



# Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12049

Entry Year 2017

Acreage: 1,811

County Dickinson

Management Area: Ralph Ground Moraine

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**Revision Date:** 2015-07-27

**Stand Examiner:** Linda Lindberg

**Legal Description:**

T42N,R29W, sec. 5,6; T43N,R29W, sec. 31-33; T43N,R30W, sec. 36

**Identified Planning Goals:**

This compartment is located in the Ralph Ground Moraine. One goal is to work toward more equal aspen age class distribution, and continue to thin hardwood maintaining diversity as needed. Keep remaining drainages functioning and work toward repairing those drainages that have been adversely affected. Protect stream quality and snowmobile trail.

**Soil and topography:**

This is fairly flat ground with some slightly rolling terrain. Soil types range from very poorly drained mucks to loamy fine sand and fine sandy loam.

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

The ownership is fairly contiguous with a few forties along the Leeman road that have full time homes on. On the east side are camps but still fairly contiguous state ownership. There is a snowmobile trail on the east side of the compartment that follows the power line running north and south.

**Unique Natural Features:**

The Sturgeon river flows through this compartment north to south with a stream dividing the compartment to the south and many drainages through the compartment.

**Archeological, Historical, and Cultural Features:**

**Special Management Designations or Considerations:**

The snowmobile trail must be protected.

**Watershed and Fisheries Considerations:**

The Sturgeon River is a Type I trout stream and therefore needs a 300 foot buffer. BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

**Wildlife Habitat Considerations:**

This compartment is dominated by upland aspen and maple stands that are interspersed with smaller spruce/fir, swamp conifer and lowland hardwood types. Pipelines and power lines provide some opening component that benefit turkeys, bear, deer and raptors (i.e. broadwing, cooper's and red tailed hawks).

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

Surface sediments consist of medium-textured glacial till (drumlins). The glacial drift thickness varies between 50 and 100 feet. The Cambrian Munising Formation, Precambrian Michigamme Formation, and a minor amount of Precambrian Randville Dolomite subcrop below the glacial drift. The Randville could be used for decorative or building/dimension stone. The Groveland Mine (iron) is located approximately seven miles to the south. There are no known gravel pits in the area, but there appears to be potential on the uplands. This compartment has not been previously leased for metallic mineral exploration. There is no economic oil and gas production in the UP.

**Vehicle Access:**

Vehicle Access to this compartment is fairly good including the Leeman road to the north which is a paved county road.

**Survey Needs:**

Two corners will be needed if stand 69 is harvested.

**Recreational Facilities and Opportunities:**

There are fishing opportunities here and there were quite a few hunters of turkeys and deer in this compartment. Camping, trapping, hiking, and snowmobiling is also available here.

**Fire Protection:**

This compartment is fairly wet in many areas but has fair access for fire.

**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**

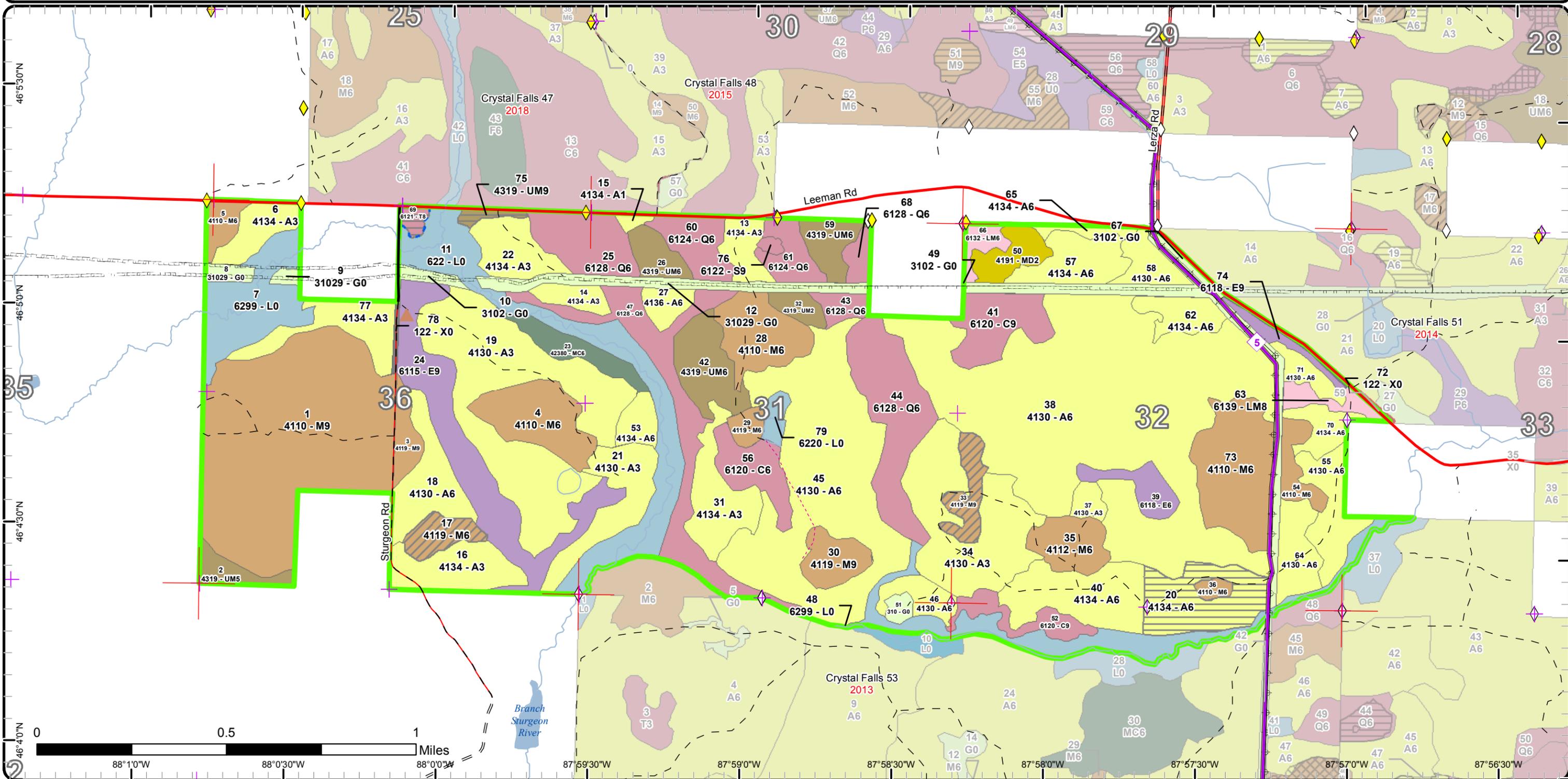
# Cover Type & Treatments



Compartment: 49  
 T43N R30W 36  
 T43N R29W 31-33  
 T42NR29W 05,06  
 County: Dickinson  
 Unit: Crystal Falls  
 Mgmt Area: Ralph Ground Moraine  
 YOE: 2017  
 Acres: 1811 GIS Calculated  
 Examiner: Linda Lindberg  
 Map Revised: 8/28/2015  
 Map Phase: Pre-Review



- ✚ Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Snowmobile
- ▲ Berms
- Rivers
- Lakes
- Pipeline
- Powerline
- ▨ Treatments with Site Conditions
- ▨ Clearcut (w/Reserves)
- ▨ Thinning (Crown, Low, Systematic)
- Forest Covertype
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forests
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- Non-Forest Covertype
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 411 - Northern Hardwood

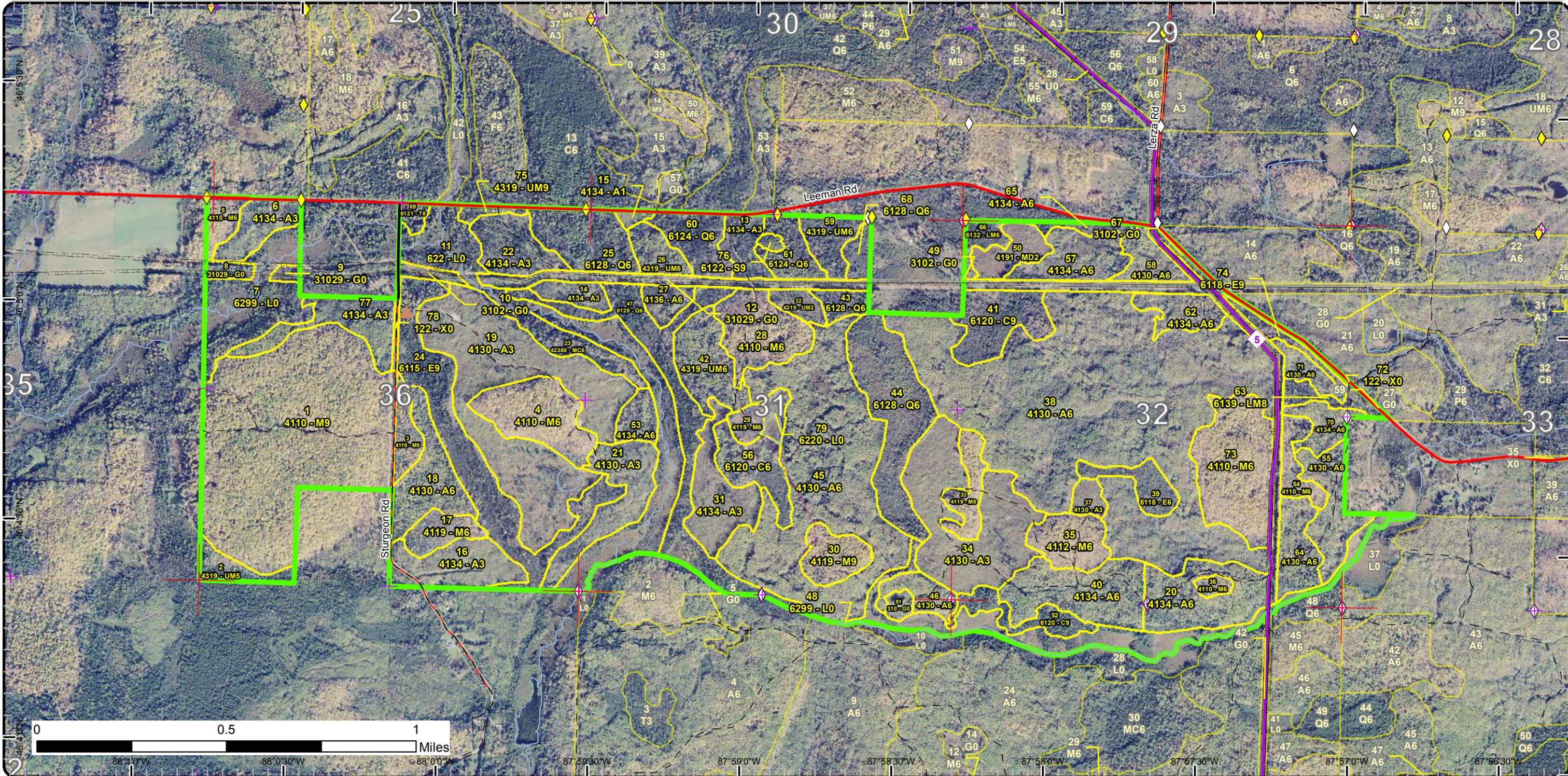


# Stand Boundary Map



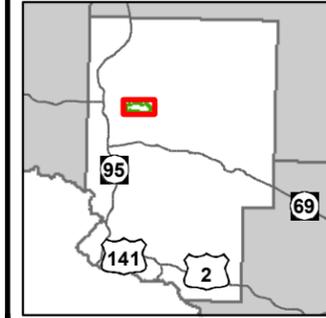
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- Stand Boundaries
- Forest Coverture
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  - 419 - Mixed Upland Deciduous
  - 423 - Other Upland Conifers
  - 430 - Upland Mixed Fores
  - 611 - Lowland Deciduous Forest
- Non-Forest Coverture
  - 122 - Roads/Parking Lot
  - 310 - Herbaceous Openland
  - 622 - Lowland Shrub
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

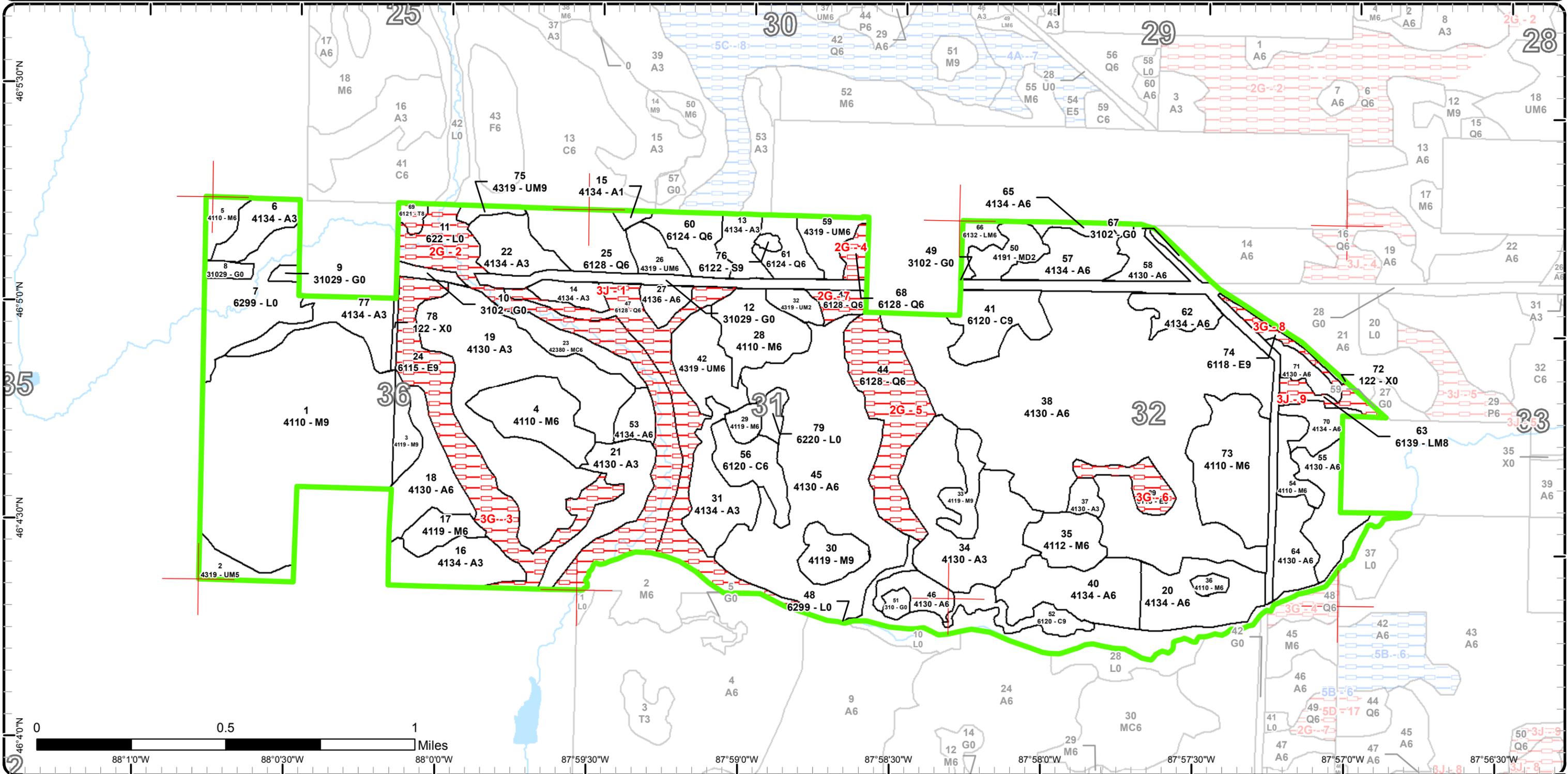


# Special Conservation Areas & Site Conditions Map

Compartment: 49  
 T43N R30W 36  
 T43N R29W 31-33  
 T42NR29W 05,06  
 County: Dickinson  
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- Miris Corners
- Stand Boundaries
- Site Condition
- Unavailable
- Unavailable Factors
  - 2G: Too wet (sensitive soils, does not include access issues)
  - 3G: Other Influence zones - See comments
  - 3J: Water quality / BMPs (stream, river, or lake)
- Special Conservation Areas
  - Cold Water Streams
  - Cold Water Lakes
  - High Priority Trout Stream Buffer



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	185	92	41	448	122	0	0	0	0	0	0	0	0	0	0	0	0	888
Cedar	0	0	0	0	0	0	0	0	0	17	35	0	0	0	0	0	0	0	52
Herbaceous Openland	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Lowland Conifers	0	0	0	0	0	27	0	24	0	58	45	0	0	0	0	0	0	0	154
Lowland Deciduous	0	0	0	0	0	0	0	0	0	72	0	0	0	0	0	0	0	0	72
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14
Lowland Shrub	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Mixed Upland Deciduous	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Northern Hardwood	0	0	0	0	0	0	0	0	0	334	0	0	0	0	0	0	0	0	334
Tamarack	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Upland Conifers	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	13
Upland Mixed Forest	0	6	0	0	0	43	0	0	3	9	0	0	0	0	0	0	0	0	61
Urban	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
<b>Total</b>	<b>209</b>	<b>203</b>	<b>92</b>	<b>41</b>	<b>448</b>	<b>192</b>	<b>0</b>	<b>24</b>	<b>16</b>	<b>492</b>	<b>97</b>	<b>0</b>	<b>1814</b>						



## Report 2 – Treatment Summary

Crystal Falls Mgt. Unit  
Year of Entry: 2017

Acres of Harvest

Compartment 49  
Total Compartment Acres: 1,811

Commercial Harvest - 55  
Harvests with Site Condition - 3  
Next Step Harvest - 37  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	30	0	0	0	0	0	0	0	0	30
Northern Hardwood	0	0	0	0	0	22	0	0	0	22
Tamarack	3	0	0	0	0	0	0	0	0	3
Upland Mixed Forest	3	0	0	0	0	0	0	0	0	3
<b>Total</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	58	0	0	0	0	0	0	0	0	58
Next Step	37	0	0	0	0	0	0	0	0	37
<b>Total</b>	<b>95</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>95</b>



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
17	12049017-Cut	10.0	4119 - Mixed Northern Hardwoods	Poletimber Well	86	81-110	Harvest	Crown Thinning	4119 - Mixed Northern Hardwoods	Two-Aged	Approved Proposal

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

Prescription Thin to 70 opening up areas where there is some 20 year old regeneration that can grow and to promote growth in the residual.

Specs:

Next Step

Treatments:

Acceptable some

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

20	12049020-Cut	30.5	4134 - Aspen, Spruce/Fir	Poletimber Well	47	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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**Habitat Cut: No**                      **Site Condition:**

Prescription Cut all trees 2 inches or greater in diameter except oak, elm, cherry, red and white pine, cedar or hemlock. Cut all spruce and balsam that is 6

Specs: inches or greater at a 4 inch stump.

Next Step

Treatments:

Acceptable aspen, spruce and balsam

Regen:

Other This should be limited to summer because of the snowmobile trail. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

33	12049033-Cut	11.7	4119 - Mixed Northern Hardwoods	Sawtimber Well	86	111-140	Harvest	Crown Thinning	4119 - Mixed Northern Hardwoods	Two-Aged	Approved Proposal
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**Habitat Cut: No**                      **Site Condition:**

Prescription Thin to 70-90 BA. Take high risk trees, white birch, leaving a few for seed, Leave some wildlife trees including aspen for soft snags. Do not cut

Specs: oak, cedar, hemlock, red and white pine, elm and cherry if present in the stand. This should be limited to summer because of the snowmobile trail.

Next Step

Treatments:

Acceptable Maple, birch,

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

69	12049069-Cut	3.1	6121 - Tamarack	Sawtimber Medium	91	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	Approved Proposal
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**Habitat Cut: No**                      **Site Condition: Too Wet**

Prescription Cut all trees 2 inches or more in diameter except spruce and balsam that are less than 6 inches in diameter at a 4 inch stump. Leave all white

Specs: pine, cedar, hemlock, oak, cherry and elm if present.

Next Step

Treatments:

Acceptable tamarack

Regen:

Other 300 foot buffer for the Sturgeon River Old next step comments:

Comment:

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
75	12049075-Cut	3.0	4319 - Mixed Upland Forest	Sawtimber Well	78	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Cut all trees 2 inches or more in diameter except red and white pine, cedar, hemlock, oak, elm and cherry if present in the stand. Cut all spruce  
Specs: and balsam that is 6 inches or larger at a 4 inch stump.

Next Step  
Treatments:

Acceptable Aspen  
Regen:

Other 300 foot buffer on the Sturgeon River Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

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**Total Treatment  
Acreage Proposed: 58.3**

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 49  
Year of Entry: 2017

### Dominant Site Conditions

	2G	3G	3J
Aspen	0		
Cedar			
Herbaceous Openland			
Lowland Conifers	56		47
Lowland Deciduous		72	
Lowland Mixed Forest			8
Lowland Shrub	64		
Lowland Spruce/Fir			
Mixed Upland Deciduous			
Northern Hardwood			
Tamarack	3		
Upland Conifers			
Upland Mixed Forest	0		
Urban			
Total Forested Acres	124	72	54
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	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	47	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	67	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Travel corridor and buffer for the north branch of the Sturgeon. It might just be too wet to operate in also.							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 49  
Year of Entry: 2017

3	<b>Unavailable</b>	<b>3G: Other Influence zones - See comments</b>	56	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This is a drainage with a creek running through it and much wildlife use. A huge travel corridor							
4	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This is part of a drainage system in this compartment that goes south to the creek on the south side of the compartment that flows into the Sturgeon River							
5	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	45	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
<b>Comments:</b> I am sure this could be harvested but is a drainage and the south area has already been compromised with a cut and a road and small puddles that are halted from flowage because of lack of a culvert or the one that is there is plugged and stops the flow to the creek on the south side of the compartment. It is a wildlife travel zone also							
6	<b>Unavailable</b>	<b>3G: Other Influence zones - See comments</b>	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This area which had a drainage allthrough it was all cut except this little piece so could be called a retention area. The drainage goes through stand 38 so that has been cut already.							
7	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This is part of the drainage that comes across the road and is also a travel corridor							
8	<b>Unavailable</b>	<b>3G: Other Influence zones - See comments</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This is a drainage right along the road. It has a lot of cedar in it and is quite wet							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit

Linda Lindberg : Examiner

Compartment: 49

Year of Entry: 2017

9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
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**Comments:**

Many drainages have been cut in this compartment so it is good to leave some also.

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
<b>Comments</b>				



**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.



Stand	Crystal Falls Mgt. Unit		Report 8 – Forested Stands			Compartment: 49 Year of Entry: 2017	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	4110 - Sugar Maple Association	Sawtimber Well	152.4	86	81-110	This stand doesn't have as much basal area as I would like to see to cut it again but it has been 15 years so will probably require a cut again.	
2	4319 - Mixed Upland Forest	Poletimber Medium	8.7	86	51-80	Fairly scattered.	
3	4119 - Mixed Northern Hardwoods	Sawtimber Well	8.6	86	81-110		
4	4110 - Sugar Maple Association	Poletimber Well	28.4	86	81-110		
5	4110 - Sugar Maple Association	Poletimber Well	7.2	85	51-80		
6	4134 - Aspen, Spruce/Fir	Sapling Well	13.1	38	Immature	This was cut right down into the wet but it needs to grow a while yet.	
13	4134 - Aspen, Spruce/Fir	Sapling Well	10.5	18	81-110		
14	4134 - Aspen, Spruce/Fir	Sapling Well	7.4	18	Immature	Same as stand 11 across the line	
15	4134 - Aspen, Spruce/Fir	Sapling Poor	2.0	7	Immature	A creek runs along the edge of this stand....not very well buffered. some of it runs through the stand from the culvert that starts in the next stand.	
16	4134 - Aspen, Spruce/Fir	Sapling Well	23.8	15	Immature		
17	4119 - Mixed Northern Hardwoods	Poletimber Well	10.0	86	81-110		
18	4130 - Aspen	Poletimber Well	24.4	42	51-80		
19	4130 - Aspen	Sapling Well	95.9	4	Immature	There is a part of this west of the hardwood that seemed to be wetland. There are clones of aspen but also, tag alder and cattails where things didn't grow. Overall, it has regenerated.	
20	4134 - Aspen, Spruce/Fir	Poletimber Well	30.5	47	81-110		
21	4130 - Aspen	Sapling Well	25.6	15	Immature		
22	4134 - Aspen, Spruce/Fir	Sapling Well	17.7	18	Immature	There is a small buffer along the road and along the river	
23	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	12.9	78	81-110	This is the buffer for the North branch of the Sturgeon River	

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## Crystal Falls Mgt. Unit

## Report 8 – Forested Stands

Compartment: 49  
Year of Entry: 2017

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
6115 - Lowland Ash	Sawtimber Well	55.9	86	Unspecified	There are varying areas for this drainage but it should stay intact. Part of the stand was cut within stand 19 where you see cattails and tag alder west of stand 4.
6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	23.8	60	81-110	There is a culvert on the north end of this stand and a stream running across the power line. It is a major drainage on the drainage map.
4319 - Mixed Upland Forest	Poletimber Well	9.5	45	51-80	This stand should wait to be cut It has a creek running along the north edge, somewhat in the clearcut to the north.
4136 - Aspen, Mixed Conifer	Poletimber Well	6.9	17	Immature	There are open areas in here that seem to be wet
4110 - Sugar Maple Association	Poletimber Well	25.0	86	81-110	
4119 - Mixed Northern Hardwoods	Poletimber Well	4.9	86	51-80	
4119 - Mixed Northern Hardwoods	Sawtimber Well	13.3	86	81-110	
4134 - Aspen, Spruce/Fir	Sapling Well	24.2	6	Immature	
4319 - Mixed Upland Forest	Sapling Medium	5.9	6	Immature	Some of this is low, some alder is all that grew. Some is higher and is regenerated.
4119 - Mixed Northern Hardwoods	Sawtimber Well	11.7	86	111-140	
4130 - Aspen	Sapling Well	58.5	6	Immature	
4112 - Maple, Beech, Cherry Association	Poletimber Well	16.4	86	51-80	
4110 - Sugar Maple Association	Poletimber Well	2.8	85	81-110	
4130 - Aspen	Sapling Well	4.8	6	Immature	
4130 - Aspen	Poletimber Well	249.9	30	81-110	
6118 - Lowland Deciduous with Cedar	Poletimber Well	10.6	81	51-80	
4134 - Aspen, Spruce/Fir	Poletimber Well	34.0	47	81-110	



Stand	Crystal Falls Mgt. Unit		Report 8 – Forested Stands			Compartment: 49 Year of Entry: 2017
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	6120 - Lowland Cedar	Sawtimber Well	22.6	93	81-110	This has a lot of cedar and some has blown down and regenerated.
42	4319 - Mixed Upland Forest	Poletimber Well	22.1	43	81-110	This should probably be cut now because of budworm.
43	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	6.1	86	81-110	
44	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	44.6	90	81-110	Some of this was cut with the adjoining stand and it did not regenerate.
45	4130 - Aspen	Poletimber Well	121.9	31	1-50	Part of this was cut that was obviously not aspen as there is cattails and tag alder growing there.
46	4130 - Aspen	Poletimber Well	9.7	31	1-50	
47	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	46.6	87	81-110	Some of this is drainage and buffer with a creek running to the Sturgeon.
50	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	11.8	6	Immature	There are open areas in here but overall it is productively regenerated.
52	6120 - Lowland Cedar	Sawtimber Well	12.4	90	81-110	This would be the buffer along the creek area. Some wide, some not some areas there is no buffer at all.
53	4134 - Aspen, Spruce/Fir	Poletimber Well	7.9	35	81-110	
54	4110 - Sugar Maple Association	Poletimber Well	9.5	86	51-80	This was just cut 10 years ago
55	4130 - Aspen	Poletimber Well	20.4	27	Immature	
56	6120 - Lowland Cedar	Poletimber Well	17.1	86	Unspecified	Should be left because so much wetland has been cut in this compartment.
57	4134 - Aspen, Spruce/Fir	Poletimber Well	19.3	30	Immature	There is a cedar inclusion on the west side that is used extensively by deer.
58	4130 - Aspen	Poletimber Well	10.3	38	51-80	
59	4319 - Mixed Upland Forest	Poletimber Well	11.3	41	81-110	
60	6124 - Lowland Spruce- Fir	Poletimber Well	15.5	45	81-110	

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## Crystal Falls Mgt. Unit

## Report 8 – Forested Stands

Compartment: 49  
Year of Entry: 2017

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	6124 - Lowland Spruce-Fir	Poletimber Well	11.9	45	81-110	
62	4134 - Aspen, Spruce/Fir	Poletimber Well	11.7	38	51-80	
63	6139 - Mixed Lowland Forest	Sawtimber Medium	7.8	90	Unspecified	This is a drainage and has flowing water so was left uncut. A lot of the drainage was cut on the other side of the pipeline and the pipeline is wet in this area.
64	4130 - Aspen	Poletimber Well	15.9	47	Unspecified	This will be left to grow to maturity
65	4134 - Aspen, Spruce/Fir	Poletimber Well	4.2	30	Immature	There is a cedar inclusion on the west side that is used extensively by deer.
66	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	5.8	90	81-110	
68	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	5.5	87	81-110	
69	6121 - Tamarack	Sawtimber Medium	3.1	91	51-80	North Branch of the Sturgeon river and buffer
70	4134 - Aspen, Spruce/Fir	Poletimber Well	9.9	43	Unspecified	
71	4130 - Aspen	Poletimber Well	7.3	43	Unspecified	
73	4110 - Sugar Maple Association	Poletimber Well	43.2	86	81-110	
74	6118 - Lowland Deciduous with Cedar	Sawtimber Well	5.3	89	Unspecified	
75	4319 - Mixed Upland Forest	Sawtimber Well	3.0	78	81-110	This was the buffer but can be cut now.
76	6122 - Black Spruce	Sawtimber Well	1.5	86	141-170	There are stumps in here like this was thinned last time.
77	4134 - Aspen, Spruce/Fir	Sapling Well	20.8	28	Immature	



Stand	Cover Type	Acres	Managed Site	General Comments:
7	6299 - Lowland Shrub (OI)	36.0	No	This is a tributary of the North Branch of the Sturgeon River with the low surrounding and a buffer of swamp tree species on both sides
8	31029 - Grass (OI)	3.6	No	Gas Line
9	31029 - Grass (OI)	2.0	No	Gas Line
10	3102 - Grass	3.5	No	Gas Line
11	622 - Lowland Shrub	64.2	No	This is the North Branch of the Sturgeon River
12	31029 - Grass (OI)	18.3	No	Gas Line
48	6299 - Lowland Shrub (OI)	39.5	No	There are some cherry, spruce, aspen and red maple in spots but the most is low There are creeks here also.
49	3102 - Grass	26.7	No	This is power and gas line that have the same upland or lowland as the surrounding area so some wet, some dry, some low, some high.
51	310 - Herbaceous Openland	3.1	No	I think this was clearcut and didn't regenerate but is a good opening with deer blinds. good visual of the wet area from up on the hill. There is a cluster of trees in the middle.
67	3102 - Grass	2.5	No	This is power and gas line that have the same upland or lowland as the surrounding area so some wet, some dry, some low, some high.
72	122 - Road/Parking Lot	2.2	No	The Leeman road
78	122 - Road/Parking Lot	1.7	No	The Sturgeon Road
79	6220 - Alder/willow	4.8	No	There is not a culvert that I can see on this road and the water is somewhat backed up and flowing across the road. to the wet on the other side