



# Compartment Review Presentation

## Crystal Falls Forest Management Unit

Compartment 12113

Entry Year 2015

Acreage: 3,531

County Dickinson

Management Area: Groveland

---

**Revision Date:** 2013-07-15

**Stand Examiner:**

**Legal Description:**

T41N,R29W sections 6, 7 & 18 T41N,R30W sections 1, 12 % 13

**Identified Planning Goals:**

This compartment has a high recreational potential that influences our efforts at managing a healthy, diverse area with more emphasis on fish and wildlife habitats within this unusually rugged area.

**Soil and topography:**

Soils are shallow and rocky. The topography is unusually rugged in this compartment.

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

The ownership of the recreation area is all state with Hanna Mining owning to the north with a parcel of private also, and some private to the south. The state land was owned by the Hanna mine also, and was a site of a large open pit mine called the Groveland Mine. When the mine was closed, the

**Unique Natural Features:**

This site was likely in the middle of a mountain range. It is now only the roots of the range, but it is rugged, diverse and beautiful. It has large ponds that were designed for mining use, but provide a more diverse site.

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

No Archeological, Historical, or Cultural Features known.

**Special Management Designations or Considerations:**

This is a widely used recreation area both in summer and winter. The road into the area is not plowed, but the public finds ways to get in there and ice fish. There are a lot of people that use it in the summer also as the fishing is good.

**Watershed and Fisheries Considerations:**

There is the pine creek, the North, South, East and West Pond.

**Wildlife Habitat Considerations:**

This is a very diverse area that provides habitat requirements for a variety of game and nongame species. The riparian areas will continue to be managed in a fashion that will benefit eagles and ospreys with the maintenance of super canopy trees in the overstory, to provide nest and perch sites. Herons have maintained rookeries in this complex of lakes, historically and current habitat features exist to encourage them to nest here again. Loons nest on Island Pond. Any harvest activities will need to take these species nesting time and locations into account during harvest operations. Hardwood stands scheduled for harvest will be treated in a way that provides structural and species diversity. Dense lowland and upland conifer sites provide both winter and summer habitat requirements for species such as deer, bobcat, and snowshoe hare. Turkeys occupy many of the forest edges and large open areas.

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

Surface sediments consist of thin to discontinuous glacial till over bedrock. The glacial drift thickness varies between 10 and 100 feet. The Precambrian Archean granite/gneiss and minor Michigamme formation outcrop below the glacial drift. There is not an economic use for these rocks, although the granite/gneiss might have building stone potential. The Groveland Iron mine is located to the north. This compartment was not previously leased for metallic exploration but could have potential. A gravel pit is located in Section 18 and there may be some potential. There is no economic oil and gas production in the UP.

**Vehicle Access:**

The road accessing the south pond needs a lot of work. It is very rocky. The rest of the road system is fairly good and there are many side roads that are both open and bermed. Some roads stop or go around rock outcrops. ORVs are allowed in some areas but there is a problem with them going off the designated trails into the stamp sands.

**Survey Needs:**

There will be need to the south along the private.

**Recreational Facilities and Opportunities:**

Many and diverse opportunities for hunting , fishing and snomobiling abound in this compartment. New boat launch facilities have been added and some of the roads and trails have been improved.

**Fire Protection:**

This is a possible fire area because of the amount of public use and the timber type. There would be a problem with the rugged terrain but there is a lot of water available.

**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**

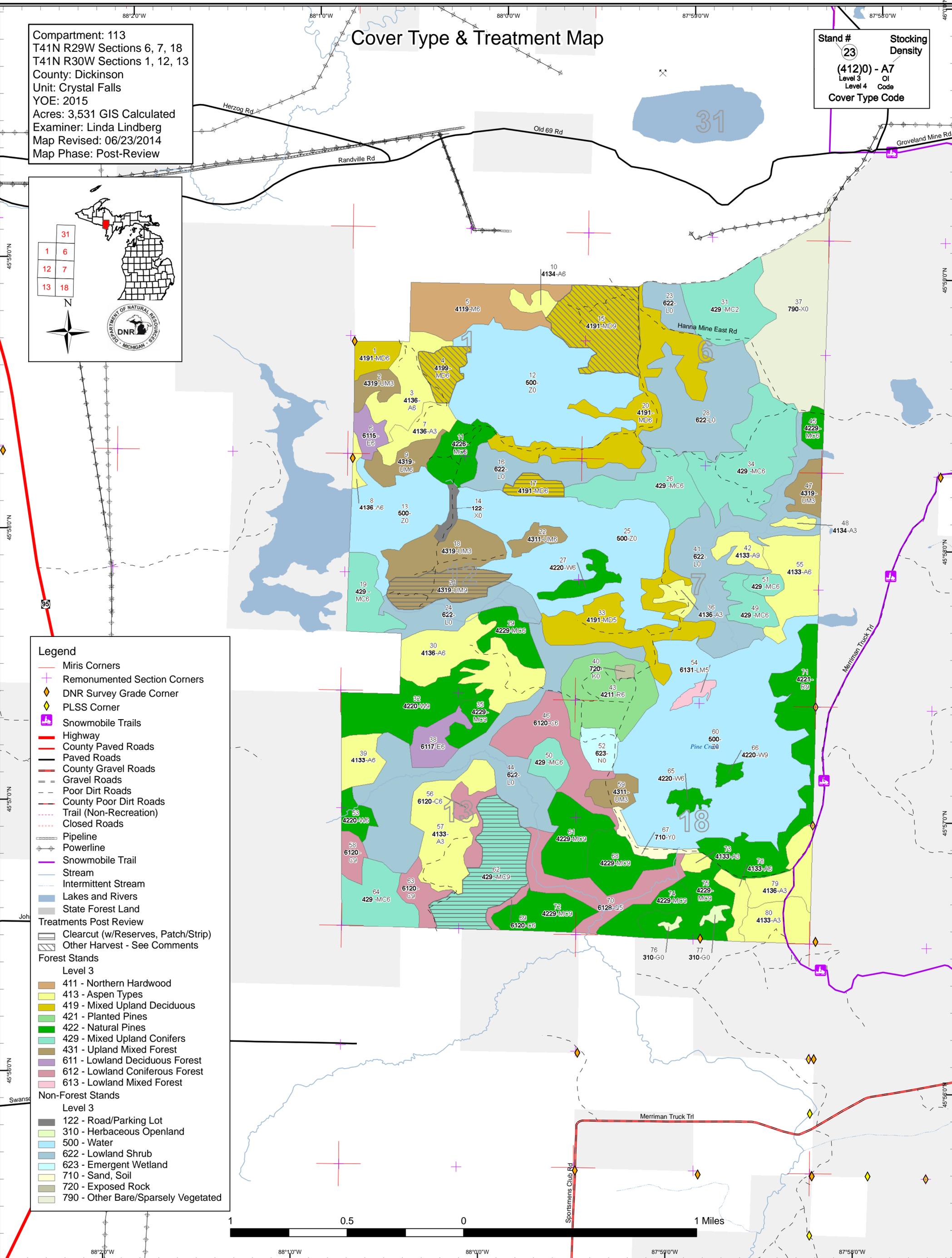
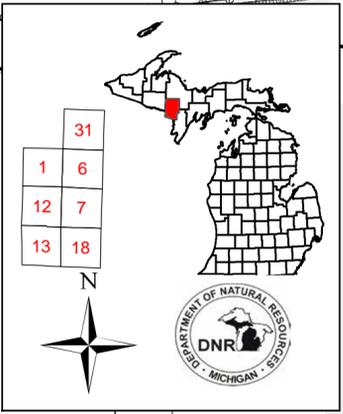
**The following information is displayed, where pertinent, on the attached compartment maps:**

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

# Cover Type & Treatment Map

Compartment: 113  
 T41N R29W Sections 6, 7, 18  
 T41N R30W Sections 1, 12, 13  
 County: Dickinson  
 Unit: Crystal Falls  
 YOE: 2015  
 Acres: 3,531 GIS Calculated  
 Examiner: Linda Lindberg  
 Map Revised: 06/23/2014  
 Map Phase: Post-Review

Stand #  
 23  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code



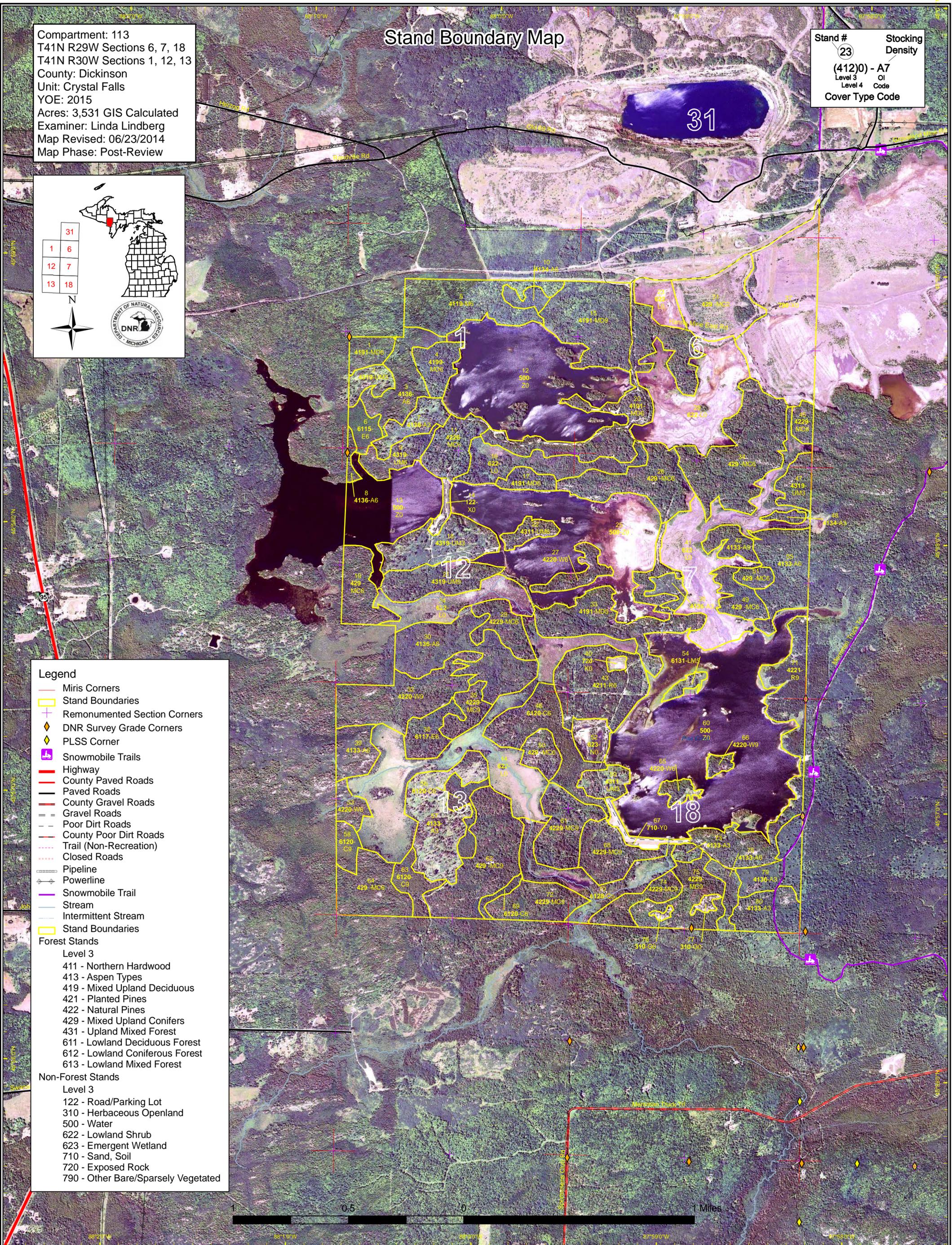
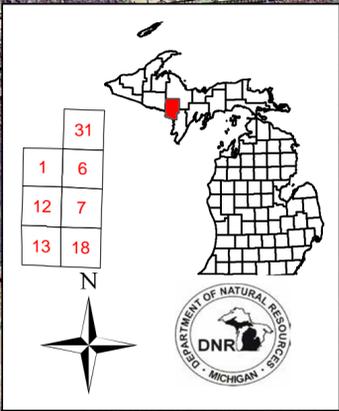
- Legend**
- Miris Corners
  - Remonumented Section Corners
  - ◆ DNR Survey Grade Corner
  - ◆ PLSS Corner
  - Snowmobile Trails
  - Highway
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trail (Non-Recreation)
  - Closed Roads
  - Pipeline
  - Powerline
  - Snowmobile Trail
  - Stream
  - Intermittent Stream
  - Lakes and Rivers
  - State Forest Land
- Treatments Post Review**
- Clearcut (w/Reserves, Patch/Strip)
  - Other Harvest - See Comments
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 429 - Mixed Upland Conifers
  - 431 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
  - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
  - 310 - Herbaceous Openland
  - 500 - Water
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
  - 710 - Sand, Soil
  - 720 - Exposed Rock
  - 790 - Other Bare/Sparsely Vegetated



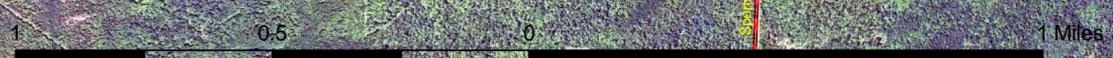
# Stand Boundary Map

Compartment: 113  
 T41N R29W Sections 6, 7, 18  
 T41N R30W Sections 1, 12, 13  
 County: Dickinson  
 Unit: Crystal Falls  
 YOE: 2015  
 Acres: 3,531 GIS Calculated  
 Examiner: Linda Lindberg  
 Map Revised: 06/23/2014  
 Map Phase: Post-Review

Stand # **23**  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code



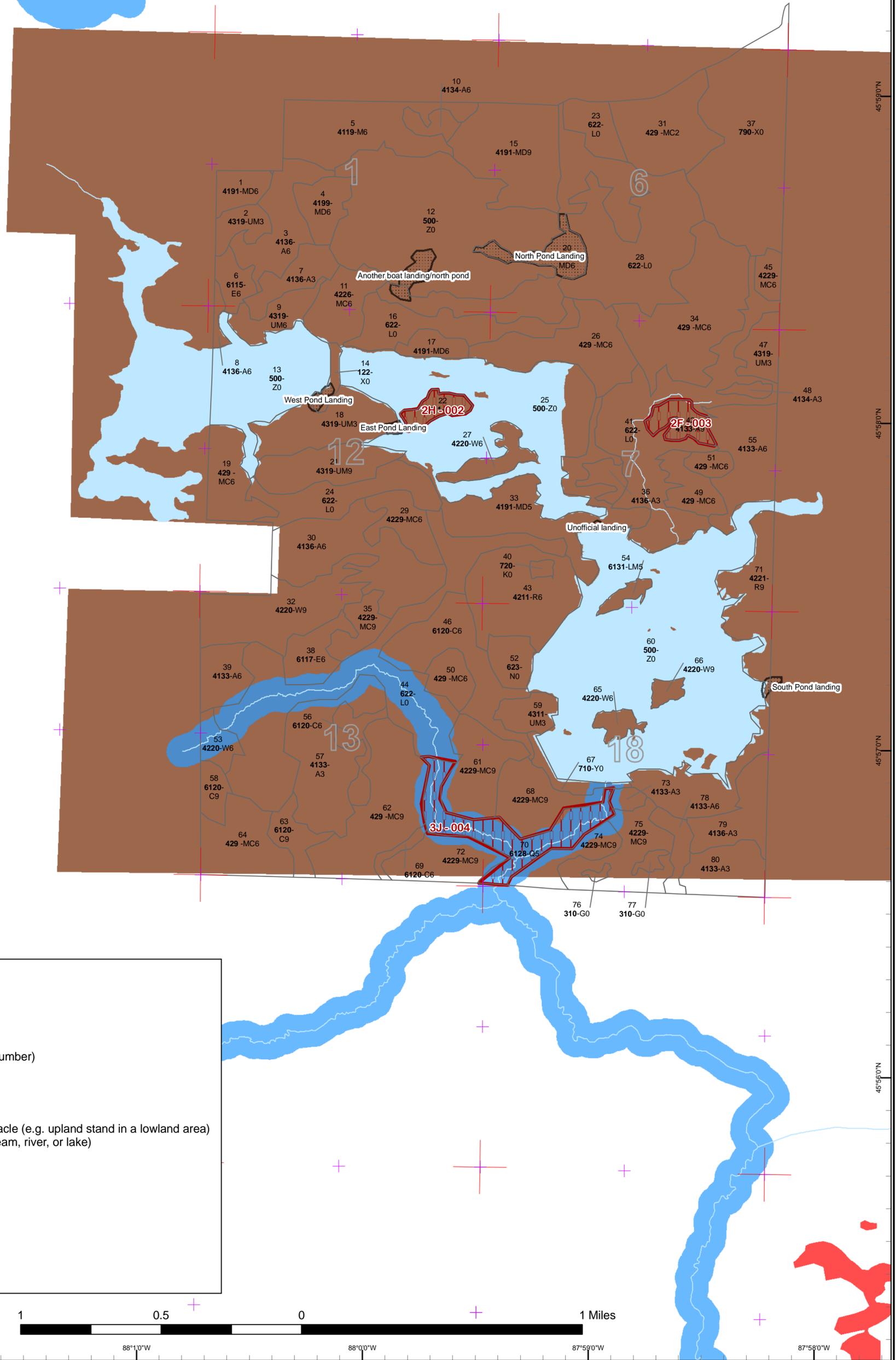
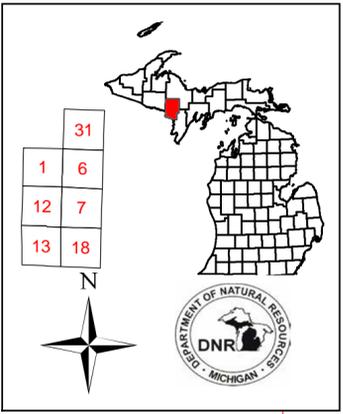
- Legend**
- Miris Corners
  - Stand Boundaries
  - Remonumented Section Corners
  - ◆ DNR Survey Grade Corners
  - ◆ PLSS Corner
  - Snowmobile Trails
  - Highway
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trail (Non-Recreation)
  - Closed Roads
  - Pipeline
  - Powerline
  - Snowmobile Trail
  - Stream
  - Intermittent Stream
  - Stand Boundaries
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 429 - Mixed Upland Conifers
  - 431 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
  - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
  - 310 - Herbaceous Openland
  - 500 - Water
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
  - 710 - Sand, Soil
  - 720 - Exposed Rock
  - 790 - Other Bare/Sparsely Vegetated



# Special Conservation Areas & Site Conditions Map

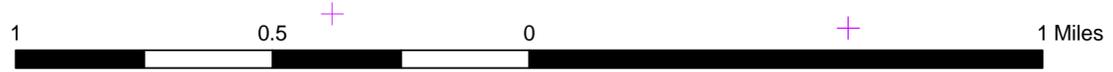
Compartment: 113  
 T41N R29W Sections 6, 7, 18  
 T41N R30W Sections 1, 12, 13  
 County: Dickinson  
 Unit: Crystal Falls  
 YOE: 2015  
 Acres: 3,531 GIS Calculated  
 Examiner: Linda Lindberg  
 Map Revised: 06/23/2014  
 Map Phase: Post-Review

Stand # **23**  
 Stacking Density  
**(4120) - A7**  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code



**Legend**

- Miris Corners
- ✦ Remonumented Section Corners
- Stand Boundaries
- Site Condition Available
- ▨ Available w/ Constraints (Factor - Number)
- ▩ Unavailable (Factor - Number)
- Site Condition Type
- Unavailable Factors
- 2F: Too steep
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- Reviewable SCAs
- ▨ Proposed SCA
- ▩ SCA Removal
- Dedicated Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes
- Ecological Reference Areas
- High Priority Trout Stream Buffer
- Wildlife Management Areas



88°20'W 88°10'W 88°00'W 87°50'W 87°50'W

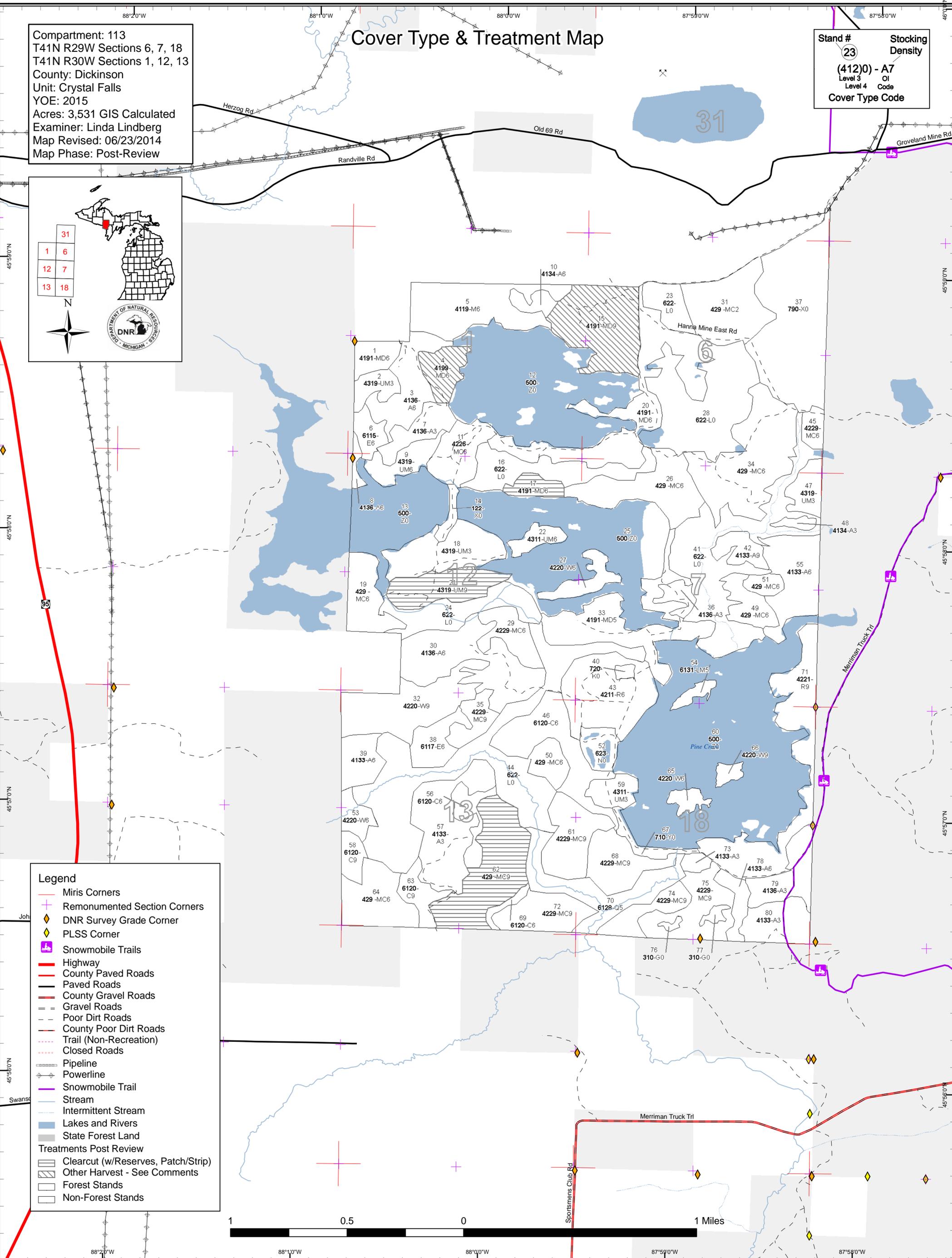
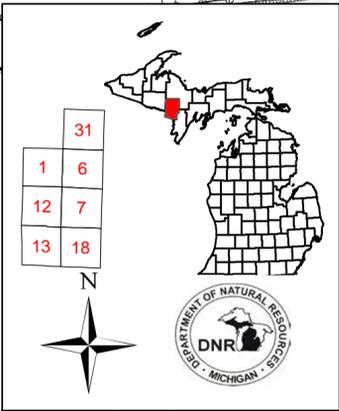
45°58'0"N  
45°58'0"N  
45°57'0"N  
45°57'0"N  
45°58'0"N

87°58'0"W  
87°58'0"W  
87°58'0"W  
87°58'0"W  
87°58'0"W

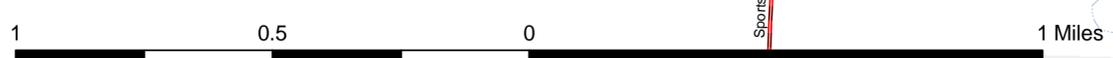
# Cover Type & Treatment Map

Compartment: 113  
 T41N R29W Sections 6, 7, 18  
 T41N R30W Sections 1, 12, 13  
 County: Dickinson  
 Unit: Crystal Falls  
 YOE: 2015  
 Acres: 3,531 GIS Calculated  
 Examiner: Linda Lindberg  
 Map Revised: 06/23/2014  
 Map Phase: Post-Review

Stand #  
 23  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code



- Legend**
- Miris Corners
  - + Remonumented Section Corners
  - ◆ DNR Survey Grade Corner
  - ◆ PLSS Corner
  - Snowmobile Trails
  - Highway
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trail (Non-Recreation)
  - Closed Roads
  - Pipeline
  - Powerline
  - Snowmobile Trail
  - Stream
  - Intermittent Stream
  - Lakes and Rivers
  - State Forest Land
  - Treatments Post Review
  - ▨ Clearcut (w/Reserves, Patch/Strip)
  - ▨ Other Harvest - See Comments
  - ▨ Forest Stands
  - ▨ Non-Forest Stands





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	123	95	23	137	13	0	0	15	0	4	0	0	0	0	0	0	0	410
Bare/Sparsely Vegetated	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131
Cedar	0	0	0	0	0	0	0	0	0	56	51	0	0	0	0	0	0	0	107
Exposed Rock	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	53
Lowland Deciduous	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
Lowland Shrub	482	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	482
Marsh	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	37	257	0	0	0	0	0	0	0	294
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	32	230	0	0	0	0	0	0	0	262
Northern Hardwood	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	70
Red Pine	0	0	0	0	0	0	69	0	87	0	0	0	0	0	0	0	0	0	156
Sand, Soil	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Upland Conifers	0	0	0	57	0	0	0	0	0	32	316	0	0	0	0	0	0	0	405
Upland Mixed Forest	0	30	18	0	0	0	0	0	38	61	21	0	0	0	0	0	0	0	168
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	798	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	798
White Pine	0	0	0	0	0	0	0	0	0	85	26	0	0	0	0	0	0	0	111
<b>Total</b>	<b>1453</b>	<b>153</b>	<b>113</b>	<b>80</b>	<b>173</b>	<b>13</b>	<b>69</b>	<b>0</b>	<b>140</b>	<b>373</b>	<b>964</b>	<b>0</b>	<b>3531</b>						



## Report 2 – Treatment Summary

Crystal Falls Mgt. Unit  
Year of Entry: 2015

Acres of Harvest

Compartment 113  
Total Compartment Acres: 3,531

Commercial Harvest - 222  
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
Mixed Upland Deciduous	12	0	0	0	0	0	0	0	95	107
Upland Conifers	77	0	0	0	0	0	0	0	0	77
Upland Mixed Forest	38	0	0	0	0	0	0	0	0	38
<b>Total</b>	<b>127</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>	<b>222</b>

### Proposed and Next Step Treatments by Harvest Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	222	0	0	0	0	0	0	0	0	222
<b>Total</b>	<b>222</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>222</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	12113004-Cut	21.5	4199 - Other Mixed Upland Deciduous	Poletimber Well	87	51-80	Harvest	Other - Specify	4199 - Other Mixed Upland Deciduous	Unspecified	Draft Field Boundary

Prescription Take the white birch and aspen out of the stand except leaving a few aspen for soft snags. This should reduce the BA in the stand which will  
Specs: make openings for regeneration.

Next Step  
Treatments:

Acceptable  
Regen:

Other This stand was cut last entry period but the birch and aspen were left and are not doing very well, so therefore should be harvested out of the  
Comment: stand. I believe the best access is across the creek from the south but you may be able to come from the north through private. Old next step  
comments: Regen survey needed after harvest.

Proposed Start Date: 10/1 /2014

**Site Condition: None**

15	12113015-Cut	73.1	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	90	51-80	Harvest	Other - Specify	4191 - Mixed Upland Deciduous with Conifer	Unspecified	Draft Field Boundary
----	--------------	------	--------------------------------------------------	-------------------	----	-------	---------	-----------------	-----------------------------------------------------	-------------	-------------------------

Prescription Harvest all species with the exception of red and white pine, oak, hemlock, cedar, elm and cherry. Cut all spruce and balsam that is greater than  
Specs: 6 inches at a 4 inch stump and be extremely careful throughout with the white and red pine regeneration. A 100' buffer will be left along the  
water.

Next Step  
Treatments:

Acceptable  
Regen:

Other There is rock and water in this area and there will be more than enough retention area in the stand.  
Comment:

Proposed Start Date: 10/1 /2014

**Site Condition: None**

17	12113017-Cut	12.1	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	90	51-80	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Draft Field Boundary
----	--------------	------	--------------------------------------------------	--------------------	----	-------	---------	----------------------------	-----------------------------------------------------	-----------	-------------------------

Prescription Harvest all species except red and white pine, hemlock, cedar, oak, elm and cherry. Cut all spruce and balsam that is 6 inches or more in  
Specs: diameter at a 4 inch stump.

Next Step  
Treatments:

Acceptable  
Regen:

Other Much of the aspen is out of this stand already and a 100' buffer will be left on the East pond and you will have to cross the wet to get there but  
Comment: there are some trees that can be harvested. Old next step comments: Regen harvest after harvest.

Proposed Start Date: 10/1 /2014

**Site Condition: None**



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
21	12113021-Cut	38.4	4319 - Mixed Upland Forest	Sawtimber Well	75	51-80	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Prescription Harvest all species with the exception of red and white pine, cedar, hemlock, oak, elm and cherry. Cut all spruce and balsam that is 6 inches or  
Specs: more at a 4 inch stump.

Next Step  
Treatments:

Acceptable  
Regen:

Other Half of this stand was cut last time and this half was left for age class diversity so can be cut this time and should be cut as it is mature. A 100'  
Comment: buffer will be left by the water. Old next step comments: Regen survey after harvest.

Proposed Start Date: 10/1 /2014

**Site Condition: None**

62	12113062-Cut	76.8	429 - Mixed Upland Conifers	Sawtimber Well	90	51-80	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
----	--------------	------	--------------------------------	-------------------	----	-------	---------	----------------------------	--------------------------------	-----------	-------------------------

Prescription Harvest all species with the exception of red and white pine, hemlock, cedar, cherry, elm and oak. Cut all spruce and balsam that is 6 inches or  
Specs: greater at a 4 inch stump.

Next Step  
Treatments:

Acceptable  
Regen:

Other As with other stands in this area, there is rock and wet and these will be left for retention. A 100' buffer will be left on the pine Creek and the  
Comment: greatest access so as not to impact the creek, will be through the private. Old next step comments: Regen survey after harvest.

Proposed Start Date: 10/1 /2014

**Site Condition: None**

**Total Treatment  
Acreage Proposed: 221.8**

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 113  
Year of Entry: 2015

### Dominant Site Conditions

	2H	3J
Aspen		
Bare/Sparsely Vegetated		
Cedar		
Exposed Rock		
Herbaceous Openland		
Lowland Conifers		52
Lowland Deciduous		
Lowland Mixed Forest		
Lowland Shrub		0
Marsh		
Mixed Upland Deciduous		
Natural Mixed Pines		1
Northern Hardwood		
Red Pine		
Sand, Soil		
Upland Conifers		0
Upland Mixed Forest	11	
Urban		
Water		
White Pine		
Total Forested Acres	11	53
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
2	Unavailable	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 113  
Year of Entry: 2015

3	Unavailable	2F: Too steep	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	54	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Creek and buffer							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 113  
Year of Entry: 2015

### Dominant Site Conditions

	2H	3J
Aspen		
Bare/Sparsely Vegetated		
Cedar		
Exposed Rock		
Herbaceous Openland		
Lowland Conifers		52
Lowland Deciduous		
Lowland Mixed Forest		
Lowland Shrub		0
Marsh		
Mixed Upland Deciduous		
Natural Mixed Pines		1
Northern Hardwood		
Red Pine		
Sand, Soil		
Upland Conifers		0
Upland Mixed Forest	11	
Urban		
Water		
White Pine		
Total Forested Acres	11	53
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
2	Unavailable	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 113  
Year of Entry: 2015

3	Unavailable	2F: Too steep	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	54	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Creek and buffer							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 113  
Year of Entry: 2015

### Dominant Site Conditions

	2H	3J
Aspen		
Bare/Sparsely Vegetated		
Cedar		
Exposed Rock		
Herbaceous Openland		
Lowland Conifers		52
Lowland Deciduous		
Lowland Mixed Forest		
Lowland Shrub		0
Marsh		
Mixed Upland Deciduous		
Natural Mixed Pines		1
Northern Hardwood		
Red Pine		
Sand, Soil		
Upland Conifers		0
Upland Mixed Forest	11	
Urban		
Water		
White Pine		
Total Forested Acres	11	53
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
2	Unavailable	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Crystal Falls Mgt. Unit  
Linda Lindberg : Examiner

Compartment: 113  
Year of Entry: 2015

3	Unavailable	2F: Too steep	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	54	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Creek and buffer							



## 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>Another boat landing/north pond</b> <b>Comments</b>	Concentrated Recreation Area	Boat Access Site	<b>Proposed SCA</b>	8
<b>East Pond Landing</b> <b>Comments</b>	Concentrated Recreation Area	Boat Access Site	<b>Proposed SCA</b>	1
<b>North Pond Landing</b> <b>Comments</b>	Concentrated Recreation Area	Boat Access Site	<b>Proposed SCA</b>	19
<b>South Pond landing</b> <b>Comments</b>	Concentrated Recreation Area	Boat Access Site	<b>Proposed SCA</b>	2
<b>Unofficial landing</b> <b>Comments</b>	Concentrated Recreation Area	Boat Access Site	<b>Proposed SCA</b>	1
<b>West Pond Landing</b> <b>Comments</b>	Concentrated Recreation Area	Boat Access Site	<b>Proposed SCA</b>	3



**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.
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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	15.1	87	51-80	
2	4319 - Mixed Upland Forest	Sapling Well	14.2	7	Unspecified	
3	4136 - Aspen, Mixed Conifer	Poletimber Well	42.0	19	51-80	
4	4199 - Other Mixed Upland Deciduous	Poletimber Well	21.5	87	51-80	Birch and aspen should go in this stand
5	4119 - Mixed Northern Hardwoods	Poletimber Well	69.8	87	51-80	
6	6115 - Lowland Ash	Poletimber Well	13.2	38	Unspecified	
7	4136 - Aspen, Mixed Conifer	Sapling Well	22.7	7	Unspecified	
8	4136 - Aspen, Mixed Conifer	Poletimber Well	4.4	90	Unspecified	very steep terrain in the rest of the stand and no access from this compartment
9	4319 - Mixed Upland Forest	Poletimber Well	20.6	90	81-110	
10	4134 - Aspen, Spruce/Fir	Poletimber Well	9.2	32	Unspecified	
11	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	31.6	87	1-50	This stand was cut with a good diverse amount of trees left for consideration of recreation area but good regeneration as a consideration also.
15	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	73.1	90	51-80	
17	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	12.1	90	51-80	Some of this has blown down and some is buffer but it should be cut because it is old and needs regeneration. Rocks are involved, also
18	4319 - Mixed Upland Forest	Sapling Well	49.3	87	51-80	This was cut leaving much diversity and buffers where necessary. This has diversity left for recreation area significance.
19	429 - Mixed Upland Conifers	Poletimber Well	32.5	87	Unspecified	This stand is inaccessible and seems very steep and rocky.
20	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	95.8	90	51-80	
21	4319 - Mixed Upland Forest	Sawtimber Well	38.4	75	51-80	

S  
t  
a  
n  
d

## Crystal Falls Mgt. Unit

## Report 8 – Forested Stands

Compartment: 113  
Year of Entry: 2015

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4311 - Pine, Aspen Mix	Poletimber Well	11.6	87	Unspecified	This is an island in a recreation area so it will remain as is and probably regenerate on its own like the other areas here.
26	429 - Mixed Upland Conifers	Poletimber Well	56.3	90	81-110	This stand is fairly flat by the water and the aspen has been cut and regenerated there. Back in farther it is very steep and rocky and impossible to log. It goes from rock to wetland. The aspen in the rocky part has fallen out.
27	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	17.2	87	Unspecified	
29	42290 - Natural Mixed Pine	Poletimber Well	24.5	90	51-80	This stand was cut and the aspen regenerated and has pine here and there also. It also has unnegotiable hills and can be considered a stream buffer also.
30	4136 - Aspen, Mixed Conifer	Poletimber Well	79.1	32	81-110	This must have been cut before we acquired the land from the mine.
31	429 - Mixed Upland Conifers	Sapling Medium	57.5	22	Unspecified	There is Black Locust and Lombardy Poplars here that must have been planted by the mine.
32	42200 - Natural White Pine	Sawtimber Well	67.6	87	81-110	This stand is very ridged and access is across a beautiful trout stream. It has large rocks with white pine as the predominant species and valleys with aspen, red maple, balm of gilead. I don't know if these areas were cut. I just think the trees regenerated here. There are thimbleberries here.
33	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	75.8	90	51-80	There is a portion of this that looked like it could be cut. Upon entering the area, I stood in black ash and looked up the mountain to the aspen, red maple, red and white pine. There is more farther down with more pine and that is also very steep.
34	429 - Mixed Upland Conifers	Poletimber Well	95.0	93	51-80	THis is such rocky ground, you can see that not much could be cut here. There was a sale and it did not get cut. It is very diverse and beautiful and very rugged. See Topo maps for verification
35	42290 - Natural Mixed Pine	Sawtimber Well	17.6	93	81-110	
36	4136 - Aspen, Mixed Conifer	Sapling Well	9.7	12	Unspecified	rocks have larger trees
38	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	22.7	39	51-80	THere are some rock bluffs with large pine and then lowland with black ash.
39	4133 - Aspen, Mixed Pine	Poletimber Well	22.9	21	Unspecified	There is an ash swale to the north in this stand also
42	4133 - Aspen, Mixed Pine	Sawtimber Well	15.5	75	Unspecified	There is regeneration along the edge and because of the steepness it has long lived species on it so should be left.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	42110 - Planted Red Pine	Poletimber Well	69.2	55	81-110	
45	42290 - Natural Mixed Pine	Poletimber Well	9.6	90	51-80	It seems this was cut by the looks of it but it is very steep and much was not cut.
46	6120 - Lowland Cedar	Poletimber Well	56.3	85	Unspecified	
47	4319 - Mixed Upland Forest	Sapling Well	17.7	17	Unspecified	Very tall rock bluff that I could see from stand13
48	4134 - Aspen, Spruce/Fir	Sapling Well	4.7	17	Unspecified	
49	429 - Mixed Upland Conifers	Poletimber Well	20.2	90	Unspecified	I believe this stand was cut with the adjoining stand in comp 72. There is more pine in this stand but all the stands over on this side of the creek seem to have been harvested at relatively the same time.
50	429 - Mixed Upland Conifers	Poletimber Well	16.3	90	51-80	A lot of the aspen has fallen out of this stand. It is steep and hard to access because of the creek on one side and the swamp on the other
51	429 - Mixed Upland Conifers	Poletimber Well	8.4	90	Unspecified	This was cut with the stand in comp 72 and is a nice mix of pine and aspen
53	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	12.7	90	Unspecified	I did not go here because it is an island surrounded by wet in some form or another. It seems to be a steep land mass, and the past inventory said it is a bluff top.
54	6131 - Hemlock, White Pine, Maple, Birch	Poletimber Medium	6.3	90	Unspecified	This is an island in the south Pond
55	4133 - Aspen, Mixed Pine	Poletimber Well	49.2	34	Unspecified	
56	6120 - Lowland Cedar	Poletimber Well	16.4	90	51-80	
57	4133 - Aspen, Mixed Pine	Sapling Well	68.6	5	Unspecified	
58	6120 - Lowland Cedar	Sawtimber Well	11.7	90	51-80	This is a cedar stand with rocks that have other species on them. There is a lot of blown down timber here.
59	4311 - Pine, Aspen Mix	Sapling Well	15.9	7	Unspecified	
61	42290 - Natural Mixed Pine	Sawtimber Well	41.8	90	51-80	The aspen was cut in this stand so some parts of the stand are aspen saplings with a lot of pine saplings also and some parts are large red and white pine

S  
t  
a  
n  
d

## Crystal Falls Mgt. Unit

## Report 8 – Forested Stands

Compartment: 113  
Year of Entry: 2015

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	429 - Mixed Upland Conifers	Sawtimber Well	76.8	90	51-80	
63	6120 - Lowland Cedar	Sawtimber Well	17.4	93	51-80	This is a beautiful and very wet cedar stand with rocks in it as with everything else around here
64	429 - Mixed Upland Conifers	Poletimber Well	43.2	90	81-110	
65	42200 - Natural White Pine	Poletimber Well	8.1	90	Unspecified	This is a rock island in the South Pond
66	42200 - Natural White Pine	Sawtimber Well	5.6	90	Unspecified	
68	42290 - Natural Mixed Pine	Sawtimber Well	36.2	90	81-110	There was one patch of Juniper here up on a rock bluff.
69	6120 - Lowland Cedar	Poletimber Well	5.2	90	Unspecified	Creek with buffer
70	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	53.2	90	Unspecified	This is the pine creek and the crossing where the beaver haven't dammed it yet.
71	42210 - Natural Red Pine	Sawtimber Well	87.2	76	111-140	There is one little inclusion that was just cut but not worth taking separately. Also, not enough to make a sale out of unless something else needed cutting there.
72	42290 - Natural Mixed Pine	Sawtimber Well	34.8	90	51-80	This is steep to wetland and some aspen and other stuff has fallen down
73	4133 - Aspen, Mixed Pine	Sapling Well	5.5	15	Unspecified	
74	42290 - Natural Mixed Pine	Sawtimber Well	22.2	90	Unspecified	Very steep and rugged
75	42290 - Natural Mixed Pine	Sawtimber Well	42.9	90	81-110	Anything that could be cut here was and the rest is too steep.
78	4133 - Aspen, Mixed Pine	Poletimber Well	13.2	47	Unspecified	
79	4136 - Aspen, Mixed Conifer	Sapling Well	32.5	12	Unspecified	
80	4133 - Aspen, Mixed Pine	Sapling Well	31.3	9	Unspecified	



Stand	Cover Type	Acres	Managed Site	General Comments:
12	500 - Water	188.7	No	
13	500 - Water	79.8	No	
14	122 - Road/Parking Lot	6.5	No	
16	622 - Lowland Shrub	46.0	No	
23	622 - Lowland Shrub	19.5	No	
24	622 - Lowland Shrub	43.0	No	
25	500 - Water	190.0	No	
28	622 - Lowland Shrub	101.9	No	
37	790 - Other Bare/Sparsely Vegetate	130.6	No	
40	720 - Exposed Rock	3.0	No	
41	6229 - Mixed lowland shrub	113.1	No	
44	622 - Lowland Shrub	159.0	No	
52	623 - Emergent Wetland	16.5	No	
60	500 - Water	339.3	No	
67	710 - Sand, Soil	10.0	No	
76	310 - Herbaceous Openland	1.9	No	
77	310 - Herbaceous Openland	3.6	No	