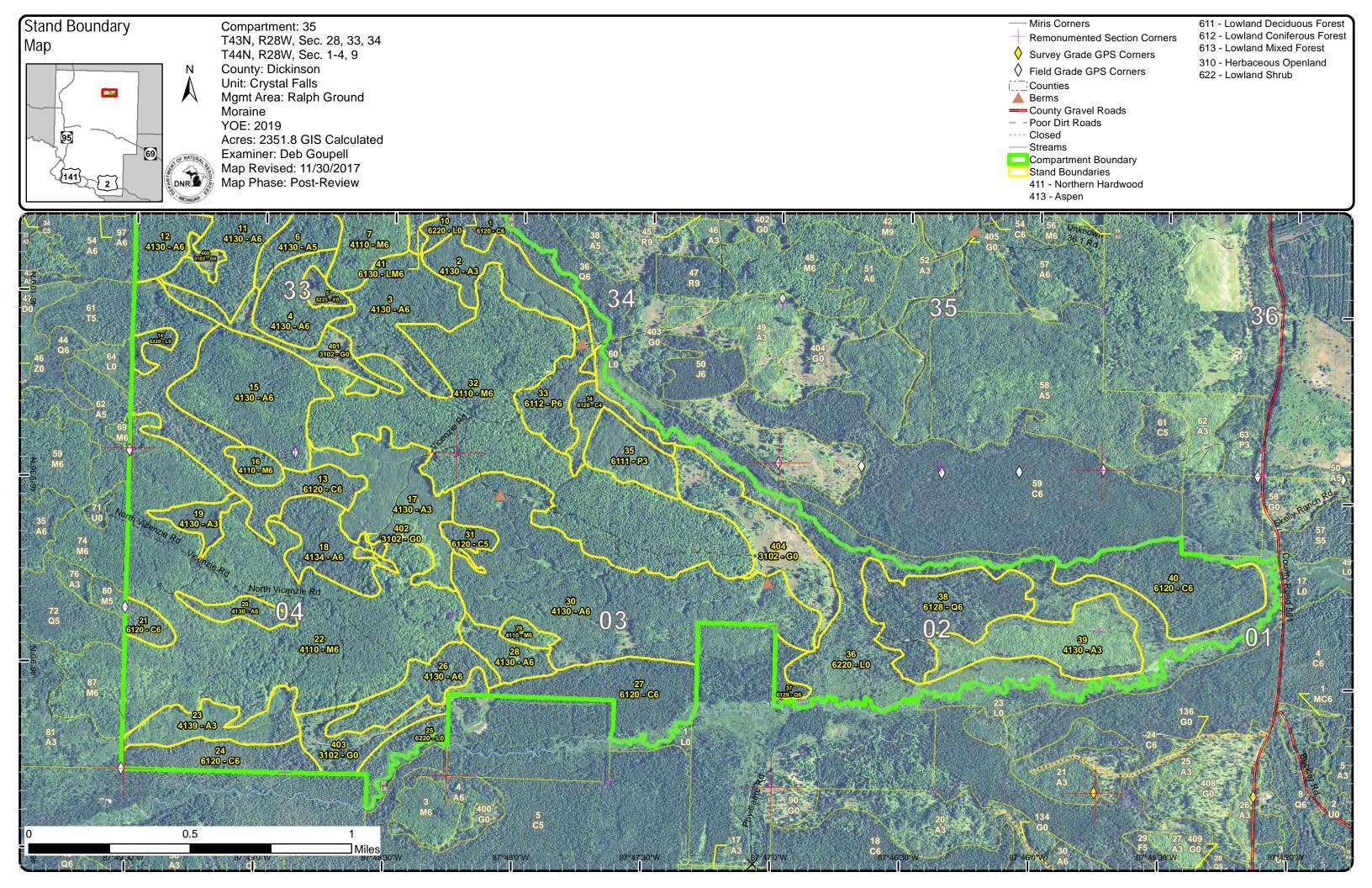
Details on the road access system

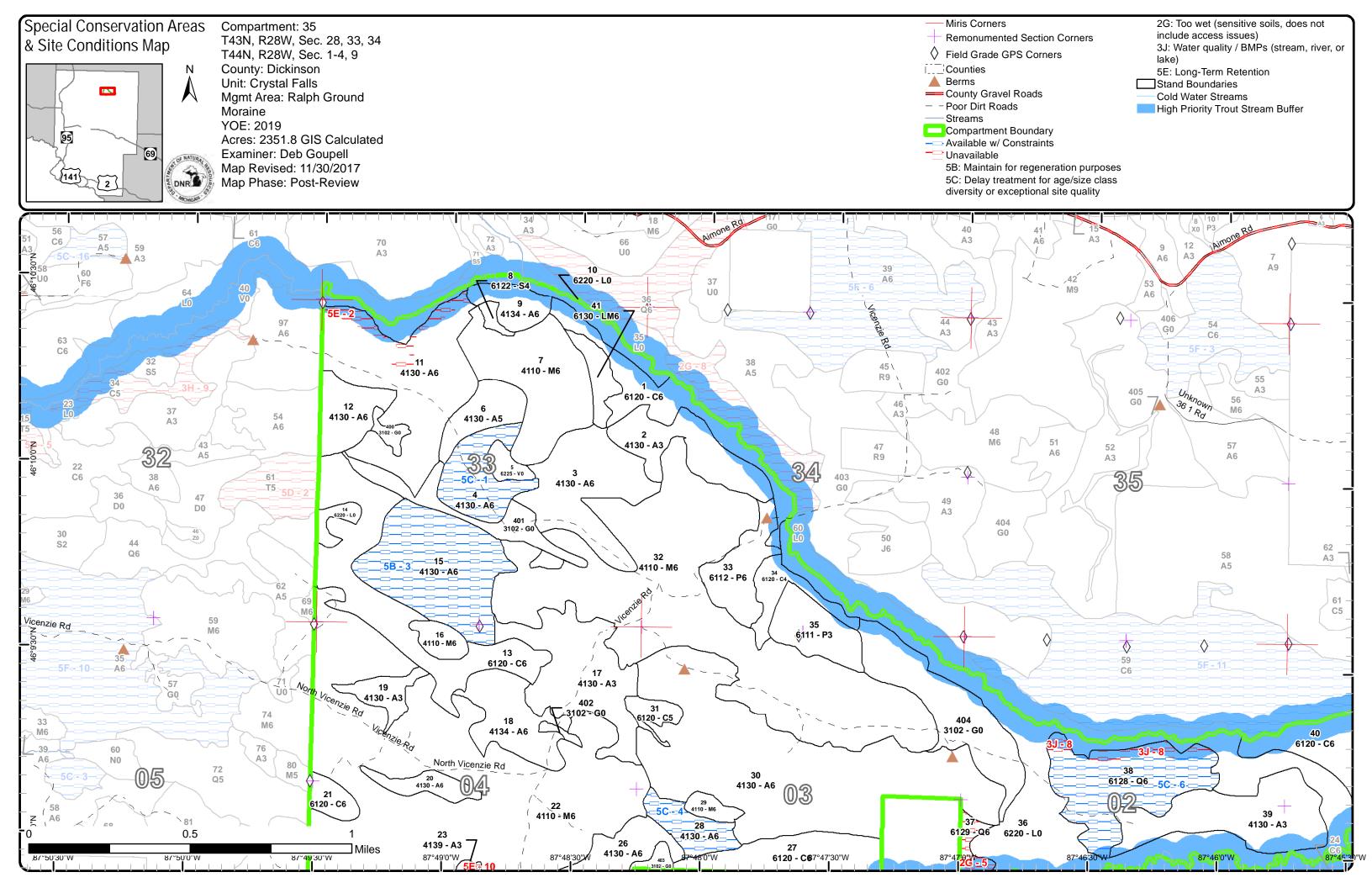


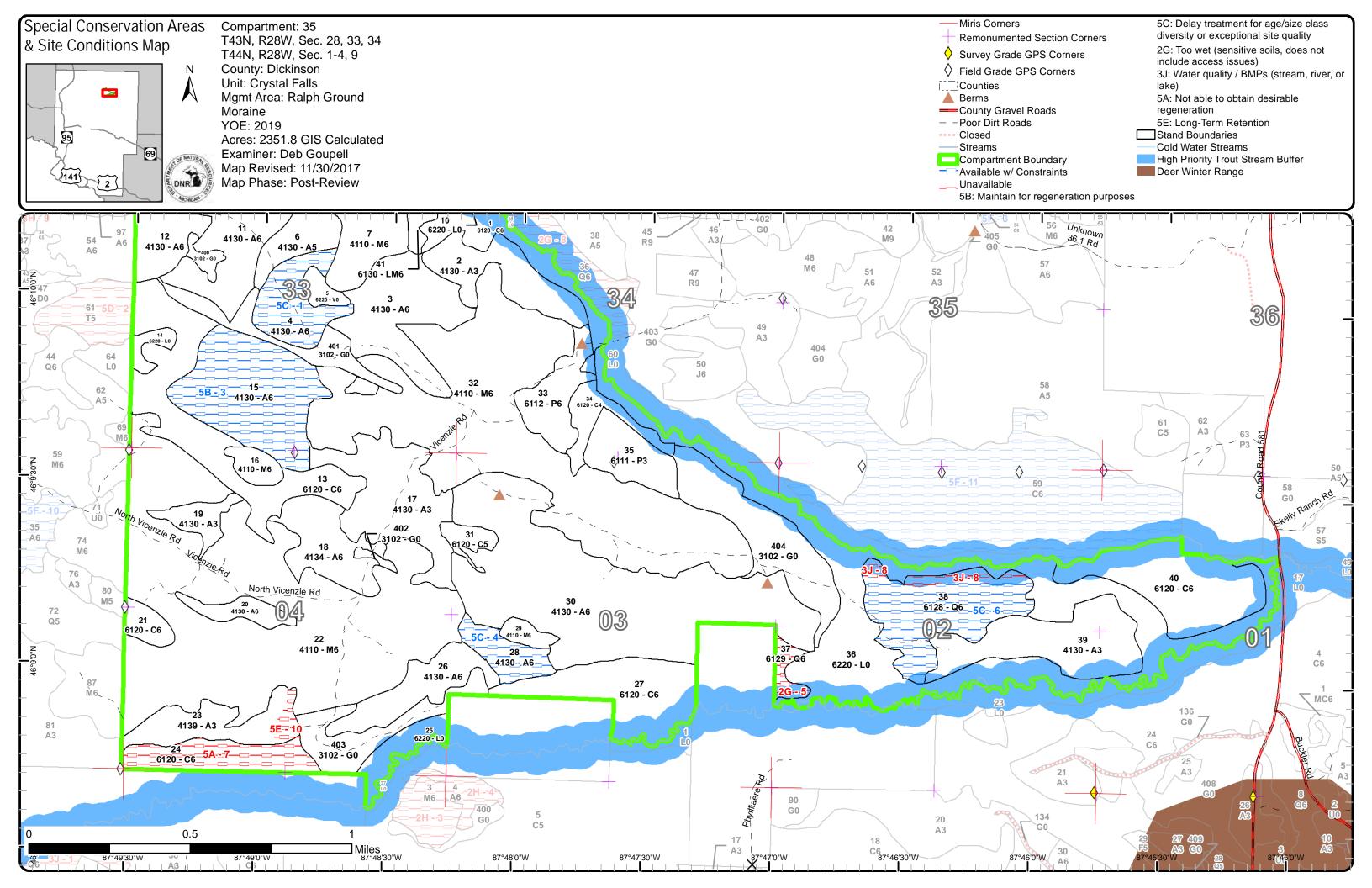












Crystal Falls Mgt. Unit

Deb Goupell : Examiner

Compartment 35 Year of Entry 2019



Age Class

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Aspen	0	166	13	40	70	360	215	0	0	0	0	0	0	0	0	0	0	0	863
Bog	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Cedar	0	0	0	0	0	0	0	0	0	67	157	83	0	10	0	0	0	0	316
Herbaceous Openland	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122
Lowland Aspen/Balsam Poplar	0	0	28	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	56
Lowland Conifers	0	0	0	0	0	0	0	0	0	77	0	0	0	0	0	0	0	0	77
Lowland Mixed Forest	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12
Lowland Shrub	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	221
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Northern Hardwood	0	0	0	0	0	0	0	0	0	675	0	0	0	0	0	0	0	0	675
Total	350	166	41	40	70	360	243	12	0	822	157	83	0	10	0	0	0	0	2352



Report 2 – Treatment Summary

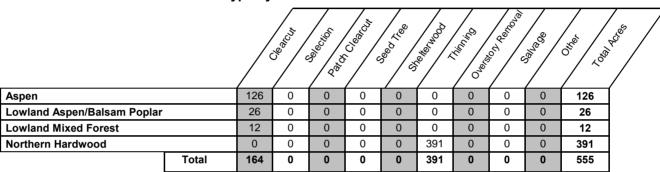
Crystal Falls Mgt. Unit Year of Entry: 2019

Acres of Harvest

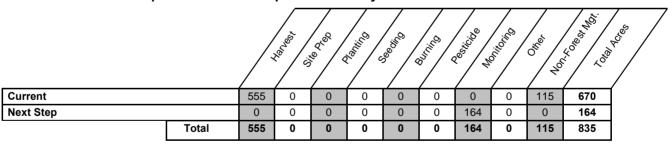
Compartment 35
Total Compartment Acres: 2,352

Commercial Harvest - 555
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Acceptable mixed hardwood, mixed softwood, aspen

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

12035022-Cut 322.9 4110 - Sugar Maple Poletimber 87 111-Harvest Crown Thinning 411 - Northern Even-Aged Approved Association Well 140 Hardwood Proposal

Habitat Cut: No Site Condition:

Prescription Thin to 80 BA. Focus on releasing crowns of crop trees. Stand will be marked lighter in some areas than others.

Specs:

Next Step Treatments:

<u>Acceptable</u>

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 35 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 6112 - Lowland 12035033-Cut 26.1 6112 - Lowland Poletimber Clearcut with Approved 33 57 Unspec Harvest Even-Aged Aspen Well ified Retention Aspen Proposal **Habitat Cut: No Site Condition:** Prescription Final harvest all stems 2"dbh and greater except black ash,cedar and pine. Retention will be the 300ft buffer to N. Br. Ford R. Winter harvest. Specs: Clumps of submerchantable conifer will be left Monitoring, Natural Regen (Re-Inventory) Next Step **Treatments:** Acceptable aspen, mixed softwood, mixed hardwood Regen: Other Comment: **Proposed Start Date:** 10/01/2018 12.1 6130 - Fir, Aspen, 41 12035041-Cut Poletimber 68 Unspec Harvest Clearcut 6112 - Lowland Even-Aged Approved Maple Well ified Aspen Proposal Site Condition: **Habitat Cut: No** Prescription Cut all stems 2" dbh and up except cedar. Frozen ground only. No retention due to small acreage. Leave live submerchantable spruce and fir Specs: and all black spruce. Monitoring, Natural Regen (Re-Inventory) Next Step **Treatments:** Acceptable mixed conifer, aspen, mixed deciduous Regen: Other Comment: **Proposed Start Date:** 10/01/2018 401 12035401-NF Unspec NonForestMgt 25.3 3102 - Grass Other - Specify 3102 - Grass Proposal Nonstocked ified **Habitat Cut: No Site Condition:** Prescription WLD will manage to keep as an opening via mechanical / Rx burn. Specs: Next Step **Treatments:** <u>Acceptable</u>

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

403 12035403-NF 32.0 3102 - Grass Unspec NonForestMgt Other - Specify 3102 - Grass Proposal Nonstocked

ified

Habitat Cut: No Site Condition:

Prescription WLD will manage to keep as an opening via mechanical / Rx burn.

Specs:

Next Step

Treatments:

<u>Acceptable</u>

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 35 s Year of Entry: 2019 t а Stand **Treatment Cover Type Treatment** Acres Stand Size BA **Treatment** Age **Approval** n Method Objective Status Density Age Structure d Name CoverType Range Type Unspec NonForestMgt 404 12035404-NF 57.9 3102 - Grass Other - Specify 3102 - Grass Proposal Nonstocked ified **Habitat Cut: No Site Condition:** Prescription WLD will manage to keep as an opening via mechanical / Rx burn. Specs: Next Step Treatments: <u>Acceptable</u> Regen:

Total Treatment
Acreage Proposed:

Proposed Start Date:

Other Comment:

670.4

10/01/2018

Compartment: 35

Crystal Falls Mgt. Unit

Year of Entry: 2019 **Deb Goupell: Examiner**

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres	Do	omina	nt Site	Cond	ditions	3	
Acres	Available	With Condition	Not Available		5B	5C	2G	3J	5A	5E
863	712	134	16	Aspen	83	51				16
7	7	0	0	Bog						
316	284	0	33	Cedar					33	
122	122	0	0	Herbaceous Openland						
56	56	0	0	Lowland Aspen/Balsam Poplar						
77	0	59	17	Lowland Conifers		59	8	10		
12	12	0	0	Lowland Mixed Forest						
221	221	0	0	Lowland Shrub						
3	3	0	0	Lowland Spruce/Fir						
675	675	0	0	Northern Hardwood						
2,352	2,092	194	67	Total Forested Acres	83	111	8	10	33	16
	89%	8%	3%	Relative Percent						

^{*}Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

age/size cla exception Comments:	treatment for ass diversity or nal site quality	32	Unspecified	Unspecified	Unspecified	Unspecified
) Unavailable 5F: Long-						
	Term Retention	11	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:						

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Deb Goupell : Examiner

Compartment: 35 Year of Entry: 2019

3	Available	5B: Maintain for regeneration purposes	83	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: Remarkable sugar	maple regeneration in understo	ry. Red	commend managing for und	derstory.			
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	59	Unspecified	Unspecified	Unspecified	Unspecified	
Comments: This stand could be harvested but will hold for another entry to put on more growth.								
7	Unavailable	5A: Not able to obtain desirable regeneration	33	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified	
	Comments:							
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Deb Goupell : Examiner

Compartment: 35 Year of Entry: 2019

10 Unavailable 5E: Long-Term Retention 5 Unspecified Unspecified Unspecified Unspecified Unspecified

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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: 35





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.

Conservatio Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxyge stocked trout populations and those of other coldwater fis year to year. Coldwater streams in Michigan typically procontributions of groundwater to their stream flows. Such s designated as trout resources by Fisheries Order 210.	sh species (e.g., slimy sculpin) to persist from vide these conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosys influences the aquatic ecosystem and vice-versa. Becaus streams and open water wetlands, riparian areas harbor a communities are ecologically and socially significant in the as aesthetics, habitat, bank stability, timber production, and	se of the unique conditions adjacent to lakes, a high diversity of plants and wildlife. Riparian heir effects on water quality and quantity, as well

S t	Crystal Falls Mgt. Unit			Report 7	- Forested	Stands Compartment: 35 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Poletimber Well	42.0	87	Unspecified	Stand is within 300 foot buffer of N. Br. N. Br. Ford River
2	4130 - Aspen	Sapling Well	39.6	27	Immature	Some sugar maple saplings along hardwood edge. Some cherry and willow
3	4130 - Aspen	Poletimber Well	61.8	46	Unspecified	STAND IS MODERATLY STOCKED ALONG ROAD IN SOUTH LOBE.
4	4130 - Aspen	Poletimber Well	32.3	50	Unspecified	Pocket of hardwood is on south side of road. Sugar maple saplings in aspen and north of bog. Stand is doing ok and can hold 10 years.
6	4130 - Aspen	Poletimber Medium	20.7	45	Unspecified	Stand is not well stocked
7	4110 - Sugar Maple Association	Poletimber Well	68.1	87	111-140	Lots of poles with tight crowns with poor/fair quality but enough for crop tree potential. Likely will need a lot of paint. Center east has pocket of 20' sugar maple saplings under aspen which should be excluded from treatment (~1 acre). Saddles and valleys and rolling hills.
8	6122 - Black Spruce	Poletimber Poor	3.2	87	Unspecified	Wet and low timber production
9	4134 - Aspen, Spruce/Fir	Poletimber Well	16.0	45	Unspecified	There are pockets of poor quality maple. Consider cutting as it is merchantable and we are harvesting hardwood stand adjacent. Some larger aspen on east side of stand 8. 300 ft buffer precludes most of the balsam/spruce which is on the north side of the stand.
11	4130 - Aspen	Poletimber Well	99.8	53	Unspecified	Impressive SM saps >20' between vernal/tag swales = retention pocket? More conifer in south lobe. some evidence of SBW. Remarkable amount of hazel in understory N end towards river trends towards older aged 12 - 16" dbh aspen
12	4130 - Aspen	Poletimber Well	24.2	35	Unspecified	Cut 1982
13	6120 - Lowland Cedar	Poletimber Well	82.9	100	Unspecified	Quiet wet; there are pockets of solid cedar and areas of general lowland swamp conifer.
15	4130 - Aspen	Poletimber Well	82.8	52	Unspecified	Recommend managing for understory sugar maple. Cannot salvage aspen without destroying much of regeneration.
16	4110 - Sugar Maple Association	Poletimber Well	9.7	87	81-110	
17	4130 - Aspen	Sapling Well	67.8	7	Immature	Special Deluxe TS cut 2010
18	4134 - Aspen, Spruce/Fir	Poletimber Well	37.2	42	Unspecified	This stand has much overmature balsam/spruce that won't last 10 years. Trace amounts of black ash. Recommend salvage cut.

s t	Crystal Falls Mgt. Unit			Report 7	– Forested	Stands Compartment: 35 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	4130 - Aspen	Sapling Well	12.5	17	Immature	cut 2000
20	4130 - Aspen	Poletimber Well	12.1	37	Unspecified	Far southwest has a linear wetland with BG, black ash saps. Ponded today (10-6-16). Opening on north central likely a vernal pond (dry t10-6-16) Trace of elm. Diameters range from 5-10". Black ash saps on southeast edge.
21	6120 - Lowland Cedar	Poletimber Well	9.9	120	Unspecified	Quite wet. North edges of stand are where white spruce/balsam, black ash and yellow birch are focused.
22	4110 - Sugar Maple Association	Poletimber Well	322.9	87	111-140	Ironwood understory and thickets throughout. Aspen pockets have sugar maple saplings 10-20' tall. Trace white birch. Lots of multi-stemmed basswood.
23	4139 - Aspen, Mixed Deciduous	Sapling Well	35.6	7	Immature	Balsam poplar heavier on east end of stand but found throughout. Retention of east end. Special Deluxe TS cut 2010.
24	6120 - Lowland Cedar	Poletimber Well	32.7	93	Unspecified	Cedar concentrated in center of stand. black spruce more on west end. white spruce/tamarack on east end and on north edges.
26	4130 - Aspen	Poletimber Well	33.4	32	Immature	Some scattered openings with aspen 3"dbh. Far east piece has a wet swale with larger aspen/spruce/fir.
27	6120 - Lowland Cedar	Poletimber Well	57.9	93	Unspecified	
28	4130 - Aspen	Poletimber Well	19.2	49	Unspecified	
29	4110 - Sugar Maple Association	Poletimber Well	6.6	87	81-110	OPIC - FMD: OI Stand Year Origin was 1930
30	4130 - Aspen	Poletimber Well	205.2	41	Unspecified	aspen diameters range from 6-10"
31	6120 - Lowland Cedar	Poletimber Medium	8.1	87	Unspecified	West half of stand is mostly black ash saps and tag.
32	4110 - Sugar Maple Association	Poletimber Well	267.5	87	81-110	Temporary Bridge TS cut 2012
33	6112 - Lowland Aspen	Poletimber Well	27.8	57	Unspecified	Birch found more on east side of stand. Smaller diameter aspen/balm of gilead on east edges.
34	6120 - Lowland Cedar	Poletimber Poor	16.5	87	Unspecified	Very few trees, could almost lump into lowland tag alder stand on north.
35	6111 - Lowland Balsam Poplar	Sapling Well	28.0	14	Immature	Cut 2003.

S t	Crystal Falls	Mgt. Unit		Report 7	' – Forested	Stands	Compartment: 35 Year of Entry: 2019	DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN
37	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	7.7	87	Unspecified	Southeast side has an	old railroad grade through it. wet.	. Stand is very
38	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	69.1	84	Unspecified	died/dying from ELB. I primarily in solid poo	ed lowland conifer. Some tam Lots of tag, wet swales, wet p ckets. Haul route on upland ri vinter cut tough stand to se	ockets. Cedar idge. Would
39	4130 - Aspen	Sapling Well	62.8	7	Immature		n on far south in central porti uffer to N. Br. Ford River.	on within 300
40	6120 - Lowland Cedar	Poletimber Well	66.3	93	Unspecified		Very wet stand.	
41	6130 - Fir, Aspen, Maple	Poletimber Well	12.1	68	Unspecified		end. This could be cut in froz r but most of it was excluded boundary.	

Compartment: 35 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
5	6225 - Bog	6.8	No	OPIC - FMD: OI Stand Year Origin was
10	6220 - Alder/willow	25.7	No	OPIC - FMD: OI Stand Year Origin was
14	6220 - Alder/willow	6.3	No	OPIC - FMD: OI Stand Year Origin was
25	6220 - Alder/willow	16.0	No	some cedar and a few white spruce within buffer zone of Ford River
36	6220 - Alder/willow	173.2	No	OPIC - FMD: OI Stand Year Origin was
400	3102 - Grass	4.6	No	OPIC - FMD: OI Stand Year Origin was
401	3102 - Grass	25.3	No	OPIC - FMD: OI Stand Year Origin was
402	3102 - Grass	2.1	No	OPIC - FMD: OI Stand Year Origin was
403	3102 - Grass	32.0	No	Stand is filling in with Balm of gilead and aspen 1-2" dbh and cherry. South edge has merchantable WS/BF (8-14") and non-merchantable conifers. Too little acreage/volume to type out as forested.
404	3102 - Grass	57.9	No	OPIC - FMD: OI Stand Year Origin was