



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 9

Entry Year 2016

Acreage: 3,268

County Dickinson

Management Area: Ralph Ground Moraine

Revision Date: 07/25/2014

Stand Examiner: Scott Sebero

Legal Description:

T44N-R29W Sections 1, 2 & 11 - 15

Identified Planning Goals:

Our management goals in this compartment are to develop age class distribution in aspen types, maintain health of conifer types and increase acreage where possible, and to develop the quality while maintaining diversity in hardwood types.

Soil and topography:

A mix of Zimmerman fine sand, 18 to 35 percent slopes, rolling, excessively well drained soil on foot slopes, side slopes, and ridges and Pemene fine sandy loam, 6 to 18 percent slopes, gently rolling, well drained soil is on foot slopes, side slopes, and ridges in the uplands.

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

Ownership patterns in this compartment consist mostly of State lands and WE Energies with some small private parcels and hunting camps. Lands in and around this compartment are used mainly for hunting and managed for forest products.

Unique Natural Features:

Schwartz Creek, 60 Day Creek, and McGregor Creek

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

This compartment contains portions of the historic Floodwood Deery Wintering Complex. Mesic and lowland conifers provide essential cover for wintering deer and should be maintained and promoted wherever possible. Continuing to promote age-class diversity in the aspen type is favorable for bear, deer, grouse, woodcock and other game and non-game species. Eagles, osprey, red-shouldered and goshawk are likely inhabitants of this compartment. Wolf activity is concentrated in and around this compartment.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured till. There is insufficient data to determine the glacial drift thickness. Archean granite/gneiss subcrops below the glacial drift. There is not a current economic use for these rocks, although they have building stone potential. Republic Iron mine is located approximately eight miles to the north. Gravel pits are not indicated in this area, but there appears to be good gravel potential. Most of this area was previously leased for metallic exploration and parts of Sections 1 - 3 are currently leased. There is no economic oil and gas production in the UP.

Vehicle Access:

Access is from Floodwood, O'Neil Lake Road, and Big Wheel Road and connecting two tracks.

Survey Needs:

Corners are needed in Sections 2, 11, & 15.

Recreational Facilities and Opportunities:

Snowmobile trail 32 runs down Big Wheel Road, which is through this compartment.

Fire Protection:

Additional Compartment Information:

Big Wheel Road is in very poor condition and needs reshaping, cross drainage culverts and gravel.

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

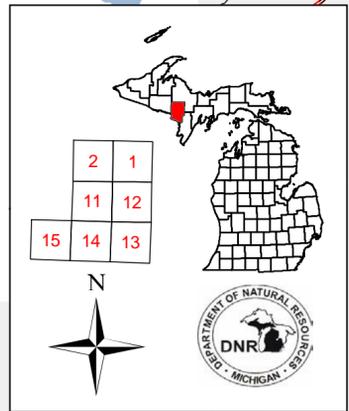
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

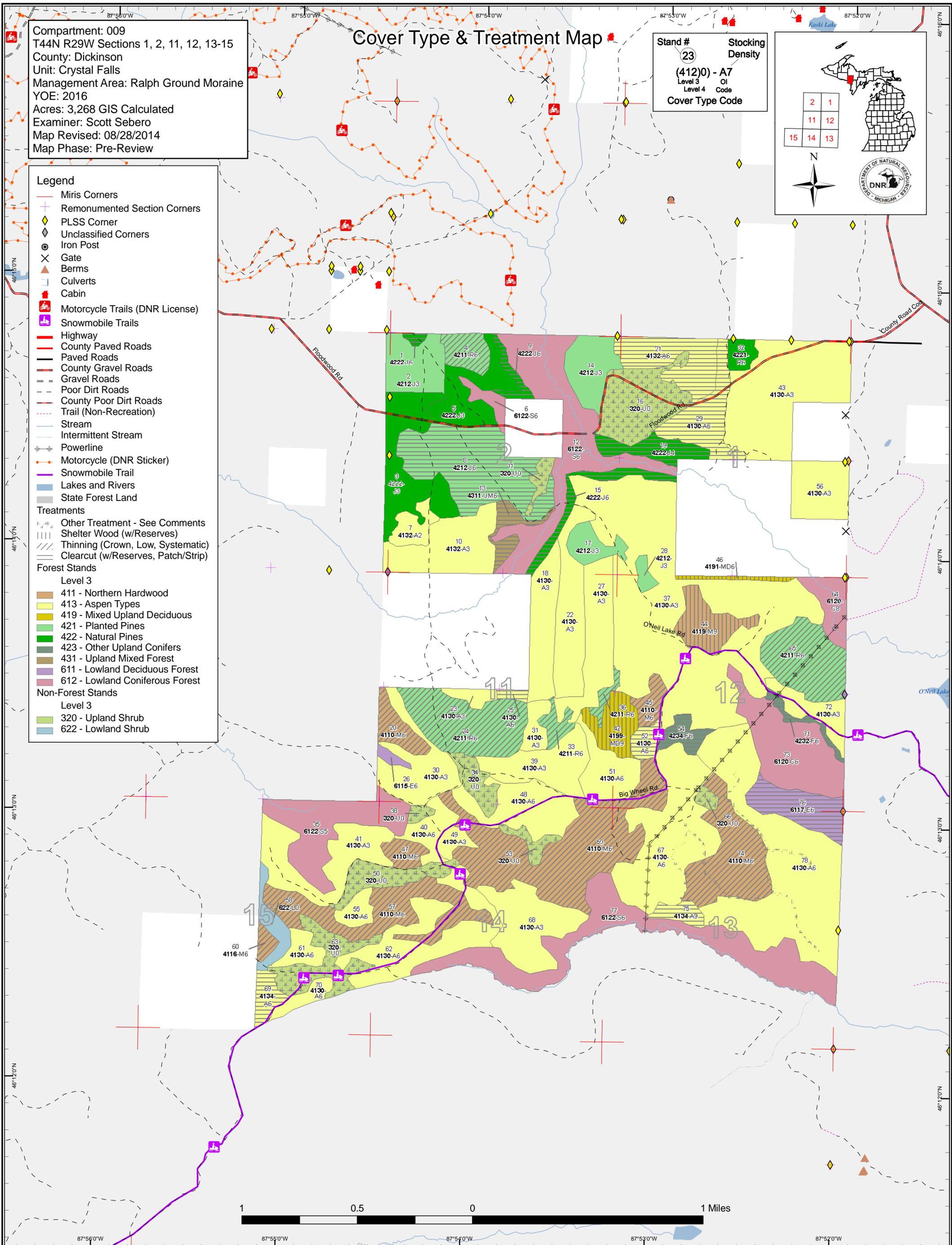
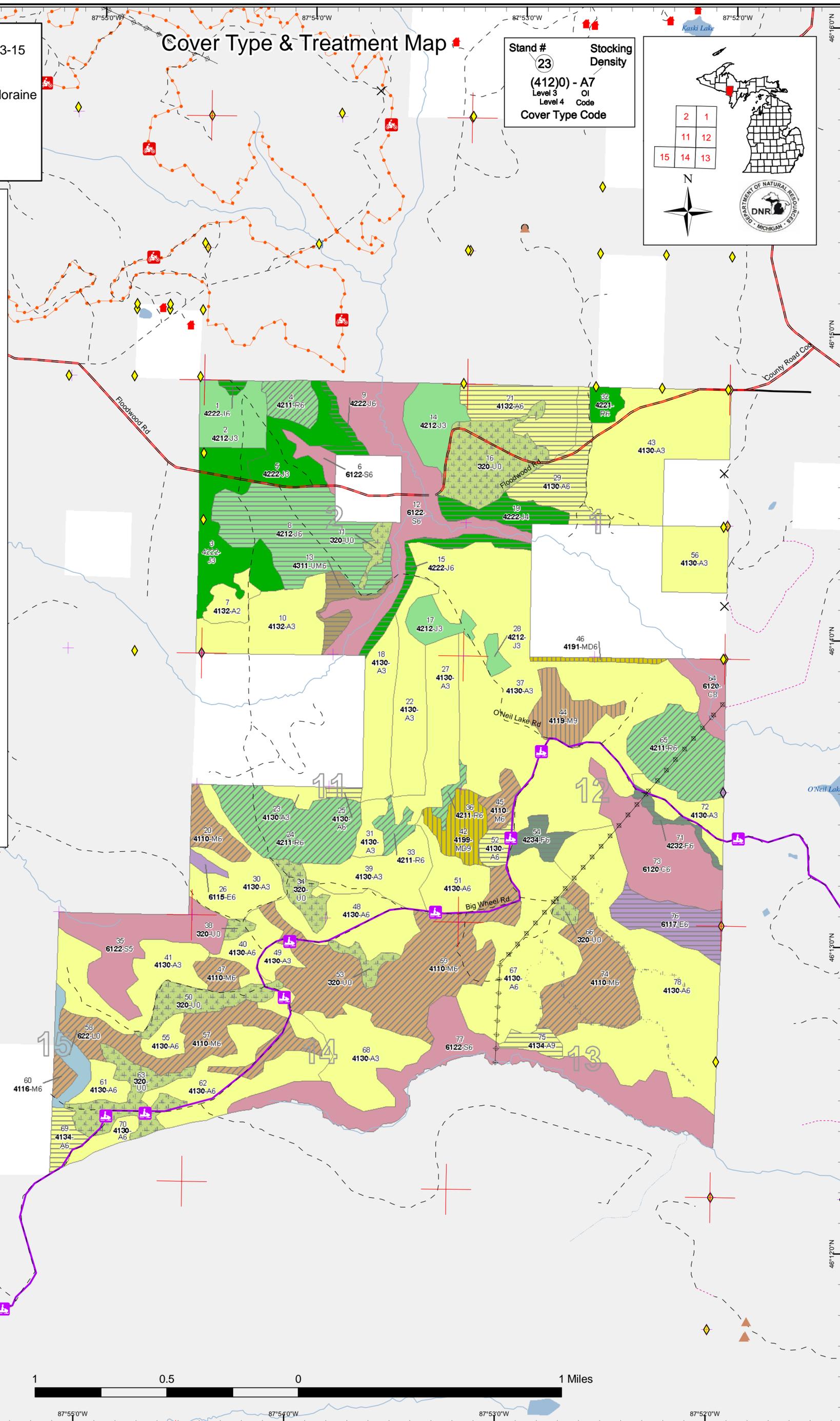
Compartment: 009
 T44N R29W Sections 1, 2, 11, 12, 13-15
 County: Dickinson
 Unit: Crystal Falls
 Management Area: Ralph Ground Moraine
 YOE: 2016
 Acres: 3,268 GIS Calculated
 Examiner: Scott Sebero
 Map Revised: 08/28/2014
 Map Phase: Pre-Review

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



Legend

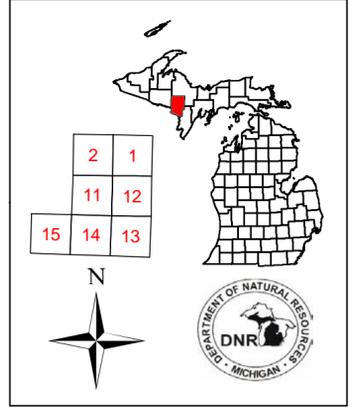
- Miris Corners
 - Remonumented Section Corners
 - PLSS Corner
 - Unclassified Corners
 - Iron Post
 - Gate
 - Berms
 - Culverts
 - Cabin
 - Motorcycle Trails (DNR License)
 - Snowmobile Trails
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Stream
 - Intermittent Stream
 - Powerline
 - Motorcycle (DNR Sticker)
 - Snowmobile Trail
 - Lakes and Rivers
 - State Forest Land
- Treatments**
- Other Treatment - See Comments
 - Shelter Wood (w/Reserves)
 - Thinning (Crown, Low, Systematic)
 - Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 320 - Upland Shrub
 - 622 - Lowland Shrub



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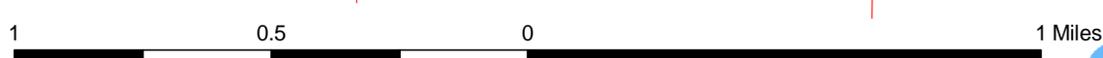
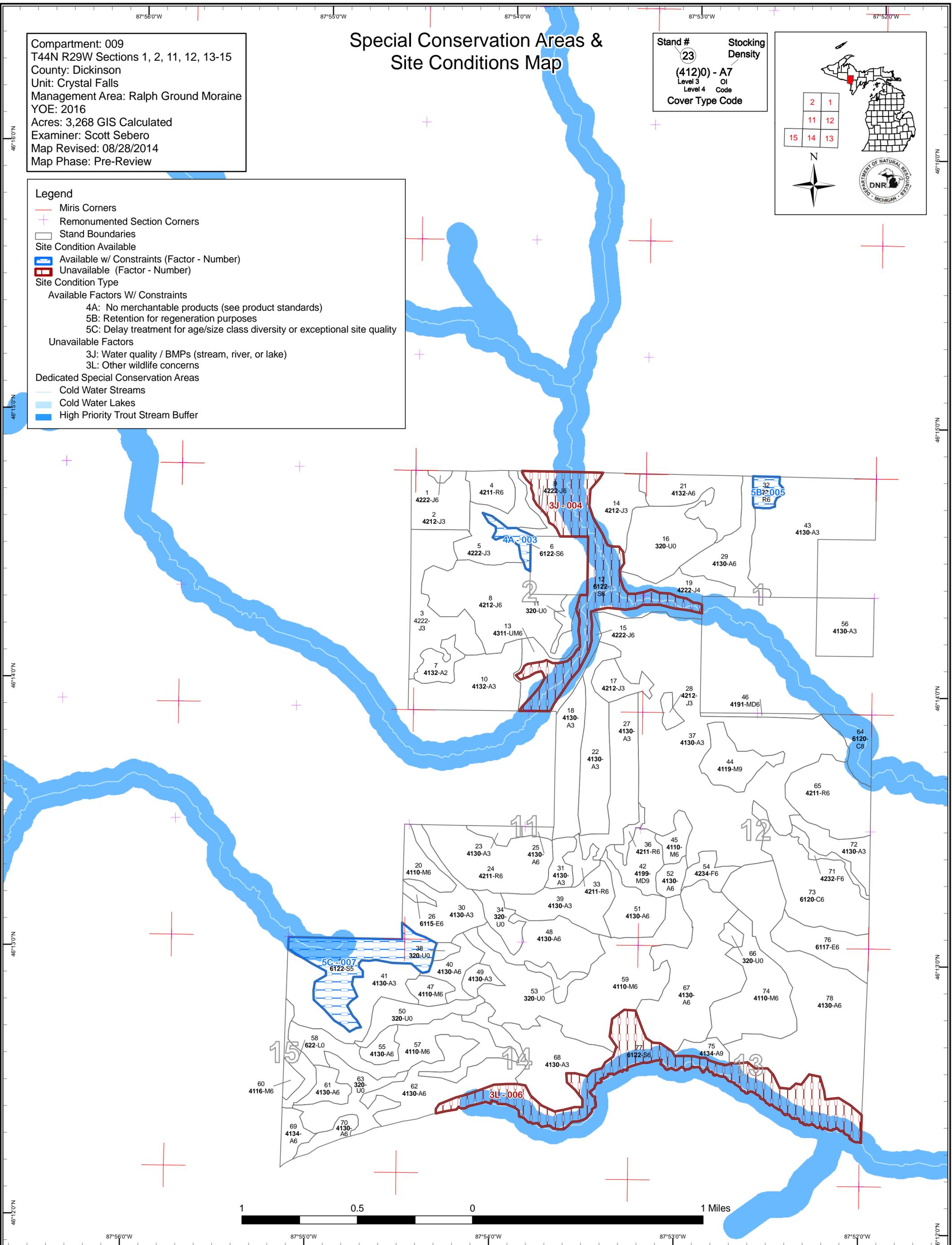
Special Conservation Areas & Site Conditions Map

Stand # **23**
(412)0 - A7
 Level 3 OI Code
 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
- Available Factors W/ Constraints
 - 4A: No merchantable products (see product standards)
 - 5B: Retention for regeneration purposes
 - 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors
 - 3J: Water quality / BMPs (stream, river, or lake)
 - 3L: Other wildlife concerns
- Dedicated Special Conservation Areas
 - Cold Water Streams
 - Cold Water Lakes
 - High Priority Trout Stream Buffer



87°56'0"W 87°55'0"W 87°54'0"W 87°53'0"W 87°52'0"W
 46°15'0"N 46°14'0"N 46°13'0"N 46°12'0"N

Report 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	247	424	311	297	221	0	49	0	82	0	0	0	0	0	1630
Cedar	0	0	0	0	0	0	0	0	101	0	0	0	0	0	101
Jack Pine	0	138	62	0	0	0	130	0	29	0	0	0	0	0	360
Lowland Deciduous	0	0	0	0	0	0	0	0	43	0	0	0	0	0	43
Lowland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	321	0	0	0	0	0	321
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	33	0	0	0	0	0	33
Northern Hardwood	0	0	0	0	0	0	0	0	377	0	0	0	0	0	377
Red Pine	0	0	0	0	0	89	80	0	10	0	0	0	0	0	178
Upland Mixed Forest	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15
Upland Shrub	173	0	0	0	0	0	0	0	0	0	0	0	0	0	173
Upland Spruce/Fir	0	0	0	0	0	0	0	0	22	0	0	0	0	0	22
Total	435	562	373	297	221	89	259	0	1032	0	0	0	0	0	3268



Report 2 – Proposed Treatment Summaries

Crystal Falls Mgt. Unit
Year of Entry 2016

Compartment 009
Total Compartment Acres: 3,268

Acres by Treatment Type

Commercial Harvest - 944 Tree Planting - 72 Other - 0
 Habitat Cut - 0 Opening Maintenance - 19

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 Types	131	0	0	0	0	0	131
Lowland Deciduous Forest	39	0	0	0	0	0	39
Mixed Upland Deciduous	0	0	0	33	0	0	33
Natural Pines	53	0	0	0	0	0	53
Northern Hardwood	0	0	0	32	346	0	377
Other Upland Conifers	22	0	0	0	0	0	22
Planted Pines	107	0	0	0	169	0	275
Upland Mixed Forest	15	0	0	0	0	0	15
Total	366	0	0	64	514	0	944



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	12009001-Cut	2.5	42220 - Natural Jack Pine	High Density Pole	80	51-80	Harvest	Clearcut with Reserves	4222 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all jack pine, aspen, balsam, spruce and maple that have a six inch or greater stump diameter. Leave red and white pine and oak if present. <u>Specs:</u> <u>Other</u> No retention other than leave species, if present. <u>Comments:</u> <u>Next</u> Scarify. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
4	12009004-Cut	19.1	42110 - Planted Red Pine	High Density Pole	60	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut every third row of red pine where rows haven't been previously cut. Thin to BA of 100. Cut any merchantable aspen, balsam and maple. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
8	12009008-Cut	106.6	42120 - Planted Jack Pine	High Density Pole	60	111-140	Harvest	Clearcut with Reserves	4222 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all jack pine, aspen, maple, balsam and spruce with a stump diameter of 2 inches or more. Cut red pine with a stump diameter of 2 inches or more, except mark 1 to 3 red pine leave trees per acre. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> Scarify. Herbicide if needed, determined by TMS. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										
9	12009009-Cut	8.0	42220 - Natural Jack Pine	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all oak, cedar, hemlock and red and white pine, if present. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2015										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	12009013-Cut	14.8	4311 - Pine, Aspen Mix	High Density Pole	80	51-80	Harvest	Clearcut with Reserves	4311 - Pine, Aspen Mix	Cmpt. Review Proposal
<u>Prescription</u> Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. leave all cedar and red and white pine and oak, if present. <u>Specs:</u>										
<u>Other</u> Push toward jack pine. <u>Comments:</u>										
<u>Next</u> Scarify. <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
15	12009015-Cut	18.8	42220 - Natural Jack Pine	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4222 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Mark 3 to 5 red pine per acre to leave. Leave all white pine and oak, if present. <u>Specs:</u>										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> Scarify. <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
19	12009019-Cut	23.5	42221 - Natural Jack Pine, Mixed Deciduous	Low Density Pole	60	1-50	Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all maple with a stump diameter of 2" or more. Cut all aspen, jack pine, spruce and balsam with a stump diameter of 6" or more. Leave all red and white pine and oak, if present. <u>Specs:</u>										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> Plant to jack pine. Herbicide as needed to prevent aspen and maple sprouting. <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
20	12009020-Cut	18.5	4110 - Sugar Maple Association	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide. Leave oak, if present. <u>Specs:</u>										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
21	12009021-Cut	48.9	4132 - Aspen, Jack Pine	High Density Pole	60	51-80	Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 2 inches or more. Leave all red and white pine and oak, if present.
Specs:

Other Very poor aspen.

Comments:

Next Plant to jack pine. Herbicide as needed to prevent aspen and maple sprouting.

Steps:

Proposed

Start Date: 10/01/2015

24	12009024-Cut	73.4	42110 - Planted Red Pine	High Density Pole	55	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Cut every third row of red pine where rows haven't been previously cut. Thin to BA of 100. Cut any merchantable aspen, balsam and maple.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

25	12009025-Cut	3.8	4130 - Aspen	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all oak and red and white pine, if present.

Specs:

Other No retention other than leave species, if present.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

29	12009029-Cut	43.0	4130 - Aspen	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all red and white pine and oak, if present.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
33	12009033-Cut	9.9	42110 - Planted Red Pine	High Density Pole	55	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Cut every third row of red pine where rows haven't been previously cut. Thin to BA of 100. Cut any merchantable aspen, balsam and maple.
Specs:

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

36	12009036-Cut	5.6	42110 - Planted Red Pine	High Density Pole	55	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Cut every third row of red pine where rows haven't been previously cut. Thin to BA of 100. Cut any merchantable aspen, balsam and maple.
Specs:

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

42	12009042-Cut	27.0	4199 - Other Mixed Upland Deciduous	High Density Log	80	111-140	Harvest	Shelterwood	412 - Oak	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 2 inches or more. Mark oak to 50 BA, leaving healthy trees with well developed crowns. Leave all red and white pine, if present.

Other Comments:

Next Steps: Scarify. Herbicide maple stump sprouts if necessary.

Proposed Start Date: 10/01/2015

44	12009044-Cut	31.9	4119 - Mixed Northern Hardwoods	High Density Log	80	141-170	Harvest	Shelterwood	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam with a stump diameter of 4 inches or more. Mark oak and maple to 50 BA, leaving healthy trees with well developed crowns. Favor oak. Leave all red and white pine, if present.

Other Comments:

Next Steps: Scarify.

Proposed Start Date: 10/01/2015



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
45	12009045-Cut	12.7	4110 - Sugar Maple Association	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide. Leave red and white pine and oak.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

46	12009046-Cut	5.6	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	80	81-110	Harvest	Shelterwood	412 - Oak	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 2 inches or more. Mark oak to 50 BA, leaving healthy trees with well developed crowns. Leave all red and white pine, if

Other Comments:

Next Steps: Scarify.

Proposed Start Date: 10/01/2015

47	12009047-Cut	12.1	4110 - Sugar Maple Association	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide. Leave red and white pine and oak.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

52	12009052-Cut	10.5	4130 - Aspen	High Density Pole	80	51-80	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all red and white pine and oak, if present.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015



Standard	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
54	12009054-Cut	14.0	42340 - Upland Spruce/Fir	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all cedar, hemlock and red and white pine and oak, if present.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

57	12009057-Cut	73.9	4110 - Sugar Maple Association	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide. Leave red and white pine and oak.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

59	12009059-Cut	151.2	4110 - Sugar Maple Association	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide. Leave red and white pine and oak.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

60	12009060-Cut	5.9	4116 - Mixed N. Hardwood - Aspen	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
65	12009065-Cut	60.6	42110 - Planted Red Pine	High Density Pole	60	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Cut every third row of red pine where rows haven't been previously cut. Thin to BA of 100. Cut any merchantable aspen, balsam and maple.
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: 10/01/2015

69	12009069-Cut	13.6	4134 - Aspen, Spruce/Fir	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all cedar, hemlock and red and white
Specs: pine and oak, if present.

Other
Comments:

Next
Steps:

Proposed
Start Date: 10/01/2015

71	12009071-Cut	7.8	42320 - Upland Spruce	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
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Prescription Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all cedar, hemlock and red and white
Specs: pine and oak, if present.

Other
Comments:

Next
Steps:

Proposed
Start Date: 10/01/2015

74	12009074-Cut	71.3	4110 - Sugar Maple Association	High Density Pole	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Mark trees to a BA of 70 to 80. Remove large aspen and balsam first, then use standards in complete marker as guide. Leave red and white
Specs: pine and oak.

Other
Comments: --Scott Sebero : 08/22/2014 comments:

Mark out and protect cultural resource in NW portion of stand and protect same resource in stand 66.

Next
Steps:

Proposed
Start Date: 10/01/2015



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75	12009075-Cut	10.8	4134 - Aspen, Spruce/Fir	High Density Log	80	81-110	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Cut all aspen, jack pine, spruce, balsam and maple with a stump diameter of 6 inches or more. Leave all cedar, hemlock and red and white										
<u>Specs:</u> pine and oak, if present.										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
76	12009076-Cut	38.8	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal
<u>Prescription</u> Cut all aspen, jack pine, spruce, balsam, tamarack and mixed hardwood, except oak, with a stump diameter of 6 inches or more. Leave all red										
<u>Specs:</u> and white pine, cedar, hemlock and oak, if present.										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
78	12009078- Hunter Walking Trail	18.2	4130 - Aspen	High Density Pole	37	51-80	Non-Forest Management	Other - Specify	310 - Herbaceous Openland	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance										
<u>Specs:</u>										
<u>Other</u> Mowing/discing/seeding										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2016										
11	NF_12009011- NonFor	7.7	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2016										
16	NF_12009016- NonFor	61.8	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2016										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	NF_12009034- NonFor	17.3	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2016										
38	NF_12009038- NonFor	4.1	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2016										
50	NF_12009050- NonFor	27.7	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2016										
53	NF_12009053- NonFor	9.1	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2016										
63	NF_12009063- NonFor	40.6	3201 - Sweet Fern				Non-Forest Management	Other - Specify	3201 - Sweet Fern	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> Unspecified										



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
66 NF_12009066-NonFor	4.6	3205 - Mixed Upland Shrub				Non-Forest Management	Other - Specify	3205 - Mixed Upland Shrub	Cmpt. Review Proposal

Prescription: Opening Maintenance
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: 10/01/2016

**Total Treatment
Acreage Proposed: 1135.2**

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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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#Type!

#Type!

PrescriptionSpecs:OtherComment:NextSteps:ProposedStart Date: #Type!Limiting Factor

Total Treatment Acreage Proposed:	0.0
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Report 5 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment 009

Year of Entry 2016

Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5C	5B	4A	3L	3J
	Available	Not Available							
1629	1629		Aspen	1,629					
101	101		Cedar	101					
360	360		Jack Pine	360					
43	43		Lowland Deciduous	43					
320	80	241	Lowland Spruce/Fir	1	69		9	128	112
33	33		Mixed Upland Deciduous	33					
380	380		Northern Hardwood	380					
178	178		Red Pine	169		10			
15	15		Upland Mixed Forest	15					
22	22		Upland Spruce/Fir	22					
3,080	2,840	241	Total Forested Acres	2,752	69	10	9	128	112
	92%	8%	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
003	Available	4A: No merchantable products (see product standards)	9				
Comments:							
004	Not Available	3J: Water quality / BMPs (stream, river, or lake)	113	2G: Too wet (sensitive soils, does not include access issues)			
Comments:							
005	Available	5B: Maintain for regeneration purposes	10				
Comments: Aspen removed last entry. BA only at 70.							

Report 5 – Site Conditions

Crystal Falls Mgt. Unit
Scott Sebero : Examiner

Compartment 009
Year of Entry 2016

006	Not Available	3L: Other wildlife concerns	128
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Comments:

007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	70	4A: No merchantable products (see product standards)
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Comments:



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
Comments				



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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
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 8 – Forested Stands			Compartment: 009 Year of Entry: 2016	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	42220 - Natural Jack Pine	High Density Pole	2.5	80	51-80		
2	42120 - Planted Jack Pine	High Density Sapling	38.2	17			
3	42221 - Natural Jack Pine, Mixed Deciduous	High Density Sapling	62.3	24			
4	42110 - Planted Red Pine	High Density Pole	19.1	60	111-140		
5	42220 - Natural Jack Pine	High Density Sapling	41.8	17			
6	6122 - Black Spruce	High Density Pole	9.2	80	81-110		
7	4132 - Aspen, Jack Pine	Medium Density	15.7	6	1-50		
8	42120 - Planted Jack Pine	High Density Pole	106.6	60	111-140	Alternate red, jack rows. Red pine very suppressed. Many areas of pure jack pine. Some pockets of aspen and scattered aspen throughout stand.	
9	42220 - Natural Jack Pine	High Density Pole	8.0	80	81-110		
10	4132 - Aspen, Jack Pine	High Density Sapling	60.9	17			
12	6122 - Black Spruce	High Density Pole	112.5	80	51-80		
13	4311 - Pine, Aspen Mix	High Density Pole	14.8	80	51-80	Poor quality aspen. Pine site. Sweet fern and blueberry.	
14	42120 - Planted Jack Pine	High Density Sapling	34.7	17			
15	42220 - Natural Jack Pine	High Density Pole	18.8	80	81-110	Nice jack pine on fairly steep hill. Heavy to red pine on east side of stand.	
17	42120 - Planted Jack Pine	High Density Sapling	17.4	17			
18	4130 - Aspen	High Density Sapling	44.6	17			
19	42221 - Natural Jack Pine, Mixed Deciduous	Low Density Pole	23.5	60	1-50	Opening growing in to cherry brush. Pockets of jack pine and red maple poles.	
20	4110 - Sugar Maple Association	High Density Pole	18.5	80	111-140	Some large aspen and balsam mixed throughout stand.	

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Crystal Falls Mgt. Unit

Report 8 – Forested Stands

Compartment: 009
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4132 - Aspen, Jack Pine	High Density Pole	48.9	60	51-80	Poor quality aspen. Pockets of old jackpine and aspen. Pockets of younger aspen and jack pine.
4130 - Aspen	High Density Sapling	54.6	5		Scattered pole and log sized red oak.
4130 - Aspen	High Density Sapling	8.1	17		
42110 - Planted Red Pine	High Density Pole	73.4	55	111-140	
4130 - Aspen	High Density Pole	3.8	80	81-110	Poor condition.
6115 - Lowland Ash	High Density Pole	3.9	80	51-80	
4130 - Aspen	High Density Sapling	53.8	17		
42120 - Planted Jack Pine	High Density Sapling	5.8	17		
4130 - Aspen	High Density Pole	43.0	80	81-110	Scattered red oak and red pine. Some paper birch and balsam.
4130 - Aspen	High Density Sapling	48.4	17		
4130 - Aspen	High Density Sapling	12.5	5		
42210 - Natural Red Pine	High Density Pole	9.7	80	51-80	
42110 - Planted Red Pine	High Density Pole	9.9	55	111-140	
6122 - Black Spruce	Medium Density Pole	70.9	80		
42110 - Planted Red Pine	High Density Pole	5.6	55	111-140	
4130 - Aspen	High Density Sapling	311.1	25		
4130 - Aspen	High Density Sapling	47.6	17		Clumps of very limby log sized red oak.
4130 - Aspen	High Density Pole	20.2	41	51-80	

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Crystal Falls Mgt. Unit

Report 8 – Forested Stands

Compartment: 009
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4130 - Aspen	High Density Sapling	64.7	17		
4199 - Other Mixed Upland Deciduous	High Density Log	27.0	80	111-140	
4130 - Aspen	High Density Sapling	124.3	5		
4119 - Mixed Northern Hardwoods	High Density Log	31.9	80	141-170	Scattered large aspen and spruce. A few yellow birch and basswood.
4110 - Sugar Maple Association	High Density Pole	12.7	80	111-140	
4191 - Mixed Upland Deciduous with Conifer	High Density Pole	5.6	80	81-110	
4110 - Sugar Maple Association	High Density Pole	12.1	80	111-140	Lots of sugar maple regen. Most of it 3 to 5 feet tall.
4130 - Aspen	High Density Pole	51.8	41	51-80	
4130 - Aspen	High Density Sapling	9.1	17		
4130 - Aspen	High Density Pole	32.9	41	81-110	Lots of oak and sugar maple left along southern edge of stand when it was harvested.
4130 - Aspen	High Density Pole	10.5	80	51-80	Scattered log sized red oak.
42340 - Upland Spruce/Fir	High Density Pole	14.0	80	81-110	
4130 - Aspen	High Density Pole	11.7	41	51-80	
4130 - Aspen	High Density Sapling	39.7	5	1-50	Pockets of pole and log sized red oak.
4110 - Sugar Maple Association	High Density Pole	73.9	80	111-140	
4110 - Sugar Maple Association	High Density Pole	151.2	80	111-140	small pockets of 6" dia. aspen. Cut only operational trees of this size. Cut most large dia. aspen. Scattered large dia. oak. Open up around these large oak.
4116 - Mixed N. Hardwood - Aspen	High Density Pole	5.9	80	111-140	Aspen in verry poor condition.
4130 - Aspen	High Density Pole	14.3	41	81-110	

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Crystal Falls Mgt. Unit

Report 8 – Forested Stands

Compartment: 009
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4130 - Aspen	High Density Pole	79.2	41	51-80	
6120 - Lowland Cedar	Medium Density Log	22.7	80	51-80	Schwartz creek runs through stand.
42110 - Planted Red Pine	High Density Pole	60.6	60	111-140	A few aspen and spruce poles still in stand.
4130 - Aspen	High Density Pole	113.7	37	51-80	
4130 - Aspen	High Density Sapling	62.4	17		
4134 - Aspen, Spruce/Fir	High Density Pole	13.6	80	81-110	Large old aspen, spruce and balsam mixed with pockets of younger aspen.
4130 - Aspen	High Density Pole	11.1	41	51-80	
42320 - Upland Spruce	High Density Pole	7.8	80	81-110	
4130 - Aspen	High Density Sapling	24.2	17		
6120 - Lowland Cedar	High Density Pole	78.4	80	81-110	
4110 - Sugar Maple Association	High Density Pole	71.3	80	111-140	
4134 - Aspen, Spruce/Fir	High Density Log	10.8	80	81-110	
6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	38.8	80	81-110	Scattered cedar. some wet drains with tag alder and black ash. Some blowdown areas.
6122 - Black Spruce	High Density Pole	128.2	80	51-80	
4130 - Aspen	High Density Pole	183.0	37	51-80	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
11	3201 - Sweet Fern	7.7	No	Unspecified	
16	3201 - Sweet Fern	61.8	No	Unspecified	
34	3201 - Sweet Fern	17.3	No	Unspecified	
38	3201 - Sweet Fern	4.1	No	Unspecified	
50	3201 - Sweet Fern	27.7	No	Unspecified	
53	3201 - Sweet Fern	9.1	No	Unspecified	
58	6229 - Mixed lowland shrub	15.6	No	Unspecified	
63	3201 - Sweet Fern	40.6	No	Unspecified	
66	3205 - Mixed Upland Shrub	4.6	No	Unspecified	