Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12011
Entry Year 2018
Acreage: 2,888
County Dickinson
Management Area: Ralph Ground Moraine

Revision Date: 2016-08-08

Stand Examiner: Scott Sebero

Legal Description:

T44N R29W Sec. 13, 22-27, 34-36

Identified Planning Goals:

There are several goals in this compartment. Timber goals include developing and maintaining age class distribution in the aspen timber type, maintain species diversity and increased sawlog quality in the northern hardwood timber type, maintain the swamp conifer timber type and there diversity and to increase the mesic conifer component of this compartment where possible. As these stands age, active management before maturity will be necessary to help balance the age classes and structure distribution across the surrounding landscape. Northern hardwood stands are still predominantly even, though some have uneven-age structure characteristics and are slowly moving toward unevenage stands. Tree quality in the majority of the hardwood stands is good, with some poorer quality in the transitional site areas. Non-timber goals include protecting the water quality and habitat of the North Branch of the Fence River, its tributaries, McGregor Creek, and the surrounding lowlands through proper BMP's. Maintaining and expanding transition zones, thermal cover cover types, and to maintain existing wildlife openings are also department goals in this compartment.

Soil and topography:

The topography of this compartment ranges from nearly level to hilly with some minor exposed rock along the eastern portion of the compartment. The major soil associations in this compartment are the Pemene-Emmet-Cathro (PEC) and Rubicon-Cathro (RC). Soils in the PEC association (well drained and very poorly drained) were formed in ice-contact drift, glacial till, and organic deposits. Pemene soils, located on flats, knolls, ridges and hills in the uplands, have a surface layer of fine sandy loam with a subsurface of loamy fine sand, and a subsoil of fine sandy loam and loamy fine sand. Emmet soils, on the flats, knolls, ridges, and hills in the uplands, on the surface are loam with a subsurface layer of fine sandy loam, and subsoil layer of sandy loam to fine sandy loam. The substratum is gravelly fine sandy loam. Cathro soils are very poorly drained and occur in depressions and drainage ways on low flats and near streams on flood plains. The soil has a surface and subsurface layer of muck. The substratum is very fine sandy loam, stratified fine sandy loam and loamy sand. RC association soils (excessively drained and very poorly drained) were formed in glacial outwash and organic deposits. Rubicon soils are located on the flats, knolls, foot slopes, side slopes and ridges. It has a surface of loamy sand; subsurface is sand with a subsoil of sand, and a substratum of sand. Cathro soils in this association have the same characteristics as in the PEC association. (Soil Conservation Service. 1989. Dickinson County. pgs 5-9.) Alberts Sub-section VIII3.1

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

Ownership surrounding this compartment is predominately State land with scattered private parcels and forest industry land. Land use on the private parcels is in camps and on industrial land is forest management. State land use is managed according to goals in the surrounding compartments determined by inventory and reviews.

Unique Natural Features:

This compartment is bordered by the North Branch of the Ford River along the northwest, west, and south sides with a small portion along the north by McGregor Creek.

Archeological, Historical, and Cultural Features:

There are two private parcels within this compartment that are occupied by camps. They are camps that were built circa. 1880-1910, and are original logging camps. The Cleveland Homestead has a common boundary with the east side of the compartment.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Maintaining adequate buffers along with protecting and enhancing the cover types, especially cedar and lowland conifer, surrounding the N. Branch and its tributaries will help to protect the water quality of this river and promote the potential high quality trout habitat it holds.

Wildlife Habitat Considerations:

This compartment is in the Ralph Ground Moraine MA which has the following featured species: American woodcock, black bear, northern goshawk, ruffed grouse, and white-tailed deer. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Lowland conifers and lowland hardwood types provide winter and summer cover and are essential for travel corridors for many species of wildlife and provide essential habitat for riparian species. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, grouse and turkey. This compartment has several hunter walking trails and maintained openings that provide herbaceous spring and summer forage particularly important for wildlife and provide recreational opportunities for consumptive and non-consumptive wildlife recreationists.

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. The Precambrian Michigamme Formation and Archean Granite/Gneiss subcrop below the glacial drift. There is not a current economic use for the Granite/gneiss, although it has dimension stone potential. The abandoned Republic Iron mine is located approximately fourteen miles to the northwest. Gravel pits are not located in the area, but there could be potential. Part of this Compartment was previously leased for metallic exploration and potential may still exist. There is no economic oil and gas production in the UP.

Vehicle Access:

There is adequate access to this compartment. The Aimone (Cleveland Homestead) road provides access to the entire compartment (east-west) with the use of side roads (north-south). Some new roads and minor road work within the compartment will be needed to accomplish timber sale activity.

Survey Needs:

Seven corners need to be installed on the private 40's located in section 26.

Recreational Facilities and Opportunities:

The Silver Lake to Floodwood Snowmobile trail is west and north of the compartment and utilizes a portion of the road used to access this compartment. It is a heavily used trail and will be affected by winter logging operations, but not in an adverse manner. Hunting occurs throughout the compartment for all game species and fishing occurs on the North Branch of the Ford River. Maintaining young stands of aspen, grassy openings, and cover types such as cedar, spruce, and lowland conifer will help to enrich the hunting and fishing opportunities in this compartment.

Fire Protection:

There are timber types that are fire susceptible within this compartment. The southwest portion of the compartment is dominated by aspen and red pine stands, with one stand being a mix of red and white pine. The red pine stands are fairly contiguous. The Nature Trail road acts as a fire break for ground fires, but crown fires would carry across certain areas of this road in the red pine type. The remaining timber types are spruce, cedar, swamp conifer, upland hardwoods, and aspen. All timber types are accessible with minor road work, i.e. berm removal.

Additional Compartment Information:

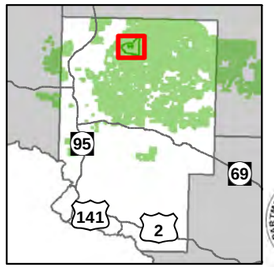
The following reports from the Inventory are attached:

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

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

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

Cover Type & Treatments Map



N

Compartment: 11
T 44N R 29W Sec. 13, 23-26, 35, 36
County: Dickinson
Unit: Crystal Falls
Mgmt Area: Ralph Ground Moraine
YOE: 2018
Acres: 2,888 GIS Calculated
Examiner: Scott Sebero
Map Revised: 11/29/2016
Map Phase: Post-Review

0 0.5 1 Miles

- Miris Corners
- Remonumented Section Corners
- Survey Grade GPS Corners
- Field Grade GPS Corners
- Gate
- Berms
- Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Rivers
- Compartment Boundary
- Clearcut (w/Reserves)
- Salvage
- Opening Maintenance
- Thinning (Crown, Low, Systematic)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
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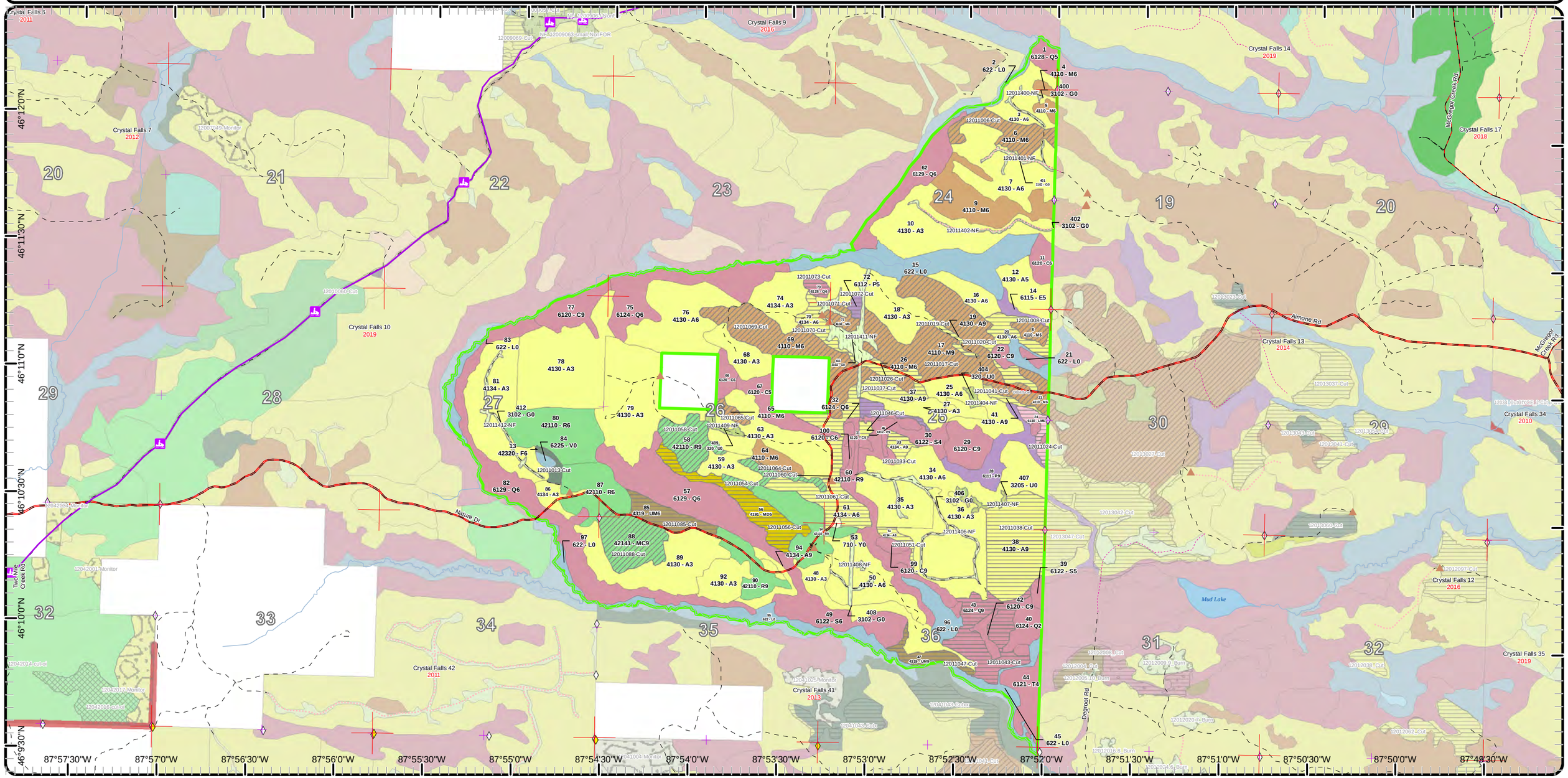
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 710 - Sand/Soil
- Lakes



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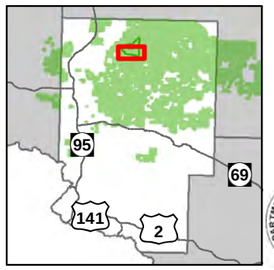

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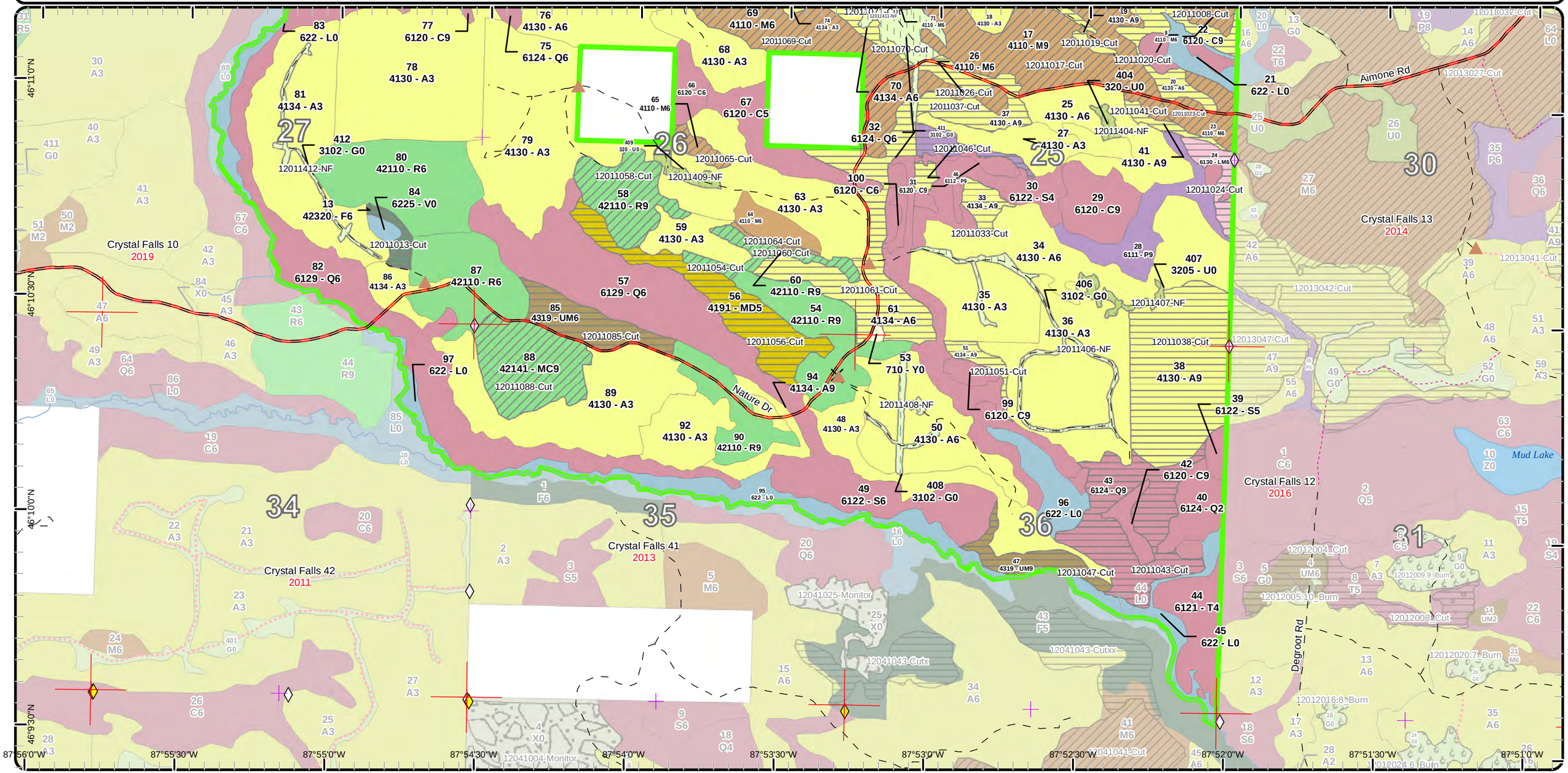
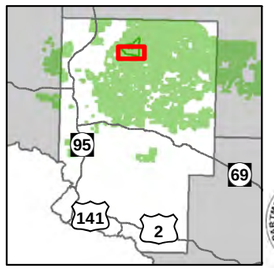


Stand Boundary Map



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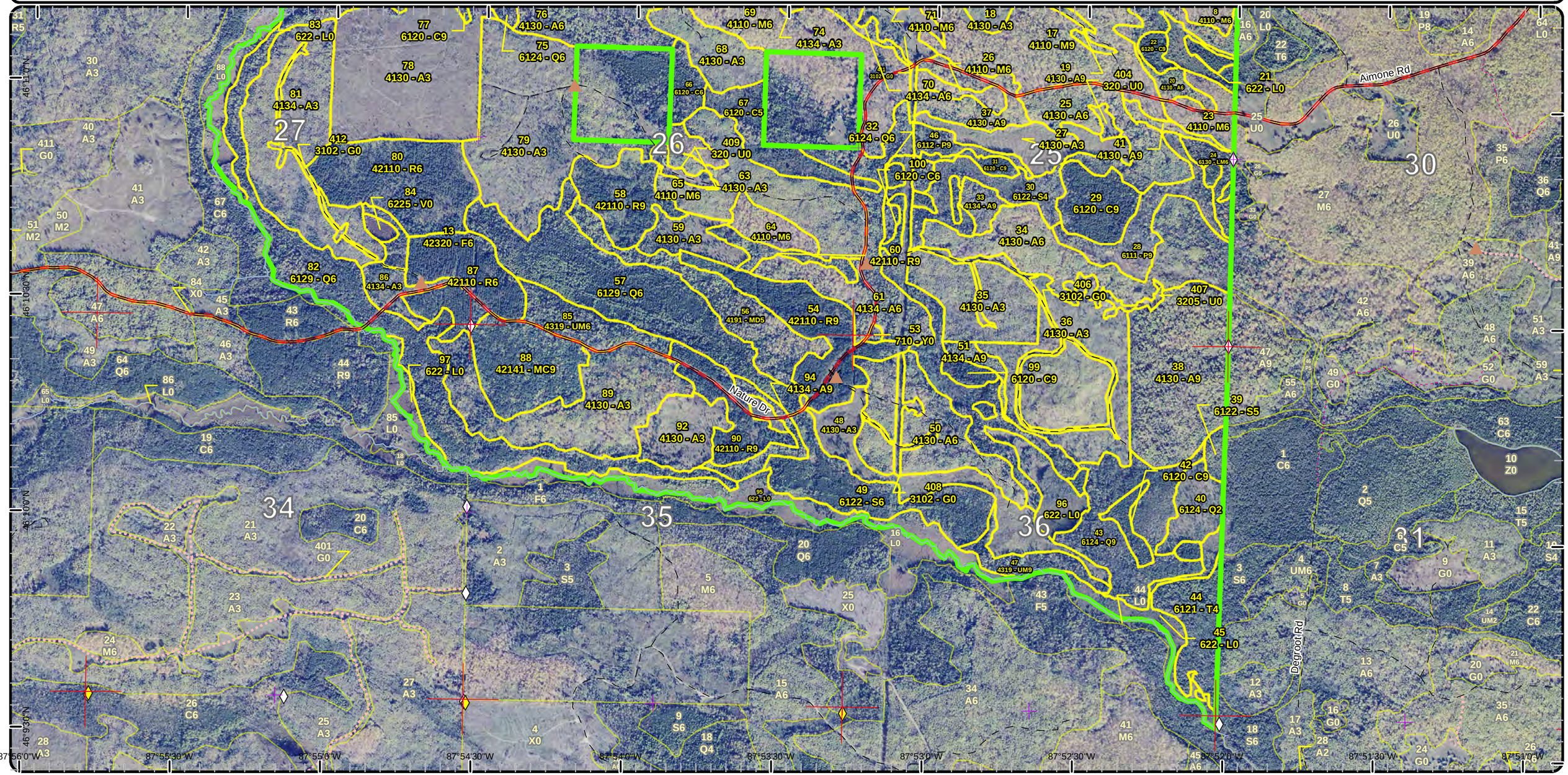
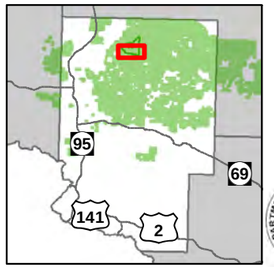


Special Conservation Areas & Site Conditions Map



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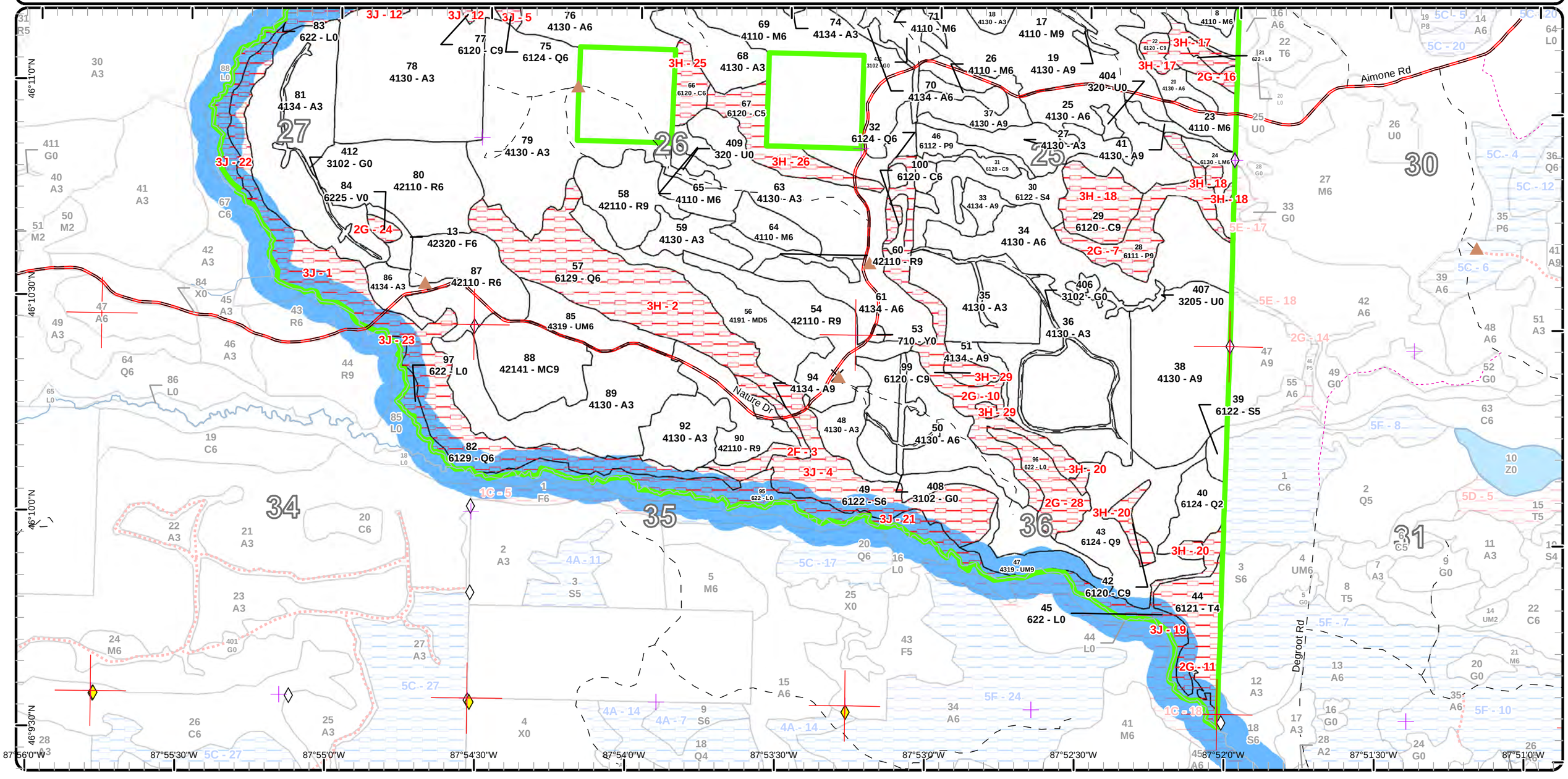
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 3H: Deer Wintering Areas
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer



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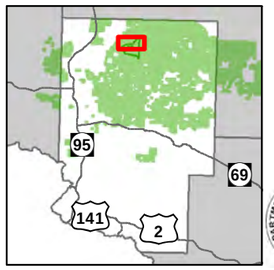

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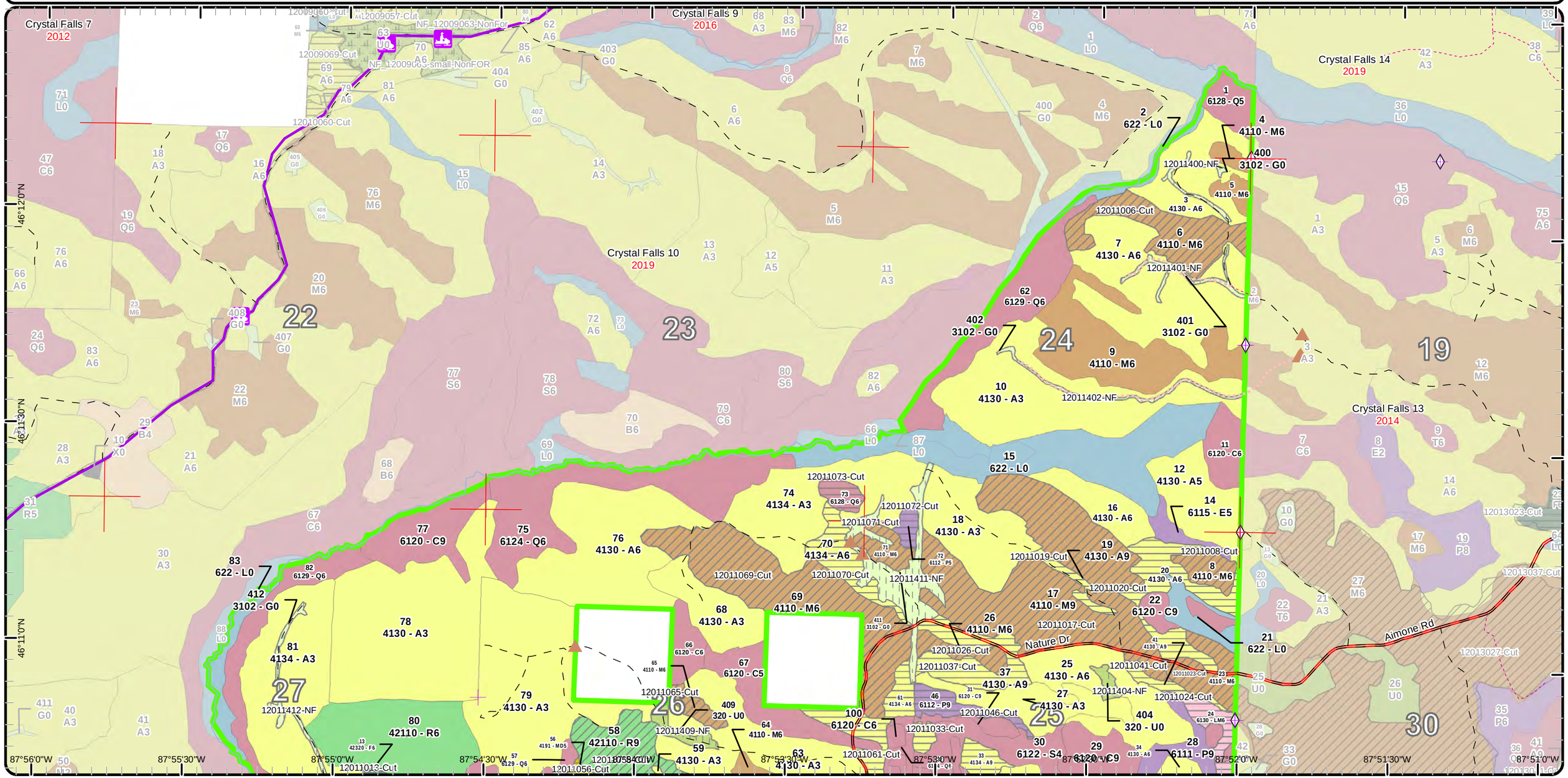

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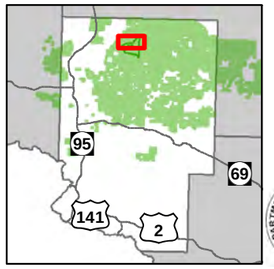

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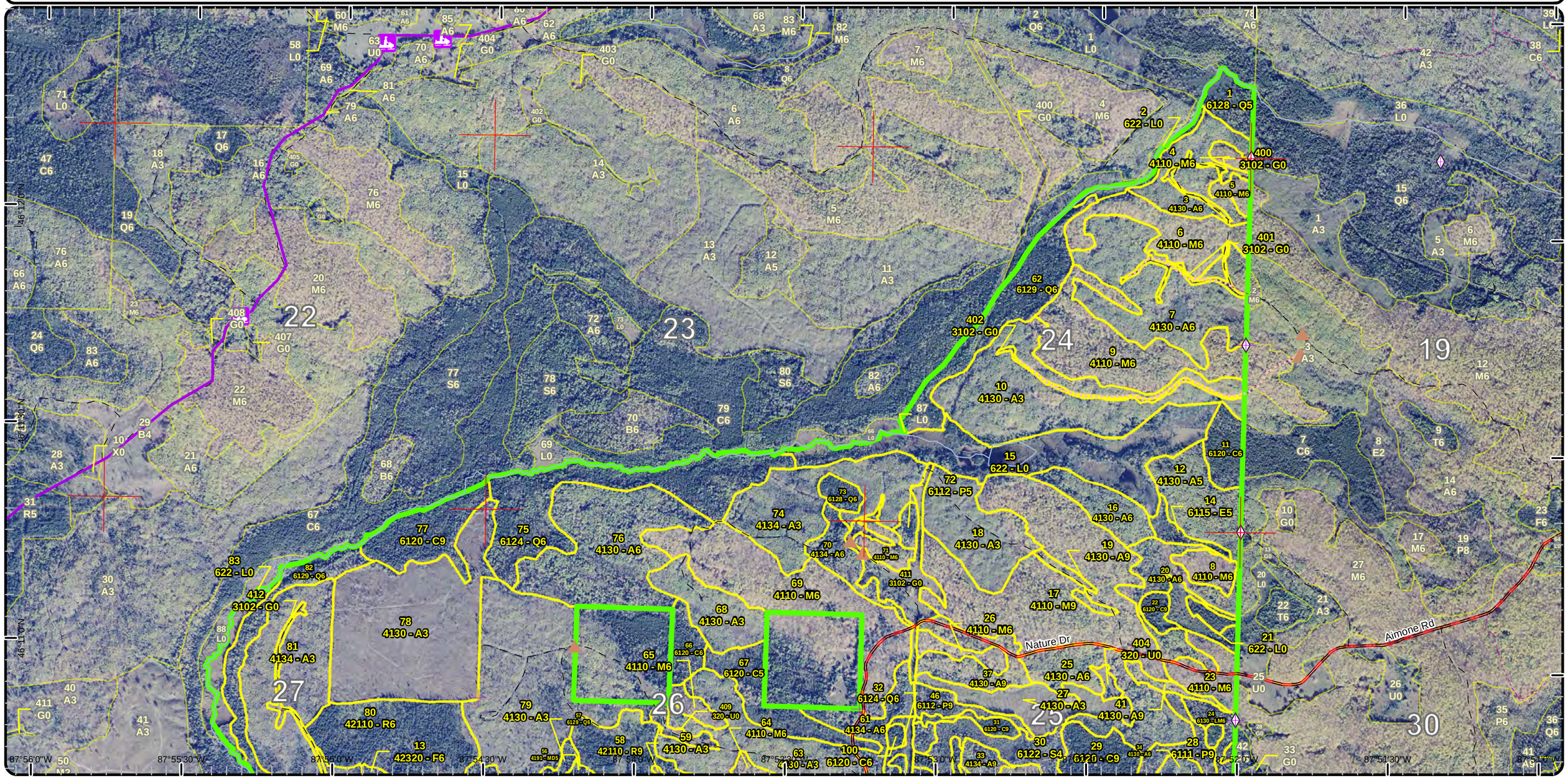

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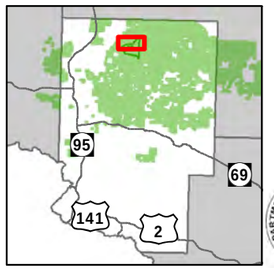

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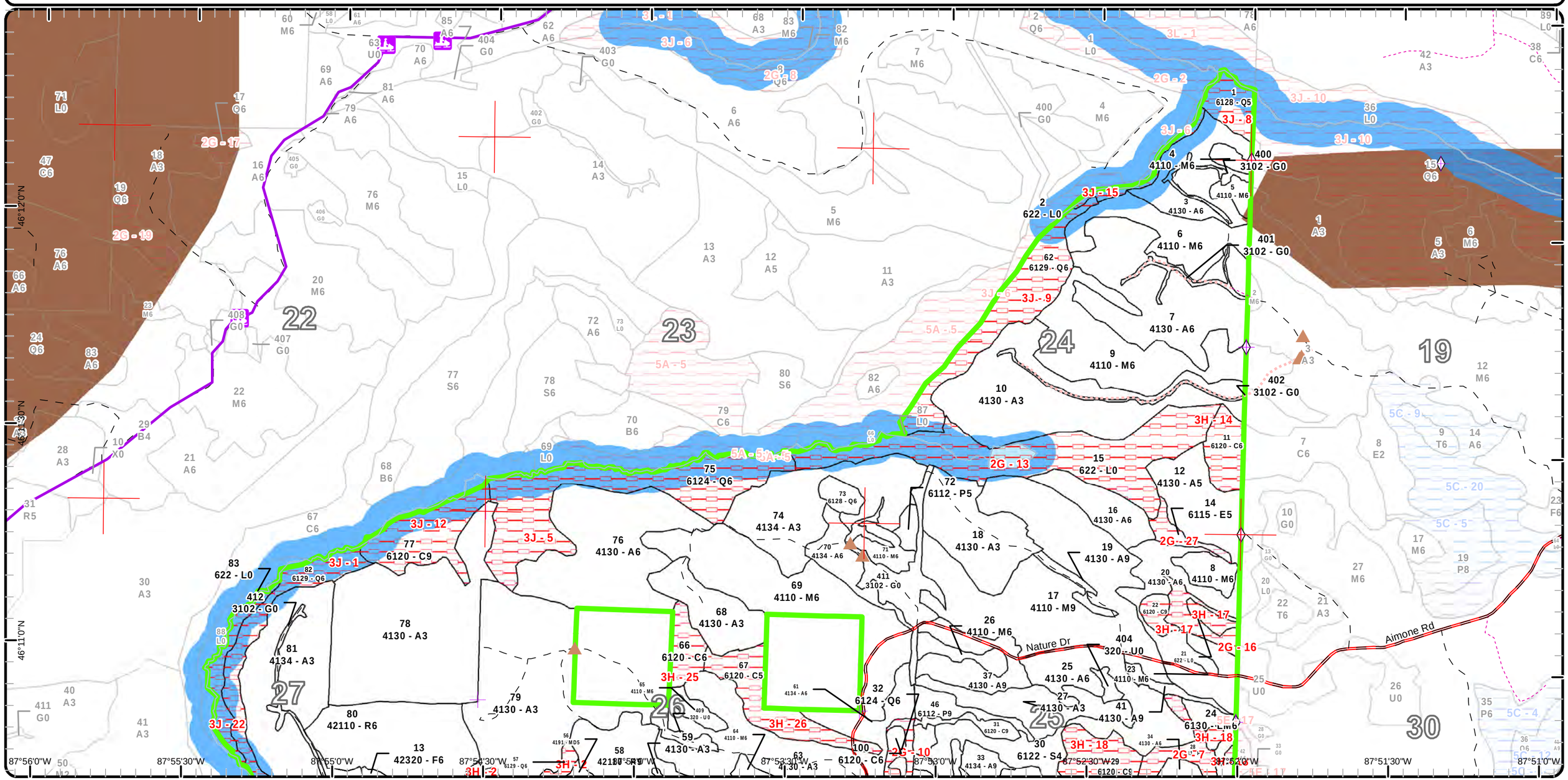
- Deer Winter Range



Report 1 – Total Acres by Cover Type and Age Class

Crystal Falls Mgt. Unit **Compartment 11** **Year of Entry 2018**

Scott Sebero : Examiner

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	201	207	427	162	161	4	51	95	29	0	0	0	0	0	0	0	20	**1356**
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Cedar	0	0	0	0	0	0	0	0	0	32	0	0	8	89	0	0	0	0	**129**
Herbaceous Openland	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**52**
Lowland Aspen/Balsam Poplar	0	0	0	0	0	4	0	0	26	8	0	0	0	0	0	0	0	0	**38**
Lowland Conifers	0	16	0	0	0	0	0	0	0	219	163	0	0	0	0	0	0	0	**398**
Lowland Deciduous	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
Lowland Mixed Forest	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	**9**
Lowland Shrub	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**169**
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	28	0	44	0	0	0	0	0	0	0	**72**
Mixed Upland Deciduous	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	**36**
Northern Hardwood	0	0	0	0	0	0	0	0	29	279	0	0	0	0	0	0	0	0	**307**
Planted Mixed Pines	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	**39**
Red Pine	0	0	0	0	0	0	197	0	0	0	0	0	0	0	0	0	0	0	**197**
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Tamarack	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	**25**
Upland Mixed Forest	0	0	0	0	0	0	0	21	0	13	0	0	0	0	0	0	0	0	**34**
Upland Shrub	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Upland Spruce/Fir	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	**5**
Total	**236**	**217**	**207**	**427**	**162**	**165**	**206**	**148**	**217**	**580**	**207**	**0**	**8**	**89**	**0**	**0**	**0**	**20**	**2886**

Report 2 – Treatment Summary

Crystal Falls Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 11

Total Compartment Acres: 2,888

Commercial Harvest - 666

Harvests with Site Condition - 0

Next Step Harvest - 21

Habitat Cut - 21

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	198	0	0	0	0	0	0	0	0	**198**
Lowland Aspen/Balsam Poplar	11	0	0	0	0	0	0	0	0	**11**
Lowland Conifers	54	0	0	0	0	0	0	0	0	**54**
Lowland Mixed Forest	9	0	0	0	0	0	0	0	0	**9**
Mixed Upland Deciduous	37	0	0	0	0	0	0	0	0	**37**
Northern Hardwood	0	0	0	0	0	237	0	2	0	**238**
Planted Mixed Pines	0	0	0	0	0	39	0	0	0	**39**
Red Pine	0	0	0	0	0	40	0	0	0	**40**
Upland Mixed Forest	34	0	0	0	0	0	0	0	0	**34**
Upland Spruce/Fir	5	0	0	0	0	0	0	0	0	**5**
Total	**348**	**0**	**0**	**0**	**0**	**316**	**0**	**2**	**0**	**666**

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	666	0	0	0	0	0	0	0	63	**729**
Next Step	21	0	0	0	0	0	331	0	0	**352**
Total	**686**	**0**	**0**	**0**	**0**	**0**	**331**	**0**	**63**	**1081**

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
6	12011006-Cut	28.5	4110 - Sugar Maple Association	Poletimber Well	72	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Featured species: Bear, Deer : Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
8	12011008-Cut	8.0	4110 - Sugar Maple Association	Poletimber Well	80	141-170	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
13	12011013-Cut	5.1	42320 - Upland Spruce	Poletimber Well	70	81-110	Harvest	Clearcut with Retention	42330 - Upland Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all spruce and balsam with one or more pulpwood sticks. Cut all aspen and maple 2" or greater DBH. No red or white pine or cedar will be cut. Leave 100 foot buffer around V-type. Buffer will serve as retention for the stand.

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

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

Other Comment: WLD: Bear, Deer, Grouse. WLD-Promoting mesic conifer within stand diversity is important for cover and travel corridors: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
17	12011017-Cut	103.8	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen: Northern hardwood mix of maple and basswood.

Other Comment: WLD- Bear, Deer . Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
19	12011019-Cut	4.1	4130 - Aspen	Sawtimber Well	57	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all maple and aspen 2" DBH or larger. Cut all softwood one or more pulpwood sticks. Do not cut red or white pine, cedar, hemlock or oak.

Next Step Treatments: Harvest, Clearcut

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

Other Comment: WLD: Grouse, Deer, Bear. Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	12011020-Cut	23.1	4130 - Aspen	Poletimber Well	70	111-140	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all maple and aspen 2" DBH or larger. Cut all softwood 1 stick or larger. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

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

Acceptable Regen: Mix of aspen, spruce and fir.

Other Comment: WLD: Grouse & Woodcock, Deer, Bear. Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
23	12011023-Cut	13.9	4110 - Sugar Maple Association	Poletimber Well	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Featured species: Bear, Deer. Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
24	12011024-Cut	8.8	6130 - Fir, Aspen, Maple	Poletimber Well	70	51-80	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood sticks. No red or white pine, cedar, hemlock or oak will be cut.

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

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

Other Comment: May need to cut in winter or very dry summer

WLD: Featured species: Bear, Deer, Grouse : Leave 6" on stump spruce/fir to provide vertical structure as well. Seed source of black spruce to maintain spruce type. Cherry provides valuable forage for bears and numerous other wildlife, leave representative sample of cherry for mast production. Drainages and associated ash should be protected as critical bear habitat.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
26	12011026-Cut	6.4	4110 - Sugar Maple Association	Poletimber Well	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen, spruce and balsam with one or more pulpwood sticks. Mark hardwood to a BA of 80. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Featured Species: Bear, Deer. Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
33	12011033-Cut	9.6	4134 - Aspen, Spruce/Fir	Sawtimber Well	83	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood stick. No red or white pine, cedar, hemlock, oak or sub-merchantable black ash will be cut.

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

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

Other Comment: Access to stand is wet and may need to be in winter or very dry summer.
WLD: : WLD: Featured Species: Bear, Deer, Grouse. Leave 6" on stump spruce/fir to provide vertical structure as well. Cherry provides valuable forage for bears and numerous other wildlife, leave representative sample of cherry for mast production. Drainages and associated ash should be protected as critical bear habitat.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
37	12011037-Cut	20.1	4130 - Aspen	Sawtimber Well	80	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees with one or more pulpwood sticks except cut no red and white pine, cedar, hemlock, oak and sub-merchantable cherry.

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

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

Other Comment: : WLD: Featured Species: Bear, Deer, Grouse. Leave 6" on stump spruce/fir to provide vertical structure as well. Cherry provides valuable forage for bears and numerous other wildlife, leave representative sample of cherry for mast production. Drainages and associated ash should be protected as critical bear habitat.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
38	12011038-Cut	71.8	4130 - Aspen	Sawtimber Well	75	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood stick. No red or white pine, cedar, hemlock, oak or sub-merchantable cherry will be cut.

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

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

Other Comment: WLD: Featured Species: Deer, Grouse & Woodcock, and Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Lowland conifers and lowland hardwood types provide winter and summer cover and are essential for travel corridors for a many species of wildlife and provide essential habitat for riparian species. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, grouse and turkey. This compartment has several hunter walking trails and maintained openings that provide herbaceous spring and summer forage particularly important for wildlife, and provide recreational opportunities for consumptive and non-consumptive wildlife users.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
41	12011041-Cut	4.1	4130 - Aspen	Sawtimber Well	80	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees with one or more pulpwood sticks, except cut no red and white pine, cedar, hemlock, oak and sub-merchantable cherry.

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

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

Other Comment: WLD: Featured Species: Grouse & Woodcock, Deer and Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment.. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
43	12011043-Cut	49.2	6124 - Lowland Spruce-Fir	Sawtimber Well	83	111-140	Harvest	Clearcut with Retention	6128 - Lowland Coniferous, Mixed Deciduous	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam, tamarack and birch with one or more pulpwood sticks. No red or white pine, cedar, hemlock or oak will be cut. Leave clumps of black spruce for seed source. Line out drains and leave strip corridor along bottom of stand.

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

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

Other Comment: Protect any wet drains. Will need to cut in winter or very dry summer.
WLD: Featured species: Deer, Bear. . Lowland conifers and lowland hardwood types provide winter and summer cover and are essential for travel corridors for a many species of wildlife and provide essential habitat for riparian species. Maintenance of lowland spruce type for featured species, as well as, black-backed woodpecker, spruce grouse and bobcat is essential.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
46	12011046-Cut	7.7	6112 - Lowland Aspen	Sawtimber Well	80	81-110	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood sticks. No red or white pine, cedar, hemlock or oak will be cut.

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

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

Other Comment: May need to be cut in winter of very dry summer.
WLD-Featured species: Grouse & Woodcock, Deer, Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Lowland conifers and lowland hardwood types provide winter and summer cover and are essential for travel corridors for a many species of wildlife. Spruce/fir provide vertical structure enhancing habitat for grouse, golden-winged warbler, deer and hare. Cherry provides valuable forage for bears and numerous other wildlife, leave representative sample of cherry for mast production. Drainages and associated ash should be protected as critical bear habitat.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
47	12011047-Cut	13.0	4319 - Mixed Upland Forest	Sawtimber Well	89	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood sticks. No red or white pine, cedar, hemlock, oak or sub-merchantable conifer will be cut.

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

Acceptable Regen: Mix of aspen, spruce and balsam.

Other Comment: Buffer stream 300 feet.
WLD: Featured species: Deer, Bear, Grouse and Woodcock. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. . Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse. It is important to leave this movement corridor intact for the above named featured species, as well as, bobcat, fisher, marten, and as habitat for riparian species.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
51	12011051-Cut	5.3	4134 - Aspen, Spruce/Fir	Sawtimber Well	83	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater. Cut all spruce, balsam and birch with one or more pulpwood sticks. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

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

Acceptable Regen: Mix of aspen, spruce and balsam.

Other Comment: WLD: Featured Species: Grouse, Deer, Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
54	12011054-Cut	3.0	42110 - Planted Red Pine	Sawtimber Well	53	111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut every third row of red pine. Cut all aspen, maple, spruce and balsam with one or more pulpwood sticks.

Next Step Treatments:

Acceptable Regen:

Other Comment: Harvest to occur only in west side of stand, part that previous cutting omitted.
WLD: Featured Species: Grouse. Maintenance of diverse species within stand will allow use by grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
56	12011056-Cut	36.5	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	65	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood sticks. No red or white pine, cedar, hemlock, oak or sub-merchantable cherry will be cut.

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

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

Other Comment: WLD: Featured species: Grouse, Deer, Bear. Maintenance of diverse species for structural diversity such as refuge and den trees. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
58	12011058-Cut	27.8	42110 - Planted Red Pine	Sawtimber Well	53	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Mark red pine to a BA of 100. Cut all aspen, balm, spruce, balsam and maple with one or more pulpwood sticks. Protect areas of advanced aspen regeneration.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD: Featured species: Grouse, Deer, Bear. Maintenance of diverse species for structural diversity such as refuge and den trees. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
60	12011060-Cut	9.0	42110 - Planted Red Pine	Sawtimber Well	53	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen with one or more pulpwood sticks. Some red pine may need to be removed to allow for access to aspen.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD: Featured species: Grouse, Deer, Bear. Maintenance of diverse species for structural diversity such as refuge and den trees. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
61	12011061-Cut	51.2	4134 - Aspen, Spruce/Fir	Poletimber Well	67	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood stick. No red or white pine, cedar, hemlock or oak will be cut.

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

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

Other Comment: WLD: Featured Species: Deer, Grouse, Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Some portions of this stand a younger and would add to age class diversity if held as retention. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
64	12011064-Cut	1.5	4110 - Sugar Maple Association	Poletimber Well	80	51-80	Harvest	Salvage	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen with one or more pulpwood stick, leaving pockets of smaller aspen for retention. No other trees will be cut.

Next Step Treatments:

Acceptable Regen:

Other Comment: Harvest to occur only in narrow strip along southern boarder of stand.
WLD: Featured species: Grouse, Deer, Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
65	12011065-Cut	5.1	4110 - Sugar Maple Association	Poletimber Well	80	171-200	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
69	12011069-Cut	64.1	4110 - Sugar Maple Association	Poletimber Well	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
70	12011070-Cut	13.1	4134 - Aspen, Spruce/Fir	Poletimber Well	44	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all maple and aspen 2" DBH or larger. Cut all softwood one or more pulpwood sticks. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments: Harvest, Clearcut

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

Other Comment: WLD: Featured species: Grouse, Deer, Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
71	12011071-Cut	7.1	4110 - Sugar Maple Association	Poletimber Well	80	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: This stand is to be thinned to a residual basal area of 70 - 90 ft^2 per acre. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD-Featured Species: Deer, Bear. Promoting mesic conifer within stand diversity is important: White pine, hemlock, cedar and spruce/fir 6" stump retained where present. Oak and cherry should be maintained for mast production. Trees showing potential for nesting bird, and providing nesting and denning cavities should be retained.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
72	12011072-Cut	3.5	6112 - Lowland Aspen	Poletimber Medium	44	51-80	Harvest	Clearcut with Retention	6111 - Lowland Balsam Poplar	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all maple and aspen 2" DBH or larger. Cut all softwood one or more pulpwood sticks. Do not cut red or white pine, cedar, hemlock or oak if present.

Next Step Treatments: Harvest, Clearcut

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

Other Comment: WLD-Featured Species: Grouse, Woodcock, Bear.Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Lowland conifers and lowland hardwood types provide winter and summer cover and are essential for travel corridors for a many species of wildlife.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
73	12011073-Cut	5.2	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	90	81-110	Harvest	Clearcut with Retention	6128 - Lowland Coniferous, Mixed Deciduous	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all maple and aspen 2" DBH or larger. Cut all softwood and birch 1 stick or larger. Do not cut red or white pine, cedar, hemlock, oak or sub-merchantable cherry. Leave pockets of black spruce for seed source and retention.

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

Acceptable Regen: Mix of spruce, fir, and tamarack.

Other Comment: WLD-Featured Species: Bear, Deer. Lowland conifers provide cover for the above mentioned species, as well as, black backed woodpecker and spruce grouse. Retaining black spruce in this stand is important. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
85	12011085-Cut	20.7	4319 - Mixed Upland Forest	Poletimber Well	66	111-140	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen and maple 2" or greater DBH. Cut all spruce, balsam and birch with one or more pulpwood stick. No red or white pine or oak will be cut.

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

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

Other Comment: WLD-Featured Species: Grouse, Deer, Bear. Balancing the age classes of aspen to provide early successional habitat through mature aspen forest is a goal in this compartment. Mesic conifer in the uplands is promoted to provide structural diversity within stands which increases habitat value, as cover for wildlife. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, grouse

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
88	12011088-Cut	39.4	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	66	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Mark red and white pine to a BA of 120, favor white pine. Cut all other trees with one or more pulpwood stick, except oak, cedar or hemlock.

Next Step Treatments:

Acceptable Regen:

Other Comment: WLD- Bear. Maintenance of diverse species for structural diversity such as refuge and den trees. Mast production, such as oak, cherry and raspberry are encouraged to provide valuable forage for bear, deer, and grouse.

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
400	12011400-NF	2.4	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
401	12011401-NF	3.3	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
402	12011402-NF	3.1	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
404	12011404-NF	2.3	320 - Upland Shrub	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
406	12011406-NF	11.0	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
407	12011407-NF	4.8	3205 - Mixed Upland Shrub	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
408	12011408-NF	6.1	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
409	12011409-NF	4.3	320 - Upland Shrub	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
411	12011411-NF	20.6	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
412	12011412-NF	5.3	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Herbaceous opening maintenance

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Total Treatment Acreage Proposed: **732.9**

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment: 11

Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	*Acres Avail With Condition*	Acres Not Available		Dominant Site Conditions 1C	2F	2G	3H	3J
1357	1347	*0*	10	**Aspen**		10			
3	0	*0*	3	**Bog**			3		
130	12	*0*	117	**Cedar**				92	25
52	52	*0*	0	**Herbaceous Openland**					
37	11	*0*	26	**Lowland Aspen/Balsam Poplar**			26		
399	71	*0*	328	**Lowland Conifers**			41	83	204
5	0	*0*	5	**Lowland Deciduous**			5		
9	9	*0*	0	**Lowland Mixed Forest**					
169	0	*0*	169	**Lowland Shrub**	0		97		72
72	28	*0*	44	**Lowland Spruce/Fir**					44
37	37	*0*	0	**Mixed Upland Deciduous**					
308	308	*0*	0	**Northern Hardwood**					
39	39	*0*	0	**Planted Mixed Pines**					
197	197	*0*	0	**Red Pine**					
1	1	*0*	0	**Sand, Soil**					
25	0	*0*	25	**Tamarack**			25		
34	34	*0*	0	**Upland Mixed Forest**					
11	11	*0*	0	**Upland Shrub**					
5	5	*0*	0	**Upland Spruce/Fir**					
2,888	2,161		727	Total Forested Acres	0	10	197	175	345
	75%		25%	Relative Percent					

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond	Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1		**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	97	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Buffer for N. BR. Ford River.

2	**Unavailable**	**3H: Deer Wintering Areas**	83	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	**Unavailable**	**2F: Too steep**	10	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments: Part of buffer for Half Way Creek.						
4	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	44	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Buffer for Half Way Creek.						
5	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	61	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Buffer for N. Br. Ford River.						
7	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	26	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Buffer for N. Br. Ford and McGregor Creek.						

9	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	36	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. Ford River.

10	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	41	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

11	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	25	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

12	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	26	3H: Deer Wintering Areas	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. ford River.

13	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	71	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

14	**Unavailable**	**3H: Deer Wintering Areas**	12	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

15	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	5	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. Ford River.

16	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	9	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

17	**Unavailable**	**3H: Deer Wintering Areas**	8	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

18	**Unavailable**	**3H: Deer Wintering Areas**	24	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

19	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	17	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. ford River.

20	**Unavailable**	**3H: Deer Wintering Areas**	10	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

21	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	34	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. Ford River.

22	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	11	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. Ford River.

23	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	6	Unspecified	Unspecified	Unspecified	Unspecified

Comments:
Buffer for N. Br. Ford River.

24	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	3	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

25	**Unavailable**	**3H: Deer Wintering Areas**	10	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

26	**Unavailable**	**3H: Deer Wintering Areas**	22	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

27	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	5	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

28	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	17	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

29	**Unavailable**	**3H: Deer Wintering Areas**	6	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres

Comments

Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water 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	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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	10.3	88	1-50	OPIC - FMD: This is a small stand that has tag alder scattered throughout the understory and is wet. There are ruts along the north edge of the stand immediately to the south from past harvesting. Soil in this stand is the Carbondale and Cathro muck series. Cedar and tamarack in north east corner.
3	4130 - Aspen	Poletimber Well	27.9	25	Immature	OPIC - FMD: OI Stand Year Origin was 1991. Immature stand with straight stems.
4	4110 - Sugar Maple Association	Poletimber Well	3.4	80	111-140	OPIC - FMD: OI Stand Year Origin was 1936.Large aspen mixed in, old and breaking up. Thin.
5	4110 - Sugar Maple Association	Poletimber Well	4.4	80	111-140	OPIC - FMD: OI Stand Year Origin was 1936. Large, old, breaking up aspen mixed in throughout stand. Thin.
6	4110 - Sugar Maple Association	Poletimber Well	28.5	72	111-140	OPIC - FMD: Quality northern hardwood pole stand. There is a component of white birch and some aspen mixed in on the extreme west end of this stand which is adding to the within stand diversity of short lived, light seeded species in a relatively long lived species stand. Large aspen mixed in throughout stand, it is old and breaking up. THINNING.
7	4130 - Aspen	Poletimber Well	65.6	25	Immature	OPIC - FMD: OI Stand Year Origin was 1991. Wet areas contain pockets of black ash, balsam fir and tamarack (6" DBH). Immature stand.
8	4110 - Sugar Maple Association	Poletimber Well	8.0	80	141-170	OPIC - FMD: Stand thinned at last entry. Sedge throughout stand. Candidate for thinning.
9	4110 - Sugar Maple Association	Poletimber Well	51.1	80	81-110	OPIC - FMD: See locked comments OI Stand Year Origin was 1936. A few large aspen present throughout stand. Slash is present from last cut. Paper birch in NW corner, old and breaking up.
10	4130 - Aspen	Sapling Well	75.0	25	Immature	OPIC - FMD: OI Stand Year Origin was 1991.
11	6120 - Lowland Cedar	Poletimber Well	12.1	121	141-170	OPIC - FMD: Carbondale and Cathro muck soil series. Nice stand of cedar to provide thermal cover. Extends east into adjoining compartment. Cedar stand bordered by tamarack, black spruce to the north and south. Thin band of black ash along west side of stand.
12	4130 - Aspen	Poletimber Medium	27.4	42	51-80	OPIC - FMD: Check SI at next entry. Balsam has been hit by spruce bud worm. Scattered black cherry throughout stand.
13	42320 - Upland Spruce	Poletimber Well	5.1	70	81-110	
14	6115 - Lowland Ash	Poletimber Medium	5.3	54	51-80	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4130 - Aspen	Poletimber Well	16.9	42	81-110	OPIC - FMD: OI Stand Year Origin was 1974. Aspen very straight stems and the balsam fir is infested with spruce bud worm.
17	4110 - Sugar Maple Association	Sawtimber Well	103.8	80	81-110	OPIC - FMD: This stand is to be thinned to a residual basal area of 70 - 80 ft^2 per acre, approximately 90% crown cover. This thinning will release the crowns of future crop trees and concentrate the growth on higher quality residual stems. To move toward a balanced diameter distribution, concentrate the removal of stems in the 6, 8, and 12 " diameter class. Stray away from removal of trees in the 10 and 14" dbh class. Some basswood stump sprouts present.
18	4130 - Aspen	Sapling Well	35.6	17	Immature	
19	4130 - Aspen	Sawtimber Well	4.1	57	81-110	OPIC - FMD: There is old leader damage to a good portion of the stems in this stand from procupine browse. This stand is narrow inclusion within a hardwood stand. The understory is M3 throughout most of the stand. Aspen is beginning to break, recommend harvest.
20	4130 - Aspen	Poletimber Well	23.1	70	111-140	OPIC - FMD: OI Stand Year Origin was 1973. Average aspen DBH is 10", but there are some very large aspen (16"+) mixed throughout out the stand. CUT.
22	6120 - Lowland Cedar	Sawtimber Well	7.8	113	111-140	OPIC - FMD: Cedar inclusion surrounded by tag alder. Cedar are of poor form, bent, twisted and crooked growth.
23	4110 - Sugar Maple Association	Poletimber Well	13.9	80	111-140	
24	6130 - Fir, Aspen, Maple	Poletimber Well	8.8	70	51-80	Balsam dying. SBW
25	4130 - Aspen	Poletimber Well	35.5	41	51-80	
26	4110 - Sugar Maple Association	Poletimber Well	6.4	80	111-140	
27	4130 - Aspen	Sapling Well	23.9	6	Immature	
28	6111 - Lowland Balsam Poplar	Sawtimber Well	25.8	70	81-110	
29	6120 - Lowland Cedar	Sawtimber Well	24.2	121	111-140	
30	6122 - Black Spruce	Poletimber Poor	24.0	70	1-50	
31	6120 - Lowland Cedar	Sawtimber Well	7.9	121	111-140	OPIC - FMD: OI Stand Year Origin was 1895

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	6124 - Lowland Spruce-Fir	Poletimber Well	40.8	83	51-80	
33	4134 - Aspen, Spruce/Fir	Sawtimber Well	9.6	83	81-110	Aspen falling apart. Balsam hit by spruce budworm.
34	4130 - Aspen	Poletimber Well	63.8	33	51-80	
35	4130 - Aspen	Sapling Well	37.1	27	Immature	
36	4130 - Aspen	Sapling Well	73.7	16	Immature	OPIC - FMD: Scattered mature hardwoods on the hill tops. There is a fair conifer component to the stand, scattered spruce and balsam as well as clumps of those species. Some scattered white birch regeneration.
37	4130 - Aspen	Sawtimber Well	20.1	80	81-110	Aspen falling out. Thick sugar maple regen in areas where aspen has fallen out.
38	4130 - Aspen	Sawtimber Well	71.8	75	81-110	
39	6122 - Black Spruce	Poletimber Medium	4.3	73	51-80	
40	6124 - Lowland Spruce-Fir	Sapling Medium	16.2	6	Immature	
41	4130 - Aspen	Sawtimber Well	4.1	80	81-110	Aspen breaking up.
42	6120 - Lowland Cedar	Sawtimber Well	9.9	121	111-140	
43	6124 - Lowland Spruce-Fir	Sawtimber Well	49.2	83	111-140	
44	6121 - Tamarack	Poletimber Poor	25.0	73	1-50	
46	6112 - Lowland Aspen	Sawtimber Well	7.7	80	81-110	
47	4319 - Mixed Upland Forest	Sawtimber Well	13.0	89	81-110	
48	4130 - Aspen	Sapling Well	36.8	6	Immature	T-sale: Halfway Creek Aspen. Beaver cutting aspen regen.
49	6122 - Black Spruce	Poletimber Well	43.9	96	81-110	OPIC - FMD: This stand borders the N. Branch of the Ford River and has a tributary running through it. Soils are of the Carbondale and Cathro muck mapping unit. These are very poorly drained soils having a high water table near or above the surface from fall to spring. There is leather leaf and sphagnum moss throughout this stand as well as scattered cedar pockets.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	4130 - Aspen	Poletimber Well	47.4	33	51-80	
51	4134 - Aspen, Spruce/Fir	Sawtimber Well	5.3	83	81-110	
54	42110 - Planted Red Pine	Sawtimber Well	42.7	53	111-140	Cut out aspen and fir at far northern portion of stand. Mark red pine to 120 BA in this portion as well.
56	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	36.5	65	81-110	
57	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	82.8	88	81-110	
58	42110 - Planted Red Pine	Sawtimber Well	27.8	53	141-170	This stand is a mix of red pine and 20 year old aspen. The aspen is regeneration from the previous cut.
59	4130 - Aspen	Sapling Well	15.6	6	Immature	Scattered pole sized spruce and balsam.
60	42110 - Planted Red Pine	Sawtimber Well	9.0	53	111-140	
61	4134 - Aspen, Spruce/Fir	Poletimber Well	51.2	67	81-110	
62	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	35.8	80	111-140	OPIC - FMD: See locked comments OI Stand Year Origin was 1936. Ground is spongy and wet. Large pocket of cedar that is surrounded by black spruce.
63	4130 - Aspen	Sapling Well	56.6	27	Immature	OPIC - FMD: OI Stand Year Origin was 1989. Young aspen stand, avg DBH 4" and avg ht of 25' with a balsam fir understory.
64	4110 - Sugar Maple Association	Poletimber Well	12.1	80	51-80	Scattered log sized oak.
65	4110 - Sugar Maple Association	Poletimber Well	5.1	80	171-200	OPIC - FMD: OI Stand Year Origin was 1936. Recommend thinning.
66	6120 - Lowland Cedar	Poletimber Well	9.6	121	141-170	OPIC - FMD: There is a small patch of hardwood on some higher ground on the west edge of this stand. There are ash seedlings scattered throughout this stand as well.
67	6120 - Lowland Cedar	Poletimber Medium	22.4	88	111-140	OPIC - FMD: This is a very wet stand. The understory is thick with tag alger. Soils in this stand are of the Carbondale and Cathro muck type with a seasonal high water table of near or above the surface from fall to spring. The muck has the potential to be up to 60 inches in depth. The trees in this stand are mature spruce, fir, cedar, balm, tamarack and paper birch.
68	4130 - Aspen	Sapling Well	23.3	27	Immature	OPIC - FMD: OI Stand Year Origin was 1989

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
69	4110 - Sugar Maple Association	Poletimber Well	64.1	80	111-140	OPIC - FMD: OI Stand Year Origin was 1936. Straight stems, 40' to 50'. Pockets of sugar maple regen to the south along the road.
70	4134 - Aspen, Spruce/Fir	Poletimber Well	13.1	44	81-110	Balsam fir and white spruce dense and larger to the north. Aspen is 10" to 14" to the north and 14" to 18" to the south. Larger aspen is breaking up. Sugar maple regen along southern edge. Red maple regen in gaps. Ground is wet to dry (north to south).
71	4110 - Sugar Maple Association	Poletimber Well	7.1	80	111-140	OPIC - FMD: OI Stand Year Origin was 1936. Stand is open, stems are straight and in good condition. No REGEN present.
72	6112 - Lowland Aspen	Poletimber Medium	3.5	44	51-80	OPIC - FMD: OI Stand Year Origin was 1972. Aspen is not in good condition, breaking up and falling apart. Ground is wet. Very diverse stand.
73	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	5.2	90	81-110	OPIC - FMD: Carbondale and Cathro muck soil type which has a seasonally high water table of near or above the surface from fall to spring. Mixed stand, ground is dry to marshy. Many tip overs. Cedar along NW edge.
74	4134 - Aspen, Spruce/Fir	Sapling Well	51.1	33	Immature	
75	6124 - Lowland Spruce-Fir	Poletimber Well	61.1	90	81-110	
76	4130 - Aspen	Poletimber Well	68.0	43	141-170	OPIC - FMD: The stand is a mix of scattered mature aspen and 30 year old trees. There is scattered hardwood throughout the stand which is providing for some structural diversity as is the mature aspen. In the southwest area of this stand there is a small cedar inclusion to small to map. Oversized aspen, spruce and fir throughout the stand.
77	6120 - Lowland Cedar	Sawtimber Well	25.5	121	111-140	
78	4130 - Aspen	Sapling Well	98.3	6	Immature	
79	4130 - Aspen	Sapling Well	86.2	18	Immature	
80	42110 - Planted Red Pine	Poletimber Well	54.4	53	51-80	
81	4134 - Aspen, Spruce/Fir	Sapling Well	73.2	25	Immature	
82	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	97.1	94	111-140	
85	4319 - Mixed Upland Forest	Poletimber Well	20.7	66	111-140	Clumps of log sized oak.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
86	4134 - Aspen, Spruce/Fir	Sapling Well	11.0	15	Immature	
87	42110 - Planted Red Pine	Poletimber Well	39.4	53	81-110	
88	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	39.4	66	171-200	
89	4130 - Aspen	Sapling Well	68.4	25	Immature	Scattered log sized oak.
90	42110 - Planted Red Pine	Sawtimber Well	23.4	53	81-110	
92	4130 - Aspen	Sapling Well	26.0	6	Immature	
94	4134 - Aspen, Spruce/Fir	Sawtimber Well	10.1	81	81-110	OPIC - FMD: This stand has been left as a filter strip to a tributary of the N. Branch of the Ford river and it is also provding as a transition zone to the confier swamp and upland surrounding it. It should be left intact as such.
99	6120 - Lowland Cedar	Sawtimber Well	5.9	83	111-140	
100	6120 - Lowland Cedar	Poletimber Well	4.3	83	111-140	

Report 8 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	General Comments:
2	622 - Lowland Shrub	4.6	No	
15	622 - Lowland Shrub	71.4	No	Pockets of hardwood, balsam poplar, white spruce,aspen, paper birch and cedar along the edges of this tag alder swamp.
21	622 - Lowland Shrub	8.8	No	Scattered cedar and dogwood. Very wet.
45	622 - Lowland Shrub	17.2	No	OPIC - FMD: Low area along the N. Branch Ford River. This stand does have scattered tamarack saplings beginning to appear as well as some black spruce.
53	710 - Sand, Soil	1.0	No	OPIC - FMD: This stand is a small gravel pit along the Cleveland Homestead Road.
83	622 - Lowland Shrub	10.5	No	OPIC - FMD: OI Stand Year Origin was
84	6225 - Bog	2.7	No	OPIC - FMD: OI Stand Year Origin was
95	622 - Lowland Shrub	33.5	No	OPIC - FMD: OI Stand Year Origin was
96	622 - Lowland Shrub	17.1	No	OPIC - FMD: This stand is a low area with small beaver ponds.
97	622 - Lowland Shrub	5.9	No	OPIC - FMD: OI Stand Year Origin was
400	3102 - Grass	2.4	Yes	OPIC - FMD: Some areas of this stand are bushy others are still open grass.
401	3102 - Grass	3.3	Yes	OPIC - FMD: Opening Maintenance-mechanical OI Stand Year Origin was
402	3102 - Grass	3.1	Yes	OPIC - FMD: Opening maintenance - mechanical OI Stand Year Origin was
404	320 - Upland Shrub	2.3	Yes	OPIC - FMD: Opening maintenance-mechanical OI Stand Year Origin was
406	3102 - Grass	11.0	Yes	OPIC - FMD: Opening maintenance-mechanical OI Stand Year Origin was
407	3205 - Mixed Upland Shrub	4.8	No	OPIC - FMD: Opening maintenance-mechanical OI Stand Year Origin was
408	3102 - Grass	6.1	Yes	OPIC - FMD: Opening maintenance-mechanical OI Stand Year Origin was
409	320 - Upland Shrub	4.3	Yes	

Stand	Cover Type	Acres	Managed Site	General Comments:
411	3102 - Grass	20.6	Yes	Grass area that has balsam fir and white spruce infiltrating in along the edges.
412	3102 - Grass	5.3	Yes	OPIC - FMD: Opening maintenance-mechanical OI Stand Year Origin was