



# Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12050

Entry Year 2019

Acreage: 2,272

County Dickinson

Management Area: Ralph Ground Moraine

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**Revision Date:** 2017-08-18

**Stand Examiner:** Scott Sebero

**Legal Description:**

T43N-R29W SECTIONS 16, 17, 20, 21, 22, 23, 26, 27 & 28.

**Identified Planning Goals:**

Develop age class distribution in aspen type. Develop the quality while maintaining diversity in hardwood types. Maintain health of conifer types and increase acreage where possible. Develop buffers on lakes and streams. Maintain and improve road system.

**Soil and topography:**

Nearly level to hilly, well drained and very poorly drained, loamy and mucky soils that formed in ice-contact drift, glacial till and organic deposits.

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

State lands mixed with private parcels. Lands used mainly for hunting and fishing.

**Unique Natural Features:**

Ford River is the Northern boundary and the E. Br. Sturgeon River is the Southern boundary of the compartment.

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

Multiple compartments were determined to have no known archaeological sites within them; we have no concerns for these compartments: 10, 14, 30, 50, 70, 75, 93, 112, 116, 138, 142, 144, 156, 166, and 186.

**Special Management Designations or Considerations:**

None.

**Watershed and Fisheries Considerations:**

The Ford River runs north along the compartments border and the EB of the Sturgeon River runs south of this compartments border. Both of important trout streams and require a 300 foot buffer 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. Vernal pools and intermittent streams should be protected as well.

**Wildlife Habitat Considerations:**

Featured species include American woodcock, black bear, northern goshawk, ruffed grouse, and white-tailed deer. It would be beneficial to all featured species to continue to manage this compartment for age class diversity and to retain what lowland complexes there are for compartment species diversity.

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

Former sand/gravel pits are located in sections 15 and 20, but potential for additional gravel within the compartment appears to be limited. There may be some sand and clay potential. There has been no metallic mineral mining within seven miles of the compartment. There has been metallic mineral leasing in the area in the recent past and potential may still exist within the compartment. There is no economic oil and gas production in the UP.

**Vehicle Access:**

Access to compartment is through private or corporate land by woods roads off Lerza Road, which comes off the Leeman Road.

**Survey Needs:**

None.

**Recreational Facilities and Opportunities:**

Snowmobile trail is located just to the West of the compartment and borders the West side of stand 11.

**Fire Protection:**

**Additional Compartment Information:**

None.

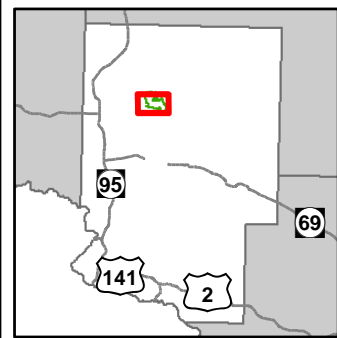
**The following reports from the Inventory are attached:**

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

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

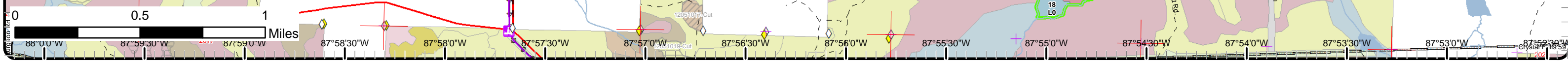
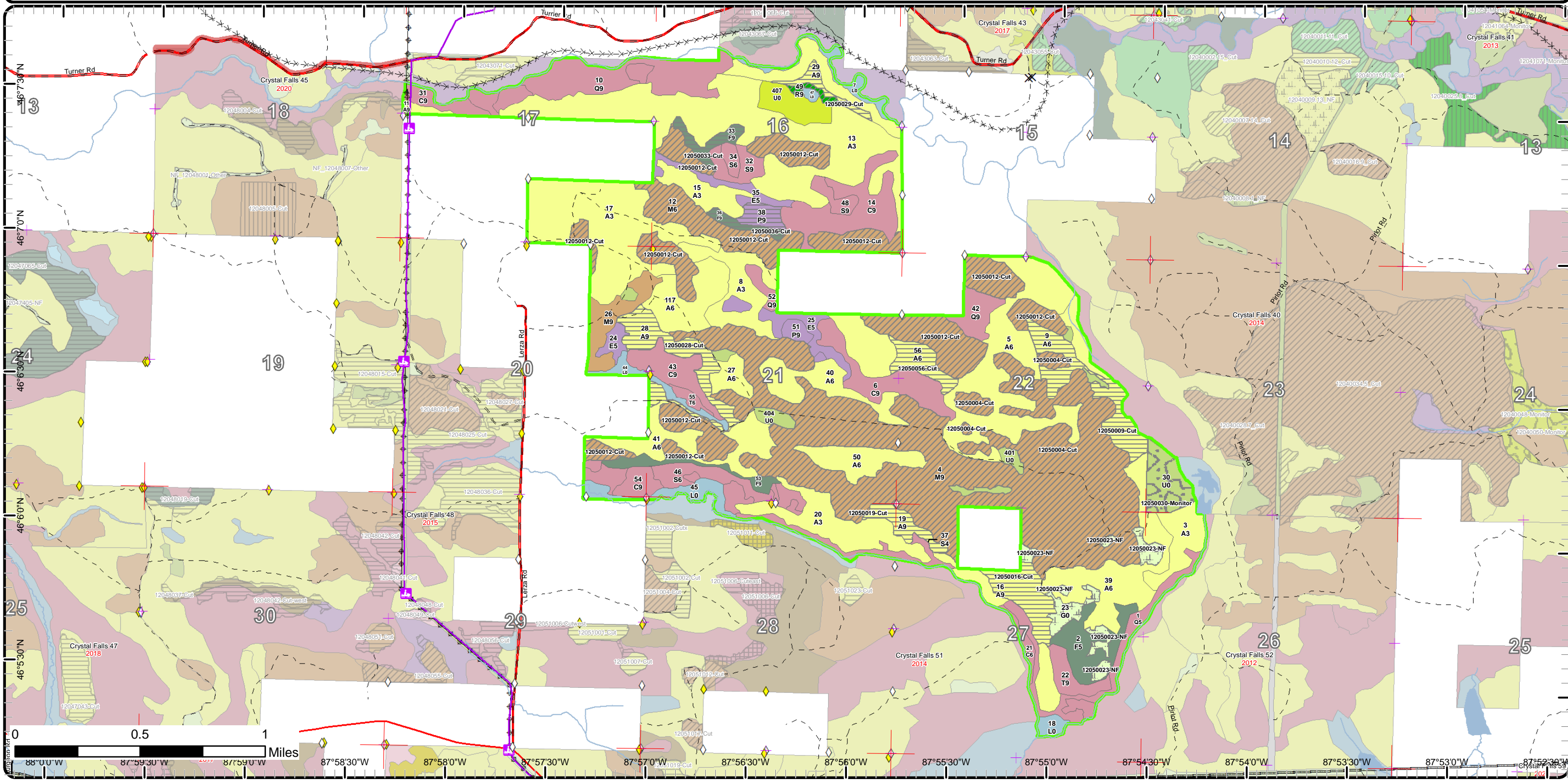
**Base feature information, stand boundaries, cover types, and numbers**  
**Proposed treatments**  
**Site condition boundaries**  
**Details on the road access system**

# Cover Type & Treatments Map

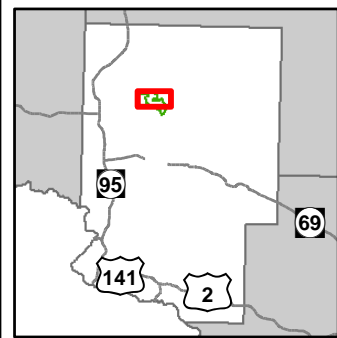


Compartment: 50  
 T43N, R29W, Sec. 15-17, 20-22,  
 27-29  
 County: Dickinson  
 Unit: Crystal Falls  
 Mgmt Area: Ralph Ground  
 Moraine  
 YOE: 2019  
 Acres: 2272.1 GIS Calculated  
 Examiner: Scott Sebero  
 Map Revised: 11/30/2017  
 Map Phase: Post-Review

- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Counties
- Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Abandoned Railroads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Other Treatment - See Comments
- Clearcut (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Regeneration Survey
- 411 - Northern Hardwood
- 413 - Aspen
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 622 - Lowland Shrub
- Lakes

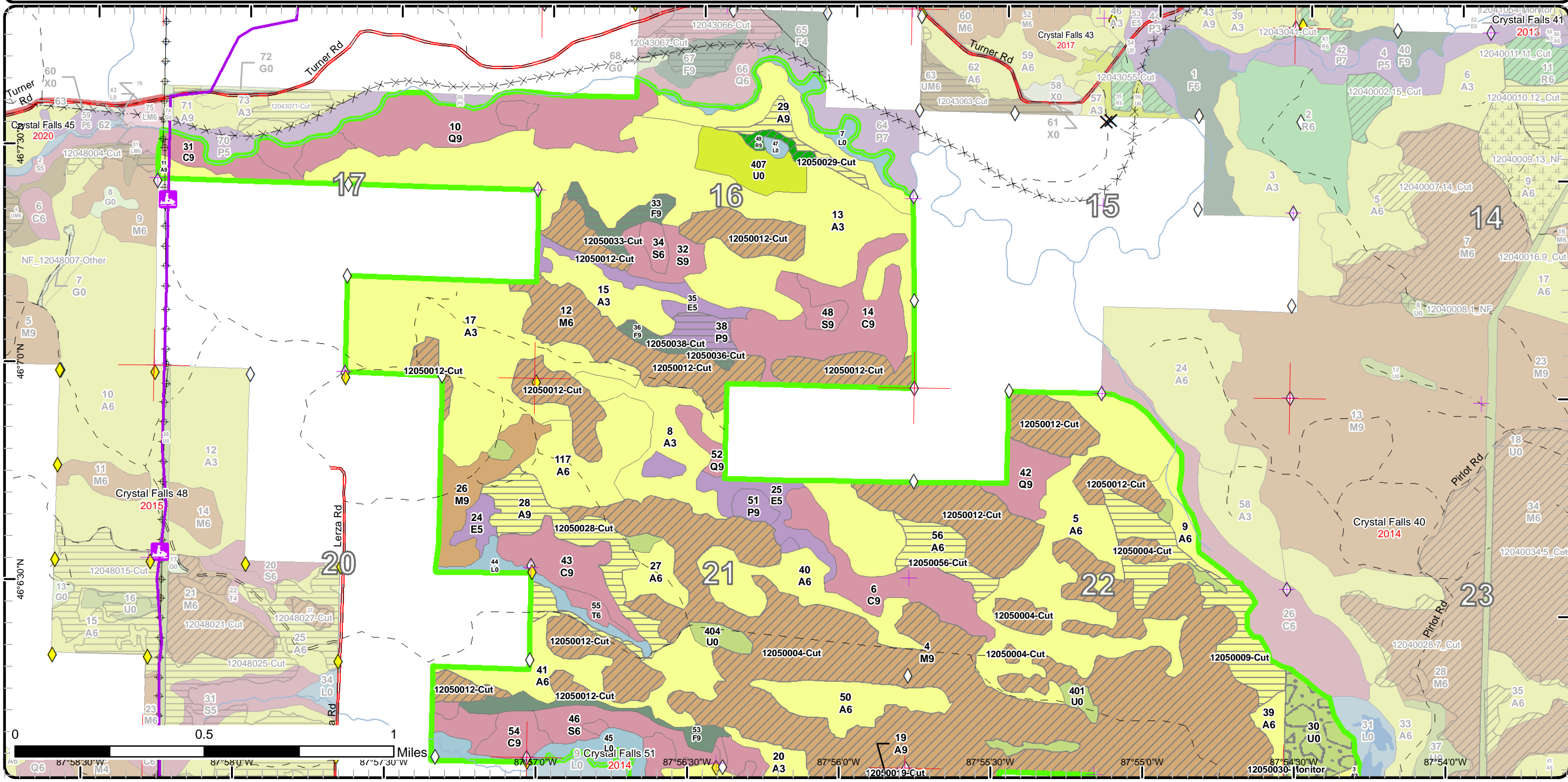


# Cover Type & Treatments Map

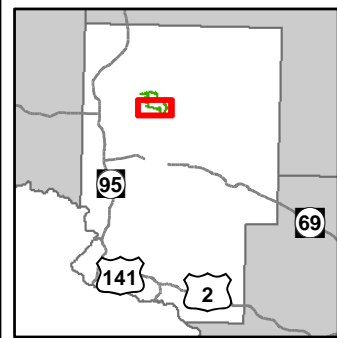


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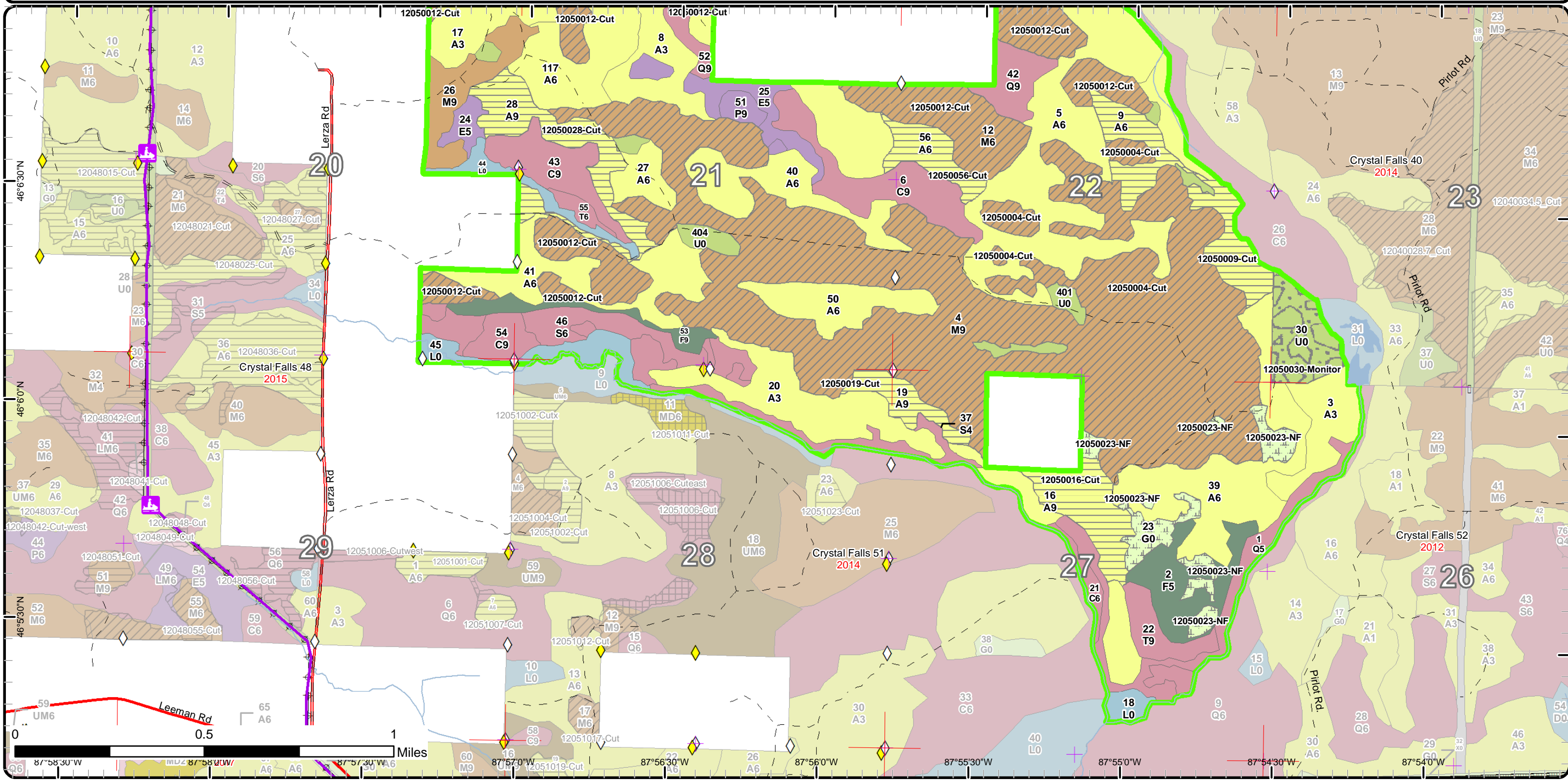


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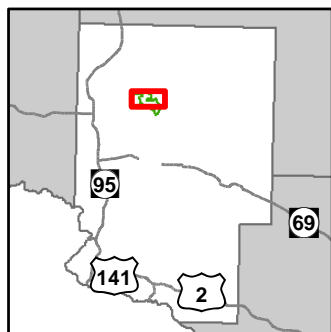
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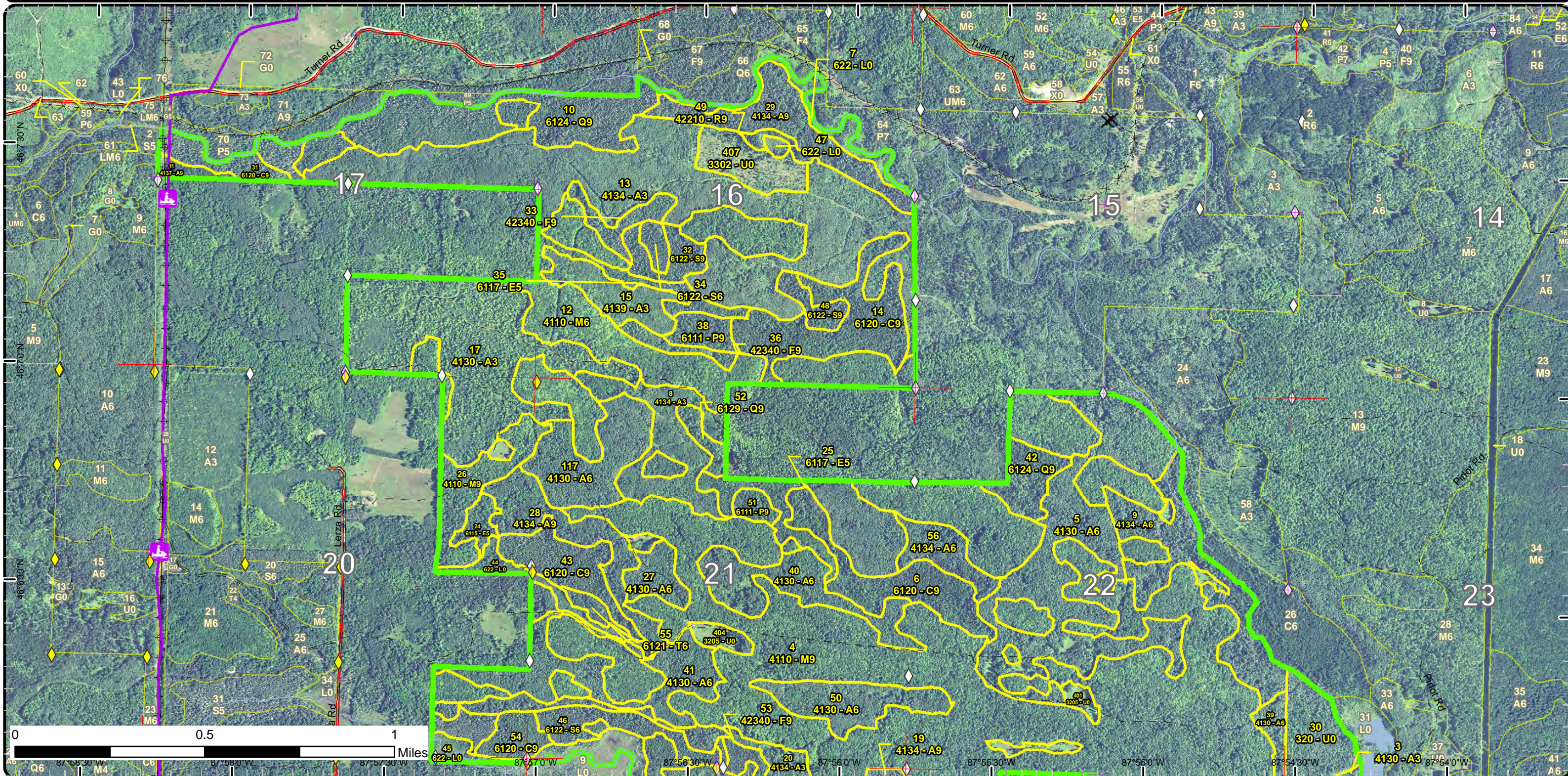


# Stand Boundary Map

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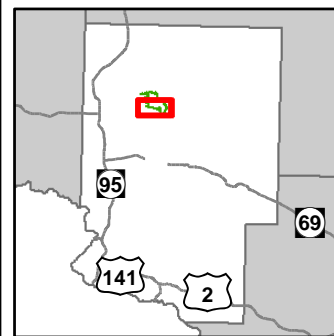


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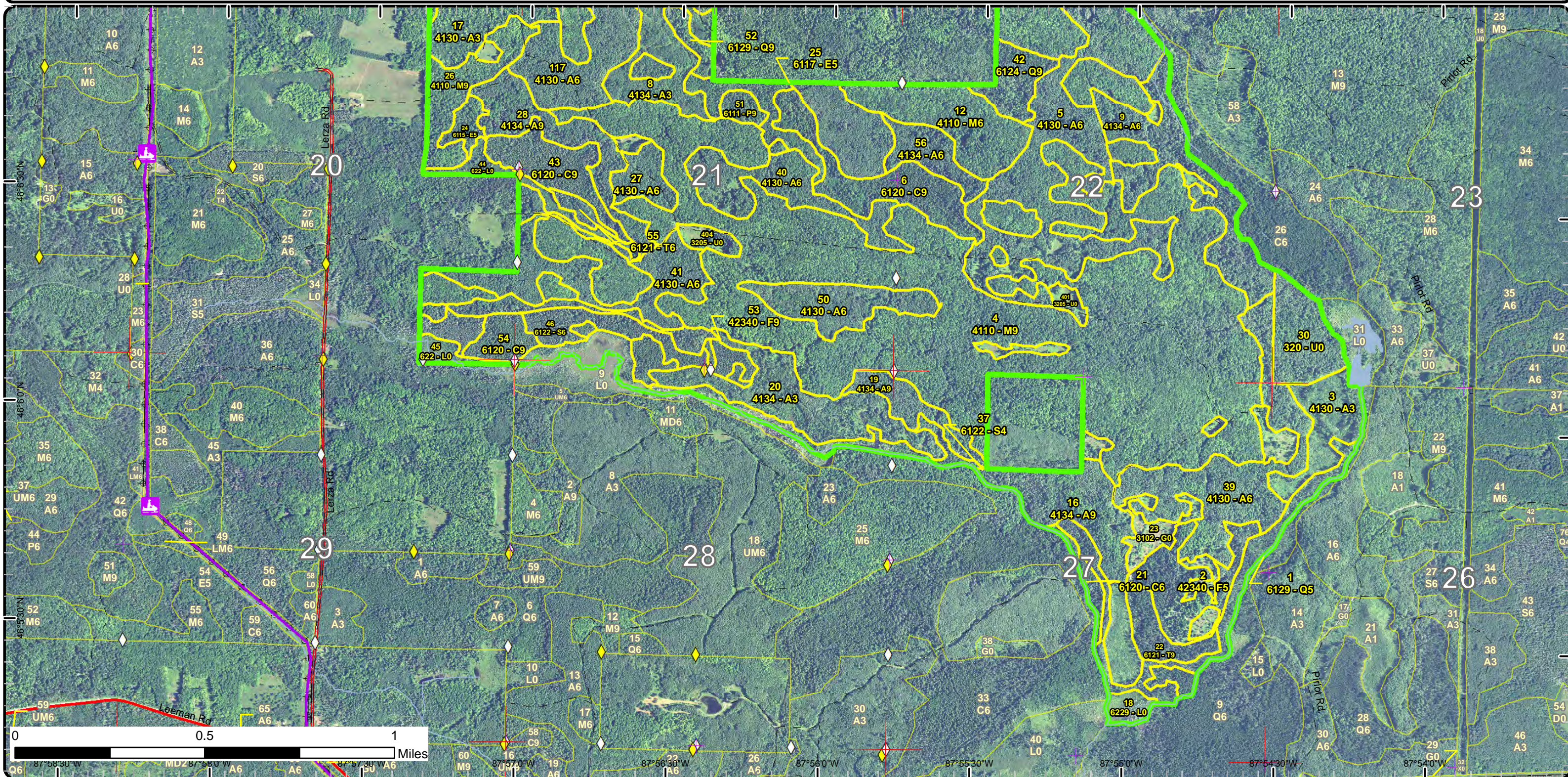


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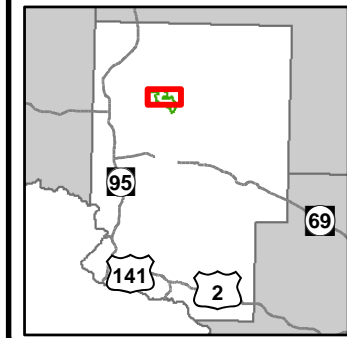


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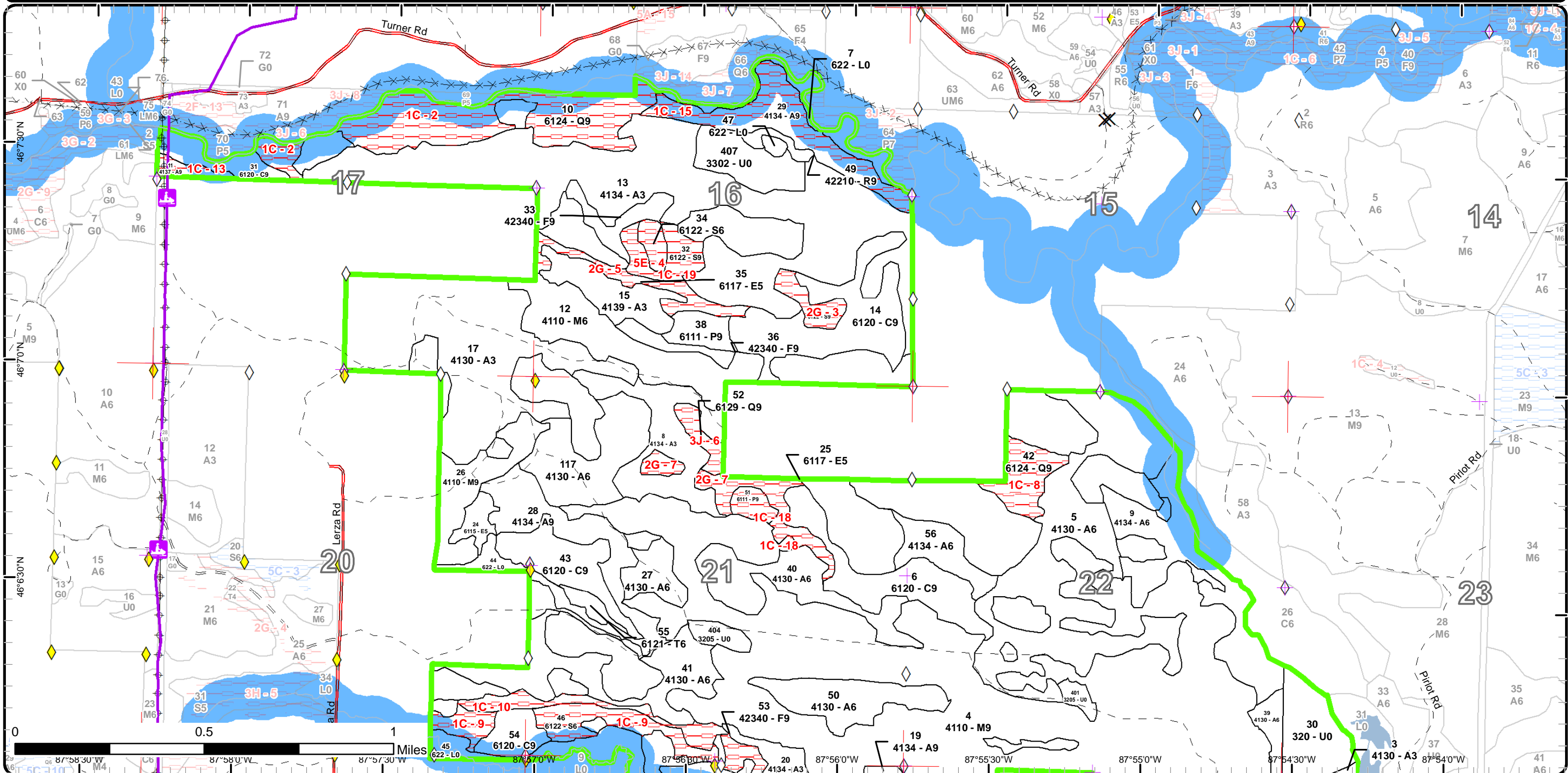


# Special Conservation Areas & Site Conditions Map

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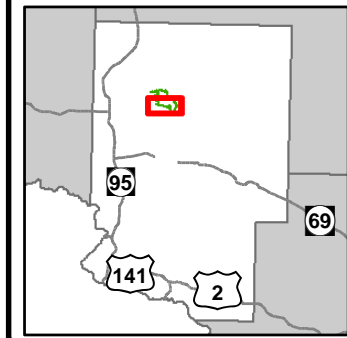
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- Unavailable
- 1C: Other dept or div proc/practices
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer



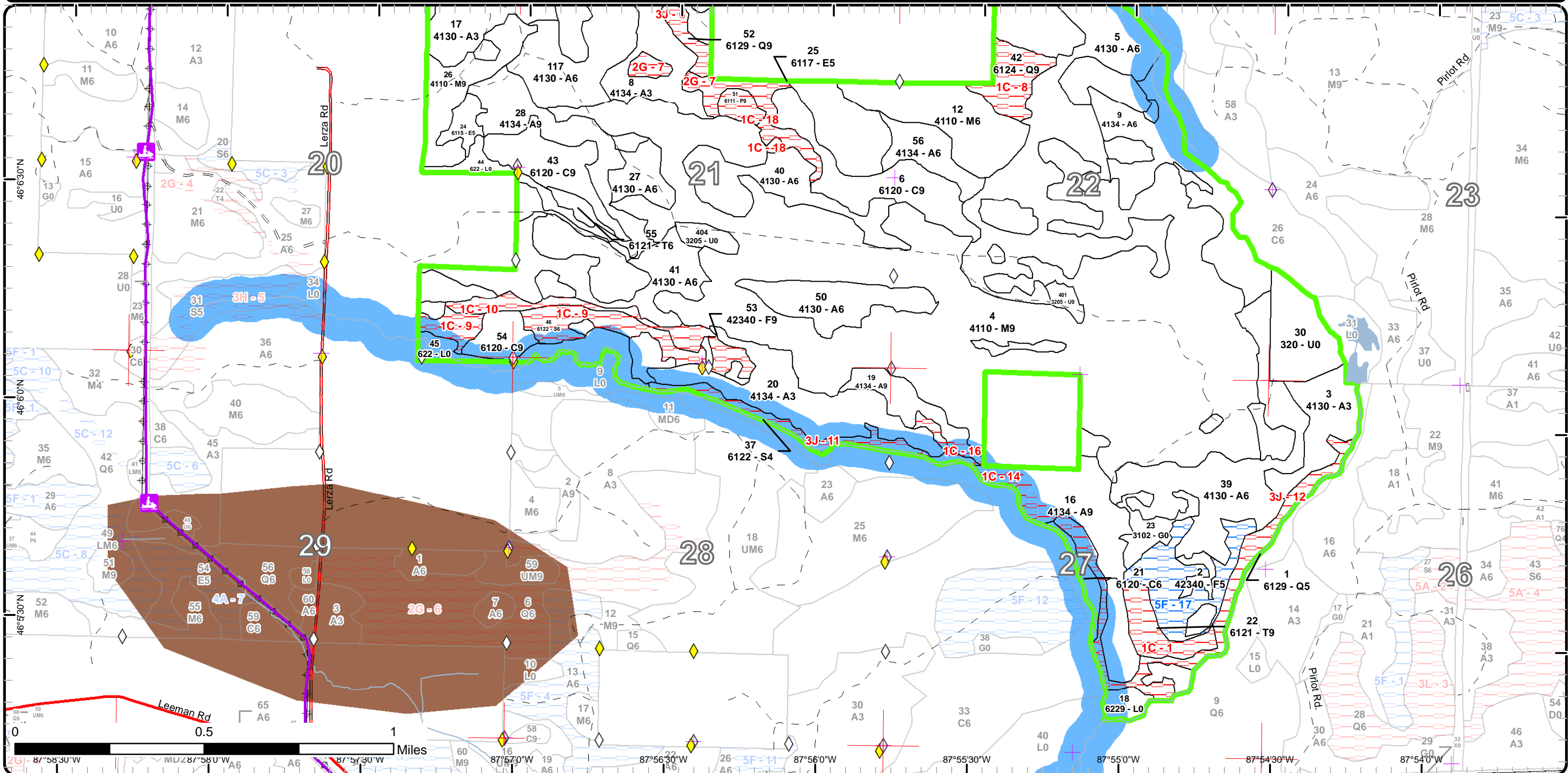


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- Unavailable
- 1C: Other dept or div proc/practices
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer
- Deer Winter Range



87°58'30"W 87°58'00"W 87°57'30"W 87°57'00"W 87°56'30"W 87°56'00"W 87°55'30"W 87°55'00"W 87°54'30"W 87°54'00"W

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	145	58	225	0	406	0	0	0	51	75	0	0	0	0	0	0	0	960
Cedar	0	0	0	0	0	0	0	0	0	55	104	0	0	0	0	0	0	0	159
Herbaceous Openland	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Low-Density Trees	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
Lowland Conifers	0	0	0	0	0	0	0	0	0	30	86	0	0	0	0	0	0	0	116
Lowland Deciduous	0	0	0	0	0	0	6	0	0	0	31	0	0	0	0	0	0	0	37
Lowland Shrub	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	45	25	0	0	0	0	0	0	0	70
Northern Hardwood	0	0	0	0	0	0	0	0	0	697	0	0	0	0	0	0	0	0	697
Red Pine	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Tamarack	0	0	0	0	0	0	0	4	0	14	0	0	0	0	0	0	0	0	18
Upland Shrub	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Upland Spruce/Fir	0	0	0	0	0	28	0	10	0	13	6	0	0	0	0	0	0	0	57
<b>Total</b>	<b>139</b>	<b>145</b>	<b>58</b>	<b>225</b>	<b>0</b>	<b>434</b>	<b>6</b>	<b>14</b>	<b>0</b>	<b>905</b>	<b>346</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2271</b>



## Report 2 – Treatment Summary

Crystal Falls Mgt. Unit  
Year of Entry: 2019

Acres of Harvest

Compartment 50  
Total Compartment Acres: 2,272

Commercial Harvest - 840  
Harvests with Site Condition - 0  
Next Step Harvest - 0  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	139	0	0	0	0	0	0	0	0	139
Lowland Aspen/Balsam Poplar	9	0	0	0	0	0	0	0	0	9
Northern Hardwood	0	0	0	0	0	672	0	0	0	672
Red Pine	0	0	0	0	0	4	0	0	0	4
Upland Spruce/Fir	17	0	0	0	0	0	0	0	0	17
<b>Total</b>	<b>164</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>675</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>840</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	840	0	0	0	0	0	25	0	27	891
Next Step	0	0	0	0	0	0	164	0	0	164
<b>Total</b>	<b>840</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>189</b>	<b>0</b>	<b>27</b>	<b>1056</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
4	12050004-Cut	455.1	4110 - Sugar Maple Association	Sawtimber Well	85	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Approved Proposal

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

Prescription Mark hardwood to 80 BA using compleat marker as guide. Aspen, spruce and balsam with one or more pulpwood stick will be designated to  
Specs: cut. No cedar, hemlock, oak, red or white pine or sub merchantable spruce or balsam will be cut.

Next Step  
Treatments:

Acceptable  
Regen:

Other Mark out wet cedar drains.

Comment:

Proposed Start Date: 10/01/2018

9	12050009-Cut	37.8	4134 - Aspen, Spruce/Fir	Poletimber Well	45	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one or more  
Specs: pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

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

Acceptable mix of aspen, spruce and balsam.  
Regen:

Other 300 ft. buffer on trib to Ford River in NE portion of stand.

Comment:

Proposed Start Date: 10/01/2018

12	12050012-Cut	216.6	4110 - Sugar Maple Association	Poletimber Well	85	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Mark hardwood to 80 BA using compleat marker as guide. Aspen, spruce and balsam with one or more pulpwood stick will be designated to  
Specs: cut. No cedar, hemlock, oak, red or white pine or sub merchantable spruce or balsam will be cut.

Next Step  
Treatments:

Acceptable  
Regen:

Other Mark out wet cedar drains.

Comment:

Proposed Start Date: 10/01/2018

16	12050016-Cut	27.2	4134 - Aspen, Spruce/Fir	Sawtimber Well	85	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak and cherry, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one  
Specs: or more pulpwood sticks. Cut all cherry with two or more pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

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

Acceptable Mix of aspen, spruce and balsam.  
Regen:

Other 300 ft. buffer on Sturgeon River.

Comment:

Proposed Start Date: 10/01/2018



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
19	12050019-Cut	13.5	4134 - Aspen, Spruce/Fir	Sawtimber Well	85	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal

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

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one or more  
Specs: pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

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

Acceptable Mix of aspen, spruce and balsam.  
Regen:

Other 300 ft. buffer on Sturgeon River.  
Comment:

Proposed Start Date: 10/01/2018

23	12050023-NF	26.8	3102 - Grass	Nonstocked	0	Unspec	NonForestMgt	Other - Specify	3102 - Grass		Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription WLD will manage to keep as an opening via mechanical / Rx burn. WLD will also manage mast plantings currently in openings.  
Specs:

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

28	12050028-Cut	36.4	4134 - Aspen, Spruce/Fir	Sawtimber Well	90	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one or more  
Specs: pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

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

Acceptable Mix of aspen, spruce and balsam.  
Regen:

Other Mark out drains and E-types at sale setup.  
Comment:

Proposed Start Date: 10/01/2018

29	12050029-Cut	7.7	4134 - Aspen, Spruce/Fir	Sawtimber Well	90	111-140	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam and jack pine with one or more  
Specs: pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

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

Acceptable Mix of aspen, spruce, balsam and pine.  
Regen:

Other 300 ft. buffer on Ford River.  
Comment:

Proposed Start Date: 10/01/2018



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
3	12050030- Monitor	24.8	4130 - Aspen	Sapling Well	3	Immature	Monitoring	Natural Regen (Re-Inventory)	4130 - Aspen	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**PrescriptionSpecs:Next StepTreatments:Acceptable Mix of aspen, spruce and fir.Regen:Other Percent to Treat = 100%Comment:Proposed Start Date: 03/17/2017

33	12050033-Cut	10.4	42340 - Upland Spruce/Fir	Sawtimber Well	60	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood two inches or greater DBH, except oak and black ash.. Cut all spruce, balsam, tamarack and jack pine with two or more pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

Specs:Next Step Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Mix of aspen, spruce, balsam and maple.Regen:OtherComment:Proposed Start Date: 10/01/2018

36	12050036-Cut	6.3	42340 - Upland Spruce/Fir	Sawtimber Well	90	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one or more pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

Specs:Next Step Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Mix of aspen, spruce and balsam.Regen:OtherComment:Proposed Start Date: 10/01/2018

38	12050038-Cut	9.2	6111 - Lowland Balsam Poplar	Sawtimber Well	90	81-110	Harvest	Clearcut with Retention	6111 - Lowland Balsam Poplar	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one or more pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

Specs:Next Step Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Mix of balsam, aspen, spruce, balsam and tamarack.Regen:Other Winter cut because of wet soils.Comment:Proposed Start Date: 10/01/2018



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
49	12050049-Cut	3.6	42210 - Natural Red Pine	Sawtimber Well	90	141- 170	Harvest	Crown Thinning	4221 - Natural Red Pine	Even-Aged	Approved Proposal

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

Prescription Mark red pine to 100 BA. Cut all Mixed hardwood, aspen, spruce and balsam with one or more pulpwood stick. No cedar, hemlock or white pine  
Specs: will be cut.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

56	12050056-Cut	15.9	4134 - Aspen, Spruce/Fir	Poletimber Well	42	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Approved Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all aspen and mixed hardwood, except oak, two inches or greater DBH. Cut all spruce, balsam, tamarack and jack pine with one or more  
Specs: pulpwood sticks. No cedar, hemlock, red or white pine will be cut.

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

Acceptable Mix of aspen, spruce and balsam.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

**Total Treatment  
 Acreage Proposed: 891.3**

## Report 4 – Site Conditions

**Crystal Falls Mgt. Unit**  
**Scott Sebero : Examiner**

**Compartment: 50**  
**Year of Entry: 2019**

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions					
		With Condition	Not Available		5F	1C	2G	3J	5E	
959	919	0	41	Aspen		41				
159	159	0	0	Cedar						
27	27	0	0	Herbaceous Openland						
20	20	0	0	Low-Density Trees						
15	9	0	6	Lowland Aspen/Balsam Poplar		6				
116	0	0	116	Lowland Conifers		80		36		
38	6	0	31	Lowland Deciduous			31			
47	47	0	0	Lowland Shrub						
70	0	0	70	Lowland Spruce/Fir		42	8	16	5	
697	697	0	0	Northern Hardwood						
4	4	0	0	Red Pine						
18	4	0	14	Tamarack		14				
44	44	0	0	Upland Shrub						
58	17	28	13	Upland Spruce/Fir	28	13				
2,272	1,953	28	291	Total Forested Acres	28	195	39	52	5	
	86%	1%	13%	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	1C: Other dept or div proc/practices	14	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife Division would like to hold stand for 10 years. FRD would like to harvest stand when stand 2 is cut.							
2	Unavailable	1C: Other dept or div proc/practices	65	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 300 foot buffer on Ford River per Fish Division request.							



## Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment: 50

Year of Entry: 2019

3	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	8	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Several small creeks winding through stand.							
4	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Seed source for surrounding stand.							
5	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	13	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Intermittent stream running through stand.							
6	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Intermittent stream running through stand.							
7	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	18	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Series of seeps and ponds in stand.							
8	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Retained per Wildlife Division request for deer cover and travel corridor.							

## Report 4 – Site Conditions

Crystal Falls Mgt. Unit  
 Scott Sebero : Examiner

Compartment: 50  
 Year of Entry: 2019

9	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	29	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife Division request to retain for deer cover and travel corridor. Buffer for Sturgeon River.							
10	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	13	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife Division request for deer cover and travel corridor.							
11	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Buffer for Sturgeon River.							
12	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	30	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Buffer for Sturgeon River.							
13	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Fish Division asked for 300 foot buffer on the Ford River.							
14	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Fish asked for a 300 foot buffer on Sturgeon River.							

## Report 4 – Site Conditions

Crystal Falls Mgt. Unit  
 Scott Sebero : Examiner

Compartment: 50  
 Year of Entry: 2019

15	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	27	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Fish Division asked for a 300 foot buffer along Ford River.							
16	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Fish Division asked for 300 foot buffer along Sturgeon River.							
17	<b>Available</b>	<b>5F: Evaluated for Forest Health Considerations</b>	28	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Hold for 10 years, unless impacted by budworm.							
18	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife Division wants to reserve stand for bear habitat.							
19	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife Division wants to save stand for bear habitat.							

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
<b>Comments</b>				



## Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area  
 HCVA = High Conservation Value Area  
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water 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	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



Stand	Crystal Falls Mgt. Unit		Report 7 – Forested Stands			Compartment: 50 Year of Entry: 2019	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	30.2	80	51-80		
2	42340 - Upland Spruce/Fir	Poletimber Medium	28.1	42	51-80	Spruce budworm present.	
3	4130 - Aspen	Sapling Well	35.6	3	Immature	OPIC - FMD: Start to break up stand next entry.	
4	4110 - Sugar Maple Association	Sawtimber Well	455.1	85	111-140	OPIC - FMD: OI Stand Year Origin was 1932	
5	4130 - Aspen	Poletimber Well	127.6	42	81-110		
6	6120 - Lowland Cedar	Sawtimber Well	34.9	90	111-140		
8	4134 - Aspen, Spruce/Fir	Sapling Well	36.9	14	Immature		
9	4134 - Aspen, Spruce/Fir	Poletimber Well	48.5	45	81-110	cut. some budworm present. some older aspen and fir mixed in throughout stand.	
10	6124 - Lowland Spruce- Fir	Sawtimber Well	64.6	90	51-80	Pockets of black spruce and balsam scattered throughout the stand. Much of stand is balm and ash with a scattered few spruce or balsam.	
11	4137 - Aspen, Birch	Sawtimber Well	4.3	90	81-110	Aspen breaking up. Converting to hardwood. Most of stand on steep hill.	
12	4110 - Sugar Maple Association	Poletimber Well	216.6	85	111-140		
13	4134 - Aspen, Spruce/Fir	Sapling Well	178.2	24	Immature	Many seeps and drains in stand. These drains are populated with balm.	
14	6120 - Lowland Cedar	Sawtimber Well	47.4	90	111-140	OPIC - FMD: OI Stand Year Origin was 1927	
15	4139 - Aspen, Mixed Deciduous	Sapling Well	21.2	14	Immature		
16	4134 - Aspen, Spruce/Fir	Sawtimber Well	35.3	85	81-110		
17	4130 - Aspen	Sapling Well	109.8	6	Immature	Ford River Aspen sale # 12-072-10-01	
19	4134 - Aspen, Spruce/Fir	Sawtimber Well	15.3	85	81-110	cut	



Stand	Crystal Falls Mgt. Unit		Report 7 – Forested Stands			Compartment: 50 Year of Entry: 2019	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
20	4134 - Aspen, Spruce/Fir	Sapling Well	46.5	27	Immature		
21	6120 - Lowland Cedar	Poletimber Well	9.7	80	111-140		
22	6121 - Tamarack	Sawtimber Well	13.6	80	81-110		
24	6115 - Lowland Ash	Poletimber Medium	6.3	50	1-50	Very wet.	
25	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	18.4	90	51-80		
26	4110 - Sugar Maple Association	Sawtimber Well	25.1	85	81-110	OPIC - FMD: OI Stand Year Origin was 1932	
27	4130 - Aspen	Poletimber Well	12.2	42	81-110		
28	4134 - Aspen, Spruce/Fir	Sawtimber Well	36.4	90	81-110	Aspen has fallen out of some of the stand. Areas of blowdown. Some younger aspen and balsam mixed in along east side of stand.	
29	4134 - Aspen, Spruce/Fir	Sawtimber Well	34.4	90	111-140	Heavy budworm damage. Stand starting to break up.	
31	6120 - Lowland Cedar	Sawtimber Well	21.7	90	81-110		
32	6122 - Black Spruce	Sawtimber Well	12.2	90	51-80	Stand starting to break up. pockets of blow down.	
33	42340 - Upland Spruce/Fir	Sawtimber Well	10.4	60	81-110	Stand impacted by budworm.	
34	6122 - Black Spruce	Poletimber Well	4.8	90	81-110	Stand looks to be in good shape.	
35	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	12.9	90	51-80		
36	42340 - Upland Spruce/Fir	Sawtimber Well	6.3	90	81-110		
37	6122 - Black Spruce	Poletimber Poor	15.8	85	1-50	Borders the Sturgeon River.	
38	6111 - Lowland Balsam Poplar	Sawtimber Well	9.2	90	81-110		
39	4130 - Aspen	Poletimber Well	62.6	42	81-110		

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## Crystal Falls Mgt. Unit

## Report 7 – Forested Stands

Compartment: 50  
Year of Entry: 2019

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	4130 - Aspen	Poletimber Well	33.6	42	81-110	
41	4130 - Aspen	Poletimber Well	40.9	42	81-110	
42	6124 - Lowland Spruce- Fir	Sawtimber Well	15.6	90	81-110	cut.
43	6120 - Lowland Cedar	Sawtimber Well	24.0	85	111-140	
46	6122 - Black Spruce	Poletimber Well	29.4	85	81-110	
48	6122 - Black Spruce	Sawtimber Well	7.8	90	81-110	Several small creeks wind through stand.
49	42210 - Natural Red Pine	Sawtimber Well	3.6	90	141-170	Should be thinned.
50	4130 - Aspen	Poletimber Well	27.1	42	51-80	
51	6111 - Lowland Balsam Poplar	Sawtimber Well	6.2	90	81-110	
52	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	6.0	90	81-110	
53	42340 - Upland Spruce/Fir	Sawtimber Well	12.7	85	81-110	
54	6120 - Lowland Cedar	Sawtimber Well	21.6	85	111-140	
55	6121 - Tamarack	Poletimber Well	4.1	60	111-140	
56	4134 - Aspen, Spruce/Fir	Poletimber Well	15.9	42	81-110	cut.
117	4130 - Aspen	Poletimber Well	37.2	42	81-110	





Stand	Cover Type	Acres	Managed Site	General Comments:
7	622 - Lowland Shrub	11.7	No	OPIC - FMD: SCA- Ford river corridor.
18	6229 - Mixed lowland shrub	5.7	No	OPIC - FMD: Start to break up stand next entry.
23	3102 - Grass	26.8	No	Russian Olive planted in NW portion. Openings growing in with tree seedlings.
30	320 - Upland Shrub	25.2		
44	622 - Lowland Shrub	10.4	No	OPIC - FMD: OI Stand Year Origin was
45	622 - Lowland Shrub	17.7	No	OPIC - FMD: OI Stand Year Origin was
47	622 - Lowland Shrub	1.7	No	
401	3205 - Mixed Upland Shrub	9.9	No	OPIC - FMD: OI Stand Year Origin was
404	3205 - Mixed Upland Shrub	9.4	No	OPIC - FMD: OI Stand Year Origin was
407	3302 - Low Density Conifer Trees	19.8	No	OPIC - FMD: Filling in with cherry and spruce seedlings.