



**Crystal Falls Forest Management Unit
Compartment Review Presentation
Compartment # 20 Entry Year: 2014
Compartment Acreage: 2273 (GIS calculated) County: Dickinson**

Revision Date: 06/19/12

Stand Examiner: Andy Church

Legal Description: T44N R27W Sections 7, 8, 17-21, 29 T44N R28W Sections 12,13

RMU (if applicable):

Management Goals: Optimize sustainable timber production while enhancing and protecting wildlife habitat. Protect the riparian areas and transition zones during management activity.

Soil and Topography: Soils are generally well drained fine sandy loams with areas of excessively drained fine sands. The topography is mostly rolling hills.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Blocks of private ownership are scattered within the compartment. Active forest management has occurred and will continue within and surrounding the compartment. Snowmobiling, hunting, camping and fishing are the main recreational use patterns.

Unique, Natural Features: None identified

Archeological, Historical, and Cultural Features: None identified

Special Management Designations or Considerations: None identified

Watershed and Fisheries Considerations: Protect water quality for all bodies of water, particularly, West Branch of Escanaba River, Little Brook Creek, and Cady Creek. Promote long lived conifer species along water bodies and use adequate buffer protection.

Wildlife Habitat Considerations: This compartment encompasses both the Cady Creek Deer Wintering Complex and the Swartz Creek Deer Wintering Complex. Conifer cover, intact transition zones, and managed forest uplands provide excellent winter habitat for deer. Aspen management in this compartment should provide maximum age class distribution to enable grouse to meet all their life requisites. Loss of conifer cover, due to a serious spruce budworm infestation, is concerning, making cedar, hemlock and pine covertypes that much more essential for wintering animals.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of medium-textured glacial till and peat and muck. There is insufficient data to determine the glacial drift

thickness. The Cambrian Munising Formation and Precambrian granite/gneiss subcrop below the glacial drift. There is not an economic use for these rocks, although they may have dimension stone potential. A rock (type?) quarry is located eight miles to the northwest. Old iron mines are located approximately fifteen miles to the southwest, east and northeast. A gravel pit is located 2.5 miles to the north and there appears to be good gravel potential. Part of this area was previously leased for metallic exploration and potential may still exist. There is no economic oil and gas production in the UP.

Vehicle Access: Excellent road system throughout entire compartment. Access is along County Roads 581 and Tower Rd. Many State forest poor dirt roads are also present.

Survey Needs: Corners are needed adjacent to private lands.

Recreational Facilities and Opportunities: Snowmobile Trail #32 runs through compartment 20. In addition, the closed Bear Hunter's Annex campground is present in the Southern portion.

Fire Protection: Felch Protection Area. Access for fire suppression in the more fire prone forest types is very good.

Additional Compartment Information:

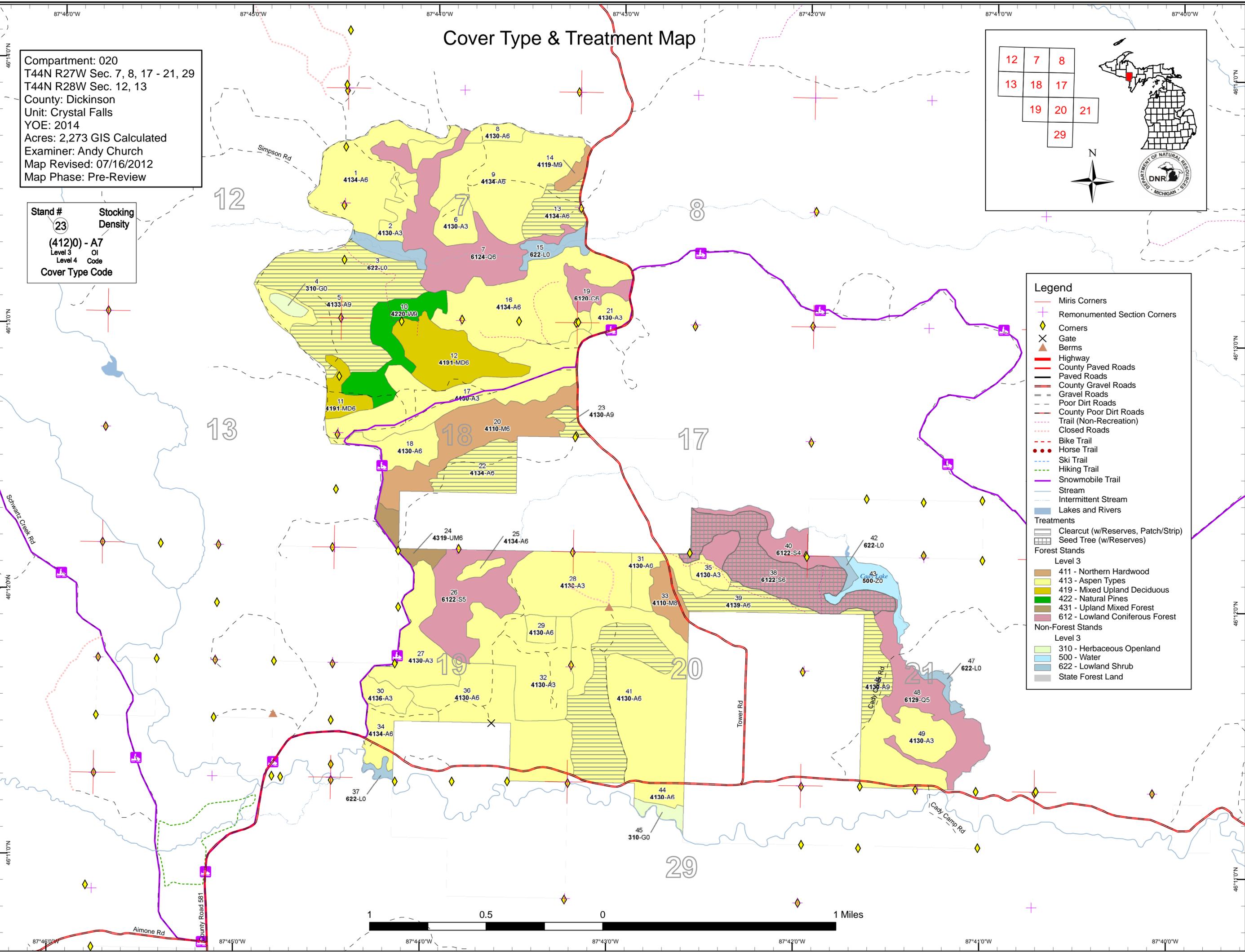
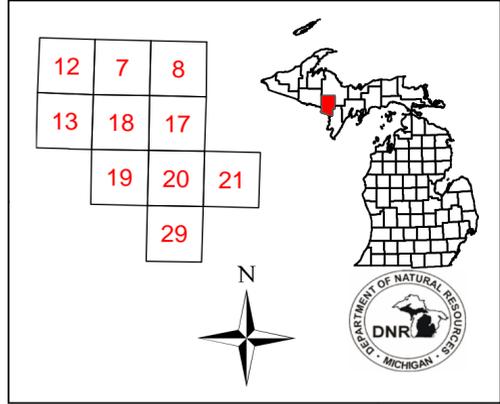
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Suggested potential old growth**

Cover Type & Treatment Map

Compartment: 020
 T44N R27W Sec. 7, 8, 17 - 21, 29
 T44N R28W Sec. 12, 13
 County: Dickinson
 Unit: Crystal Falls
 YOY: 2014
 Acres: 2,273 GIS Calculated
 Examiner: Andy Church
 Map Revised: 07/16/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- Remonumented Section Corners
- Corners
- Gate
- Berms
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Bike Trail
- Horse Trail
- Ski Trail
- Hiking Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)

Forest Stands

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

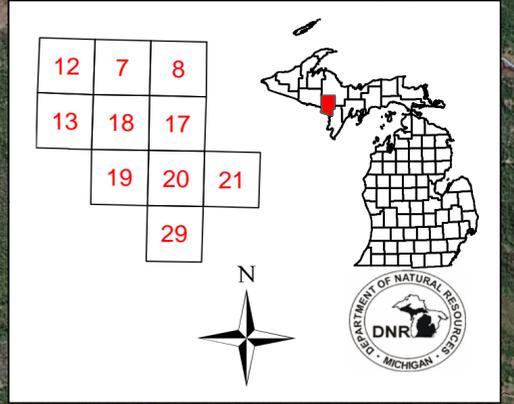
Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- State Forest Land

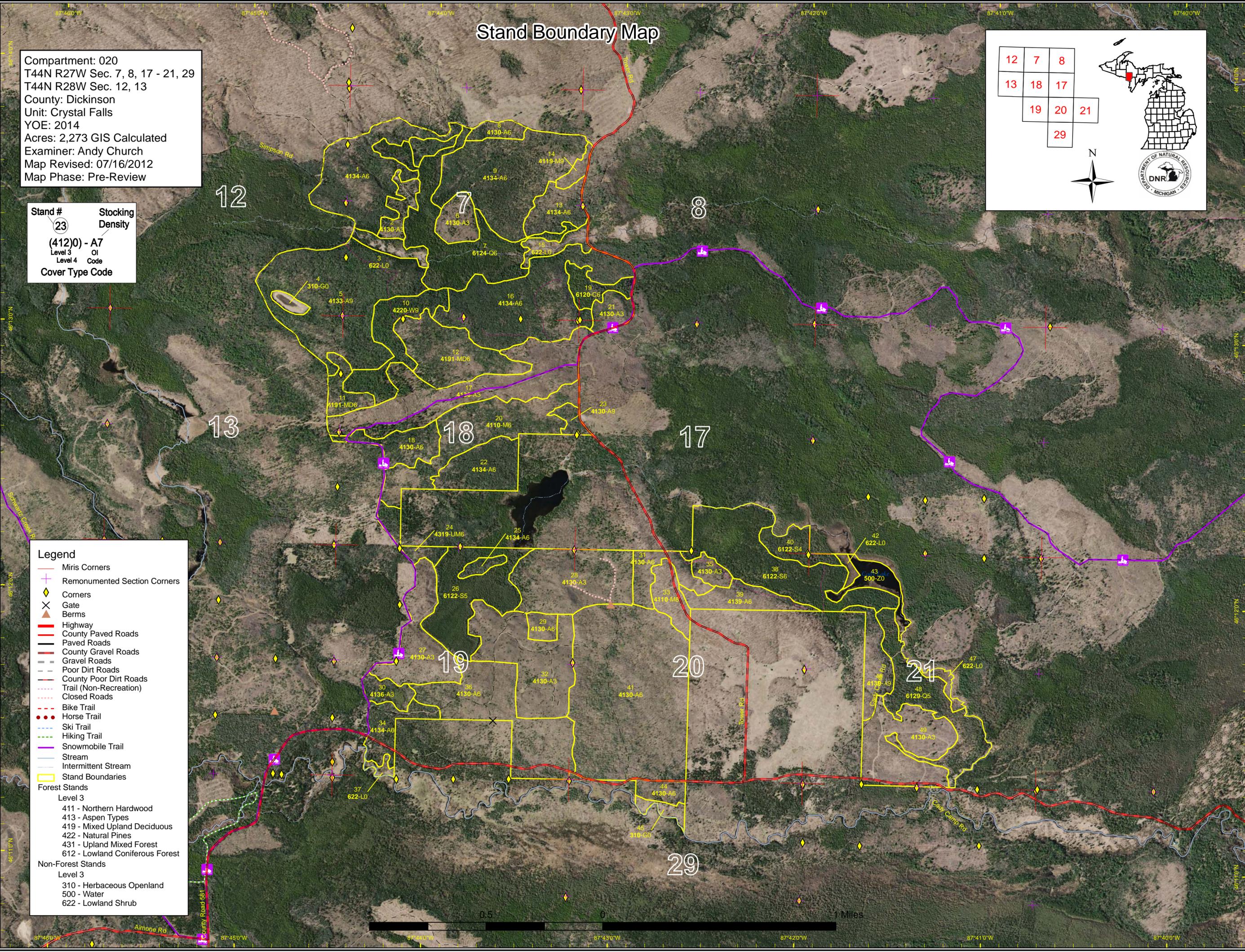
Stand Boundary Map

Compartment: 020
 T44N R27W Sec. 7, 8, 17 - 21, 29
 T44N R28W Sec. 12, 13
 County: Dickinson
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 YOE: 2014
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Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

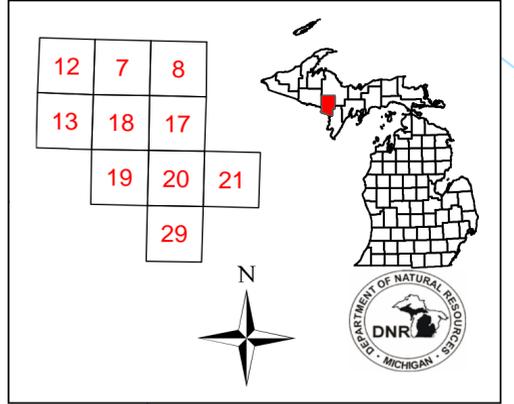
- Legend**
- Miris Corners
 - ⊕ Remonumented Section Corners
 - ◇ Corners
 - ✕ Gate
 - ▲ Berms
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Bike Trail
 - Horse Trail
 - Ski Trail
 - Hiking Trail
 - Snowmobile Trail
 - Stream
 - Intermittent Stream
 - Stand Boundaries
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub



Dedicated & Proposed Special Conservation Area Map

Compartment: 020
 T44N R27W Sec. 7, 8, 17 - 21, 29
 T44N R28W Sec. 12, 13
 County: Dickinson
 Unit: Crystal Falls
 YOE: 2014
 Acres: 2,273 GIS Calculated
 Examiner: Andy Church
 Map Revised: 07/16/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Stand Boundaries
 - Dedicated Special Conservation Areas
 - ▲ Campgrounds
 - ⚓ Boat Access Sites
 - Cold Water Streams
 - Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - Non-Forest Stands**
 - Level 3
 - 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub

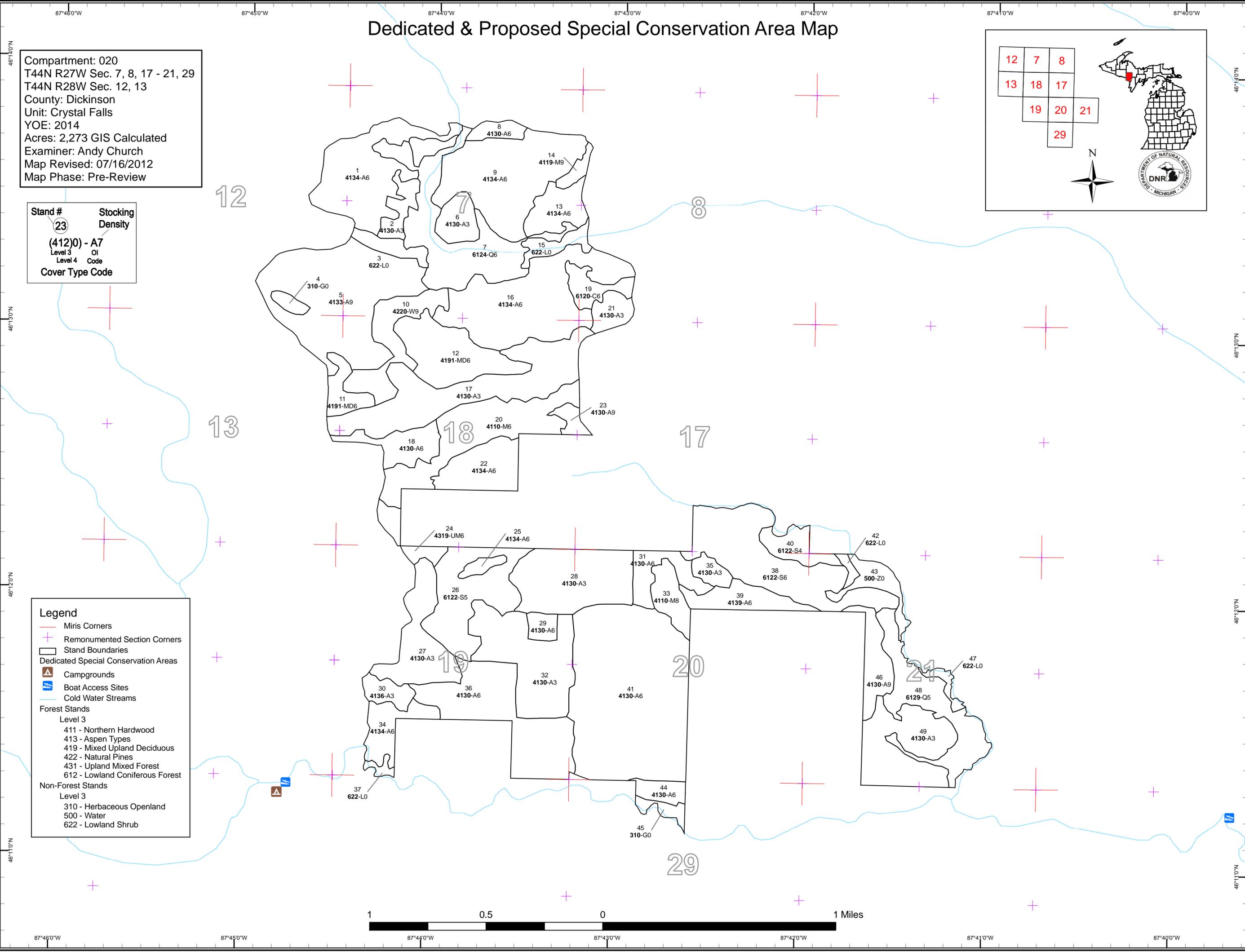
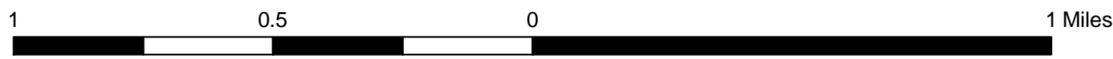
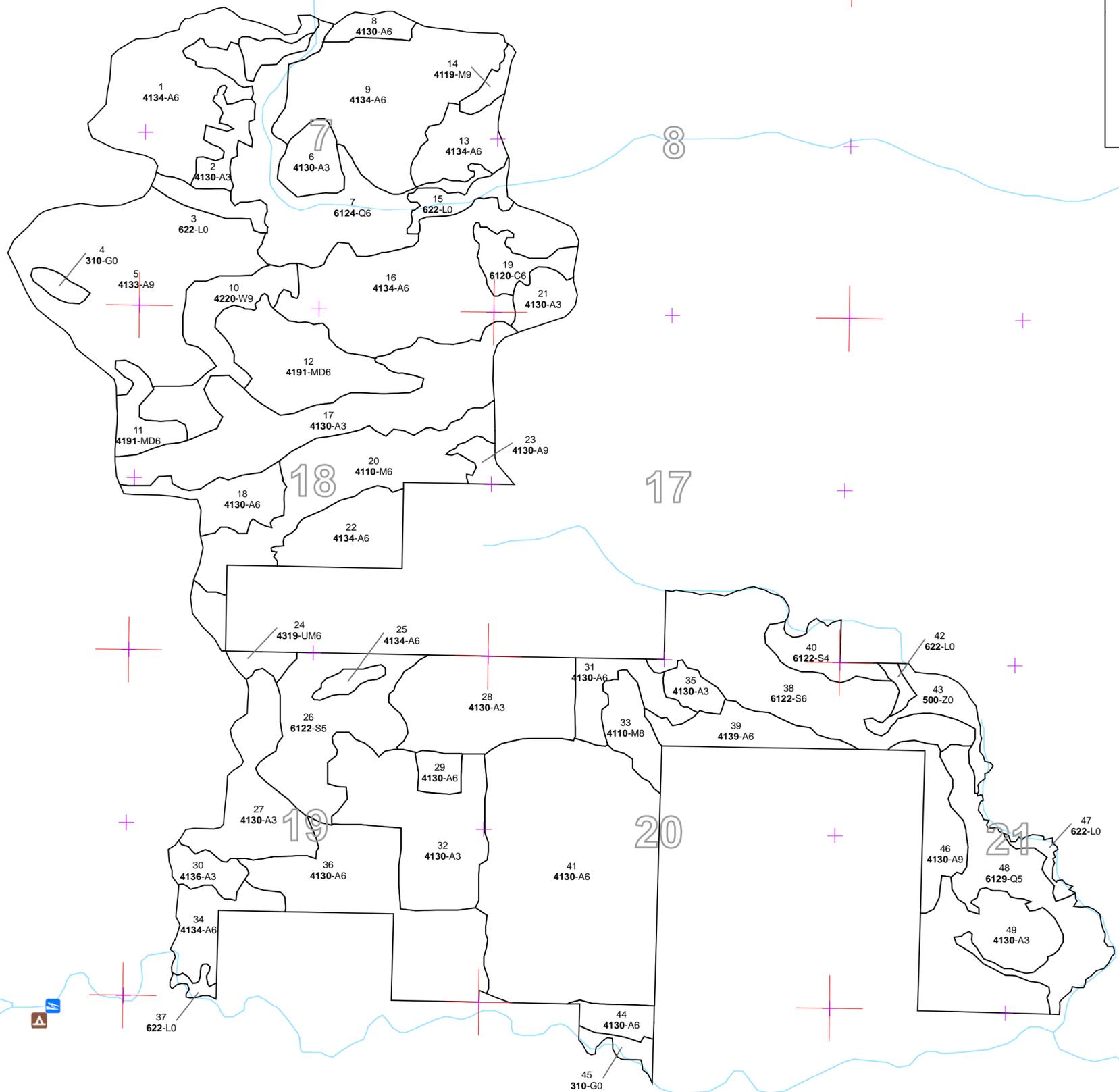


Table 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	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 +		Uneven Age
Aspen	131	248	112	267	285	260	77	27	154	0	0	0	0	0	1561
Cedar	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18
Herbaceous Openland	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Lowland Conifers	0	0	0	0	0	0	0	0	0	164	0	0	0	0	164
Lowland Shrub	41	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Lowland Spruce/Fir	0	0	0	0	20	0	0	0	0	181	0	0	0	0	201
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	62	18	0	0	0	0	80
Northern Hardwood	0	0	0	0	0	0	0	0	107	7	0	0	0	0	114
Upland Mixed Forest	0	0	0	0	15	0	0	0	0	0	0	0	0	0	15
Water	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
White Pine	0	0	0	0	0	0	0	0	0	0	0	46	0	0	46
Total	205	248	112	267	320	260	77	27	323	387	0	46	0	0	2273



Table 2 – Proposed Treatment Summaries

Crystal Falls Mgt. Unit
Year of Entry 2014

Compartment 020
Total Compartment Acres: 2273

Acres by Treatment Type

Commercial Harvest - 455	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen	363	0	0	0	0	0	363
Lowland Spruce/Fir	0	0	92	0	0	0	92
Total	363	0	92	0	0	0	455



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	12020005-Cut	142.5	4133 - Aspen, Mixed Pine	High Density Log	83		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final harvest using 2" spec. Leave all: Cedar, Hemlock, and Oak if found. Also leave Pine over 20" DBH. Buffer Little Brook creek 100 feet.										
<u>Specs:</u> RETENTION: Pine over 20" DBH, Cedar, Hemlock, Oak, and Buffer ACCEPTABLE ALTERNATIVE REGEN: Pine/Fir										
<u>Other</u> Varying ages and densities of Aspen. Likely a result of high grading last time. Aspen falling apart and blowing over. No need to buffer dry lake										
<u>Comments:</u> located on West side of stand as this is not a wetland. Trace amounts of Jack Pine present. Not a designated '78 deeryard.										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2013										
13	12020013-Cut	28.3	4134 - Aspen, Spruce/Fir	High Density Pole	63		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final harvest using 2" spec. Leave: Cedar, Pine, Hemlock, Oak, and submerchantable conifer if found. Buffer creek 100 feet.										
<u>Specs:</u> RETENTION: Cedar, Pine, Hemlock, Oak, and submerchantable conifer, and Buffer. ACCEPTABLE ALTERNATIVE REGEN: Maple/Fir										
<u>Other</u> South side of stand is more dense with smaller diameter Aspen. Buffer Big Brook 100 feet. Diameters and densities vary greatly. Leave										
<u>Comments:</u> submerchantable conifer as under-represented species. Stand is not '78 designated deeryard.										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2013										
22	12020022-Cut	41.0	4134 - Aspen, Spruce/Fir	High Density Pole	64	111-140	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final Harvest using 2" spec. Leave Cedar, Oak, Hemlock and submerchantable conifer if found. Avoid wet areas.										
<u>Specs:</u> RETENTION: Cedar, Oak, Hemlock, Wetter areas ACCEPTABLE ALTERNATIVE REGEN: Maple/Fir										
<u>Other</u> Aspen is mature. Small tag pockets in South. No obvious evidence of Budworm. Conifers well represented. Check for corners, may need										
<u>Comments:</u> survey. Not designated '78 deeryard.										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2013										
23	12020023-Cut	8.0	4130 - Aspen	High Density Log	65		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final Harvest using 2" spec. Leave all Pine, Cedar, Hemlock, Oak and submerchantable conifer if found.										
<u>Specs:</u> RETENTION: Pine, Cedar, Hemlock, Oak and submerchantable conifer if found. If not found, no retention to promote the high quality Aspen. ACCEPTABLE ALTERNATIVE REGEN: Maple/Fir										
<u>Other</u> High quality Aspen stand. Check for survey corners to South. Not a designated '78 deeryard.										
<u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2013										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	12020038-Cut	91.8	6122 - Black Spruce	High Density Pole	93		Harvest	Seed Tree with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Seed Tree with reserves. Leave all Pine, Cedar, Hemlock, and Oak if found. Also, leave some clumps of trees to act as seed source. Do not include heavy Cedar area reflected in treatment boundary. Operations limited to frozen conditions only. 100 foot buffer near Cady Creek. Actual harvest acres may vary. Roundwood operations only. RETENTION: Pine, Hemlock, Oak, Buffers, and trees left for seed. ACCEPTABLE ALT REGEN: Tamarack/Fir</p> <p><u>Other Comments:</u> Black Spruce stand with scattered Tamarack and Cedar. More Cedar/Tamarack to West. A couple large White Pines near Cady Lake. May need survey. Not a designated '78 deeryard. Cady creek is not a designated trout stream. Expect slower regen to West due to higher water table.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
39	12020039-Cut	28.8	4139 - Aspen, Mixed Deciduous	High Density Pole	59		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Final Harvest using 4" spec. Winter cut only, no whole tree skidding to protect advanced regeneration. Leave all: Cedar, Hemlock, and Oak if found. RETENTION: Cedar, Hemlock, Oak, and all other trees less than 4" DBH ACCEPTABLE ALTERNATIVE REGEN: Maple/Fir</p> <p><u>Other Comments:</u> Western portion of stand has great Sugar Maple sapling recruitment. Saplings are not stunted... yet. Remove overstory to release this portion, and regenerate rest of stand to Aspen. Corners may be needed. Not a designated '78 deeryard.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
41	12020041-Cut	87.1	4130 - Aspen	High Density Pole	54		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Final harvest using 2" spec. Leave Oak, Pine, Cedar, and Hemlock if found. Also, leave all submerchantable conifers. Reinforce berm on road leading to Stand #28. RETENTION: Oak, Pine, Cedar, Hemlock, and submerchantable conifers. ACCEPTABLE ALT REGEN: Maple/Fir</p> <p><u>Other Comments:</u> Pockets of Big toothed Aspen mixed throughout stand. Likely high graded last time harvested. Aspen is showing mortality and conks. Retain submerchantable conifer as under represented species. Not a designated '78 deeryard.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
46	12020046-Cut	27.5	4130 - Aspen	High Density Log	73		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Final Harvest using 2" spec. Leave Pine, Cedar, Hemlock, Oak if found. Retain small pocket of pure hardwoods for retention. RETENTION: Patch of Hardwood, Pine, Cedar, Hemlock, Oak ACCEPTABLE ALTERNATIVE REGEN: Maple/Fir</p> <p><u>Other Comments:</u> Aspen/Maple mixed stand. Convert to Aspen. Low quality hardwoods are being suppressed by large Aspen. May need corners. Not a designated '78 deeryard.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

**Total Treatment
Acreage Proposed: 455.0**

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Error

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12091001-Cut	31.4	4110 - Sugar Maple Association	High Density Log	87		Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal - Incomplete

Prescription: Mark trees to 80 BA leaving best tree in place according to the Compleat Marker but focusing on White Ash to avoid Emerald Ash borer devastation. Create canopy gaps for regeneration

Other Comments:

Next Steps: Regen check according to certification

Proposed Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 31.4**



Stand	Crystal Falls Mgt. Unit			5 – Forested Stands		Compartment: 020 Year of Entry: 2014	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	4134 - Aspen, Spruce/Fir	High Density Pole	87.6	49		Tag Alder drainages mixed throughout. Some Aspen pockets older than the majority of stand. Most likely result of high grading.	
2	4130 - Aspen	High Density Sapling	15.9	11			
5	4133 - Aspen, Mixed Pine	High Density Log	154.1	83		Varying ages and densities of Aspen. Likely a result of high grading last time. Aspen falling apart and blowing over. No need to buffer dry lake located on West side of stand as this is not a wetland. Trace amounts of Jack Pine present. Not a designated '78 deeryard.	
6	4130 - Aspen	High Density Sapling	19.8	11			
7	6124 - Lowland Spruce- Fir	High Density Pole	96.8	93	1-50	Low stocking. Small pockets of cedar mixed throughout. Much windthrow. Tribs/creeks everywhere.	
8	4130 - Aspen	High Density Pole	10.7	49		Some Oak seedlings and saplings in understory. More mixed hardwood on wetter sites.	
9	4134 - Aspen, Spruce/Fir	High Density Pole	121.1	36		Some mature pockets of timber, but most of stand is just starting to become mature. Scattered supercanopy Pines mixed throughout.	
10	42200 - Natural White Pine	High Density Log	45.9	110	111-140	Good quality pine stand. Rolling terrain. Diameters too large to benefit from thinning, needs regen harvest. Scarify to obtain bare mineral soil creating a receptive seedbed for Pine. Not a designated '78 deeryard.	
11	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	17.8	93	81-110	Poor quality hardwood stand. Heavy to RM, Asp, and Birch. This stand was thinned last YOE.	
12	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	62.3	87	81-110	Low quality. Lower stocking to North. BA too low to thin, have to wait to remove defect.	
13	4134 - Aspen, Spruce/Fir	High Density Pole	28.3	63		South side of stand is more dense with smaller diameter Aspen. Buffer Big Brook 100 feet. Diameters and densities vary greatly. Stand is not '78 designated deeryard.	
14	4119 - Mixed Northern Hardwoods	High Density Log	7.0	97	81-110	Poor quality hardwood stand. Holes, seams, forks. Some Ironwood and Pine in understory. BA too low to thin. Needs regen harvest, but too risky. Consult with TMS for viable hardwood regen options.	
16	4134 - Aspen, Spruce/Fir	High Density Pole	125.3	40		Pockets of HDWD mixed throughout. Less than 5 acres. Most of stand is not quite ready yet. Small mature pockets of Aspen are present. Most likely result from high grading. Some Oak seedlings coming in along road.	
17	4130 - Aspen	High Density Sapling	113.7	10		A3 stand resulting from tornado harvest. Scattered overstory Pines mostly in West.	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4130 - Aspen	High Density Pole	27.8	47		Logger's choice last time harvested. Varying diameters and ages. some areas have great HM sapling regen. Most WP located in North portion of stand. Monitor West side of Preinventory stand #39 for HM regen released next rotation. That stand had similar HM sapling in understory of Aspen.
19	6120 - Lowland Cedar	High Density Pole	17.6	97		Wait to harvest when neighboring Aspen is mature.
20	4110 - Sugar Maple Association	High Density Pole	85.2	89	81-110	Poor quality HDWD stand. BA too low to thin, however there are small pockets of higher BA.
21	4130 - Aspen	High Density Sapling	15.5	24		Wetter Tamarack spot in North
22	4134 - Aspen, Spruce/Fir	High Density Pole	41.0	64	111-140	Aspen is mature. Small tag pockets in South. No obvious evidence of Budworm. Check for corners, may need survey.
23	4130 - Aspen	High Density Log	8.0	65		High quality Aspen stand. Check for survey corners to South.
24	4319 - Mixed Upland Forest	High Density Pole	15.0	41		More conifer component to North.
25	4134 - Aspen, Spruce/Fir	High Density Pole	6.4	45		High ground island surrounded by Q type. Aspen is very healthy.
26	6122 - Black Spruce	Medium Density Pole	73.8	93		Fir/Aspen around edges. Black Spruce old, but not merchantable. Scattered mature Tamarack mixed throughout. More Cedar to North. Low volumes.
27	4130 - Aspen	High Density Sapling	55.7	5		Healthy, thick A3
28	4130 - Aspen	High Density Sapling	82.4	21		Some Pine, Spruce, and Balsam scattered throughout. Berm not effective on South side of stand.
29	4130 - Aspen	High Density Pole	9.4	36		Conifer regen low.
30	4136 - Aspen, Mixed Conifer	High Density Sapling	14.0	22		Tamarack pocket to East.
31	4130 - Aspen	High Density Pole	25.0	36		Great HM regen in spots. Aspen is starting to become merchantable.
32	4130 - Aspen	High Density Sapling	87.9	17		Some overstory Fir and Spruce
33	4110 - Sugar Maple Association	Medium Density Log	21.4	89	51-80	Thinned last YOY. Trace amount of Birch

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Crystal Falls Mgt. Unit

5 – Forested Stands

Compartment: 020
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	4134 - Aspen, Spruce/Fir	High Density Pole	27.0	40		Small Cedar includin in SW portion. Southern edge of stand is closed Bear Hunter's campground.
35	4130 - Aspen	High Density Sapling	10.5	11		
36	4130 - Aspen	High Density Pole	99.4	36		Conifer regen low.
38	6122 - Black Spruce	High Density Pole	107.1	93		Black Spruce stand with scattered Tamarack and Cedar. More Cedar/Tamarack to West. A couple large White Pines near Cady Lake. May need survey. Not '78 designated deeryard. Cady creek is not a designated trout stream.
39	4139 - Aspen, Mixed Deciduous	High Density Pole	28.8	59		Western portion of stand has great Sugar Maple sapling recruitment. Saplings are not stunted... yet. Remove overstory to release this portion, and regenerate rest of stand to Aspen. Corners may be needed. Not a designated '78 deeryard.
40	6122 - Black Spruce	Low Density Pole	20.4	45		Low stocking, small diameters
41	4130 - Aspen	High Density Pole	231.0	54		Pockets of Big toothed Aspen mixed throughout stand. Likely high graded last time harvested. Aspen is showing mortality and conks.
44	4130 - Aspen	High Density Pole	12.4	31		Scattered Fir/Spruce. Vernal Pond near Co Rd. 581 too small to type out. Stand is just starting to become pole-sized.
46	4130 - Aspen	High Density Log	27.5	73		Aspen/Maple mixed stand. Convert to Aspen. Low quality hardwoods are being suppressed by large Aspen. May need corners.
48	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	67.3	97		Scattered White Pines mixed with swamp conifer. Stand is low volume.
49	4130 - Aspen	High Density Sapling	74.8	5		Scattered WP in overstory



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	6220 - Alder/willow	13.4	No	Unspecified	
4	3102 - Grass	6.0	No	Unspecified	
15	6220 - Alder/willow	14.0	No	Unspecified	
37	6220 - Alder/willow	3.8	No	Unspecified	
42	6229 - Mixed lowland shrub	3.8	No	Unspecified	
43	50 - Water	20.1	No	Unspecified	Cady Lake
45	3102 - Grass	7.7	No	Unspecified	
47	6220 - Alder/willow	5.8	N/A	Unspecified	



7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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.