



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32208

Entry Year 2018

Acreage: 1,114

County Marquette

Management Area: Yellowdog Plains

Revision Date: 2016-08-09

Stand Examiner: Rick Hill

Legal Description:

T50N-R29W, sections 4, 5, 8, 9. T51N-R29W, section 35

Identified Planning Goals:

Vegetative management in the Yellow Dog Plains management area will provide a variety of forest products; maintain or enhance wildlife habitat; protect areas with unique characteristics; and provide for forest based recreational uses.

Soil and topography:

Glacial outwash plains and drainage ways compose the land form in this compartment. The topography is level to rolling with the exception of some steeper slopes down into the drainage ways. Soils range from courser sands to loamy sands to organics in the drainage ways.

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

This compartment is mostly surrounded smaller private land holdings and camps to the north, east and south. There are also Weyerhaeuser lands bordering the compartment . State land borders the far east edge of the compartment. Land use is primarily for forest production and passive recreation.

Unique Natural Features:

A small pond is present within this compartment. The head waters of the Yellow dog river are within the vicinity of this compartment as well.

Archeological, Historical, and Cultural Features:

There is an old homestead site within the compartment locally known as Anderson homestead. This site is well known locally and includes the standing remains of a hay barn.

Special Management Designations or Considerations:

None at this time.

Watershed and Fisheries Considerations:

a small pond is present within this compartment. The head waters of the Yellow dog river are within the vicinity of this compartment as well.

Wildlife Habitat Considerations:

Compartment 208 is found within the Yellow Dog Plains Management Area; which is on an Outwash Plain in northern Marquette County. The State Forest covers about 3,800 acres and is somewhat scattered parcels. The dominant natural communities are dry northern forest. The major forest cover type is jack pine. This management area provides multiple benefits to the public including forest products, dispersed recreational activities, and habitat for fish and wildlife species. The management priority in this area is to continue to provide these multiple benefit in a sustainable manner while minimizing user conflicts. Wildlife considerations in the Yellow Dog Plains Management Area consist of managing jack pine habitat with strategies that more closely mimic natural fire disturbance regimes, to increase early successional jack pine management where appropriate while increasing stand size and striving to accommodate many species associated with xeric forest habitat is desirable. Some of the most significant wildlife management issues in the management area are: mast (hard and soft); habitat fragmentation; within stand diversity; mature forest condition; mesic conifer; large open land complexes; and early successional forest.

The following have been identified as featured species for Yellow Dog Plains Management Area: Black Bear, Gray Jay, Kirtland's Warbler, Spruce Grouse, and Upland Sandpiper.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. There is insufficient data to determine the glacial drift thickness (>150 feet within the outwash plain). The Proterozoic Michigamme Formation subcrops below the glacial drift. The Michigamme does not have a current economic use. Gravel pits are not located in the

area, but the little evidence that exists suggests there is good gravel potential. Eagle Mine is less than three miles to the east and the majority of the state minerals in the compartment are currently leased for metallic mineral exploration and development. There is no economic oil and gas production in the UP.

Vehicle Access:

There is a well developed road system on the state owned land in the area. some temporary roads may be needed to harvest some of the stands currently prescribed in the compartment.

Survey Needs:

Some corners may be needed for planed timber sales. Survey requests will be submitted after treatments are approved.

Recreational Facilities and Opportunities:

There is no developed recreation in this compartment. The heaviest public use is for hunting and trapping and berry picking. This compartment also has a snowmobile trail passing though it. The area also receives ORV traffic during the snow free months

Fire Protection:

This compartment is jack pine plans that are somewhat remote. Camps and mining use complicate any firefighting efforts that would be needed here.

Additional Compartment Information:

The following reports from the Inventory are attached:

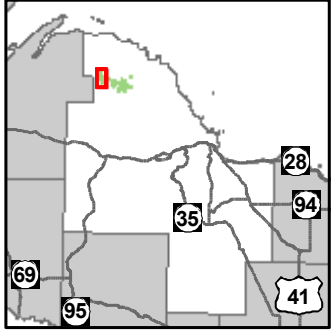
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

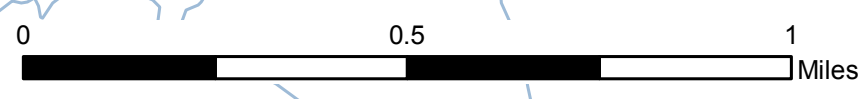
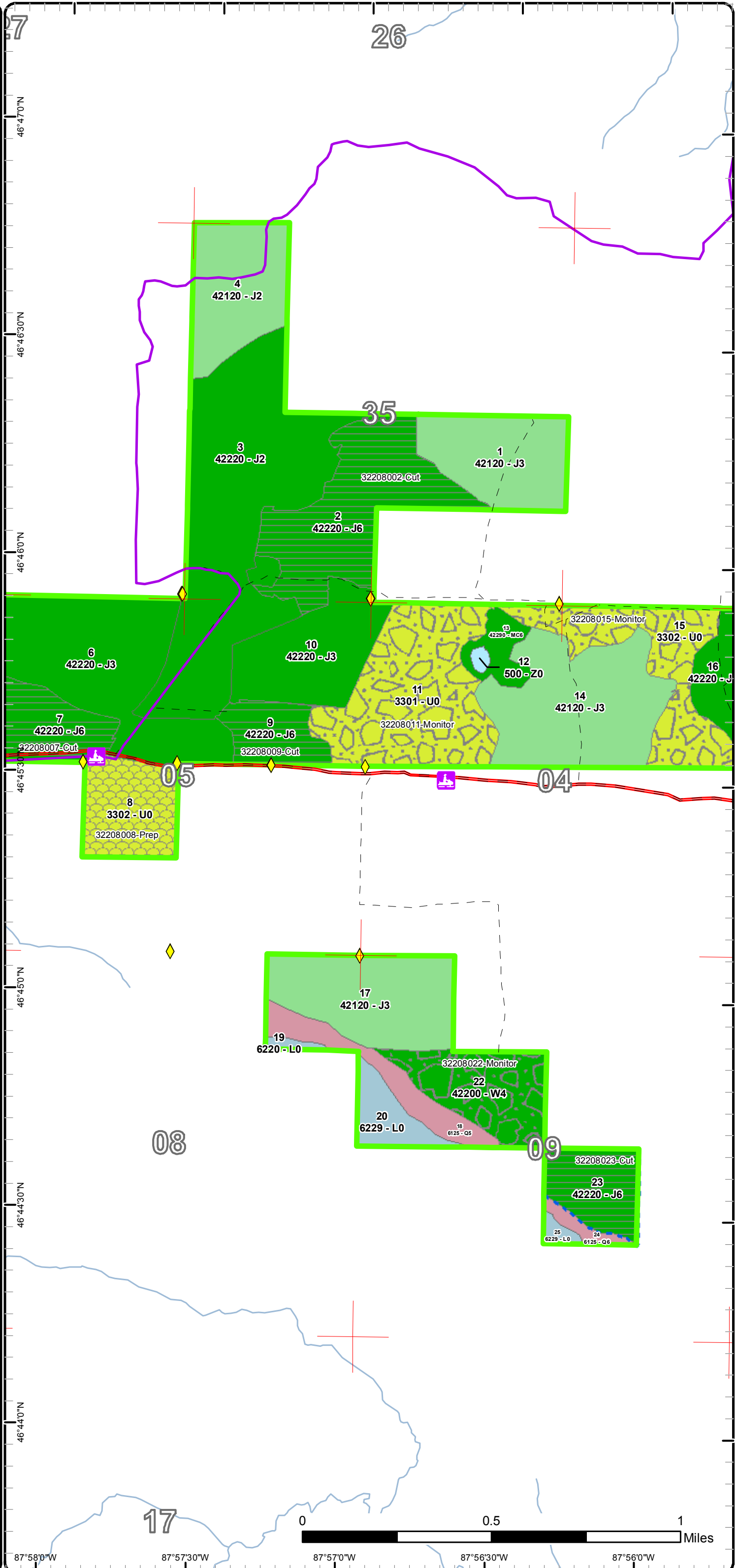
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 208
 T50N, R29W, Sec: 04, 05, 08, 09
 T51N, R29W, Sec: 35
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Yellowdog Plains
 YOE: 2018
 Acres: 1113.8 GIS Calculated
 Examiner: Rick Hill
 Map Revised: 2/8/2017
 Map Phase: Post-Review



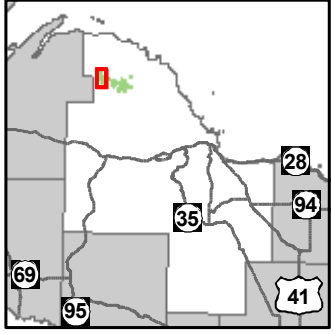
- Miris Corners
- ◆ Survey Grade GPS Corners
- Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Poor Dirt Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Site Prep
- Clearcut (w/Reserves)
- Regeneration Survey
- 421 - Planted Pines
- 422 - Natural Pines
- 612 - Lowland Coniferous Forest
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub



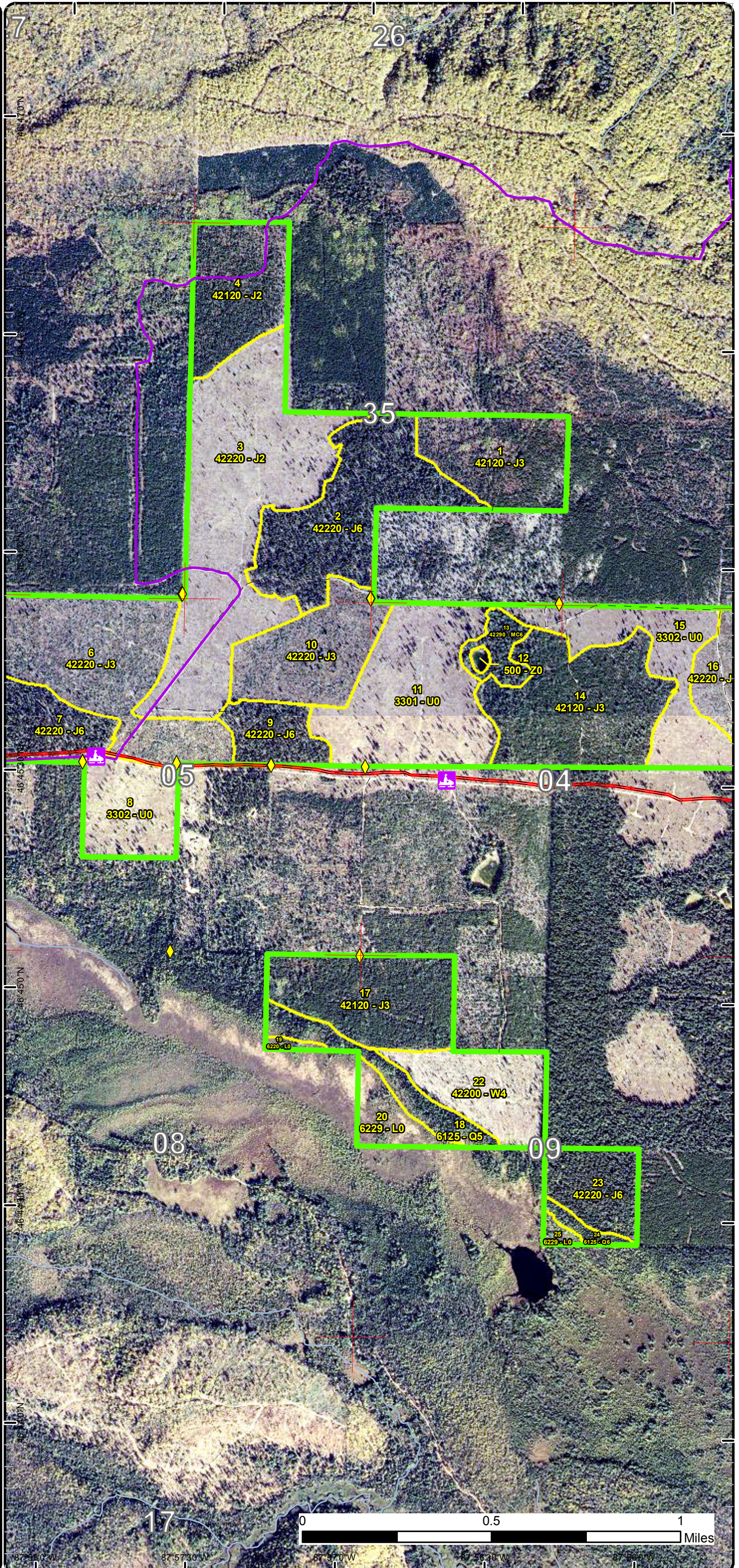
87°58'0"W 87°57'30"W 87°57'0"W 87°56'30"W 87°56'0"W

Stand Boundary Map

Compartment: 208
 T50N, R29W, Sec: 04, 05, 08, 09
 T51N, R29W, Sec: 35
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Yellowdog Plains
 YOE: 2018
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 Examiner: Rick Hill
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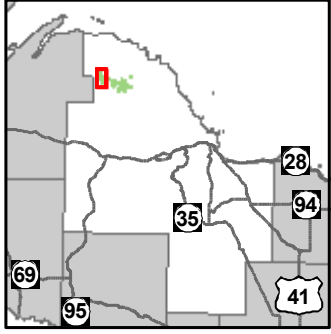
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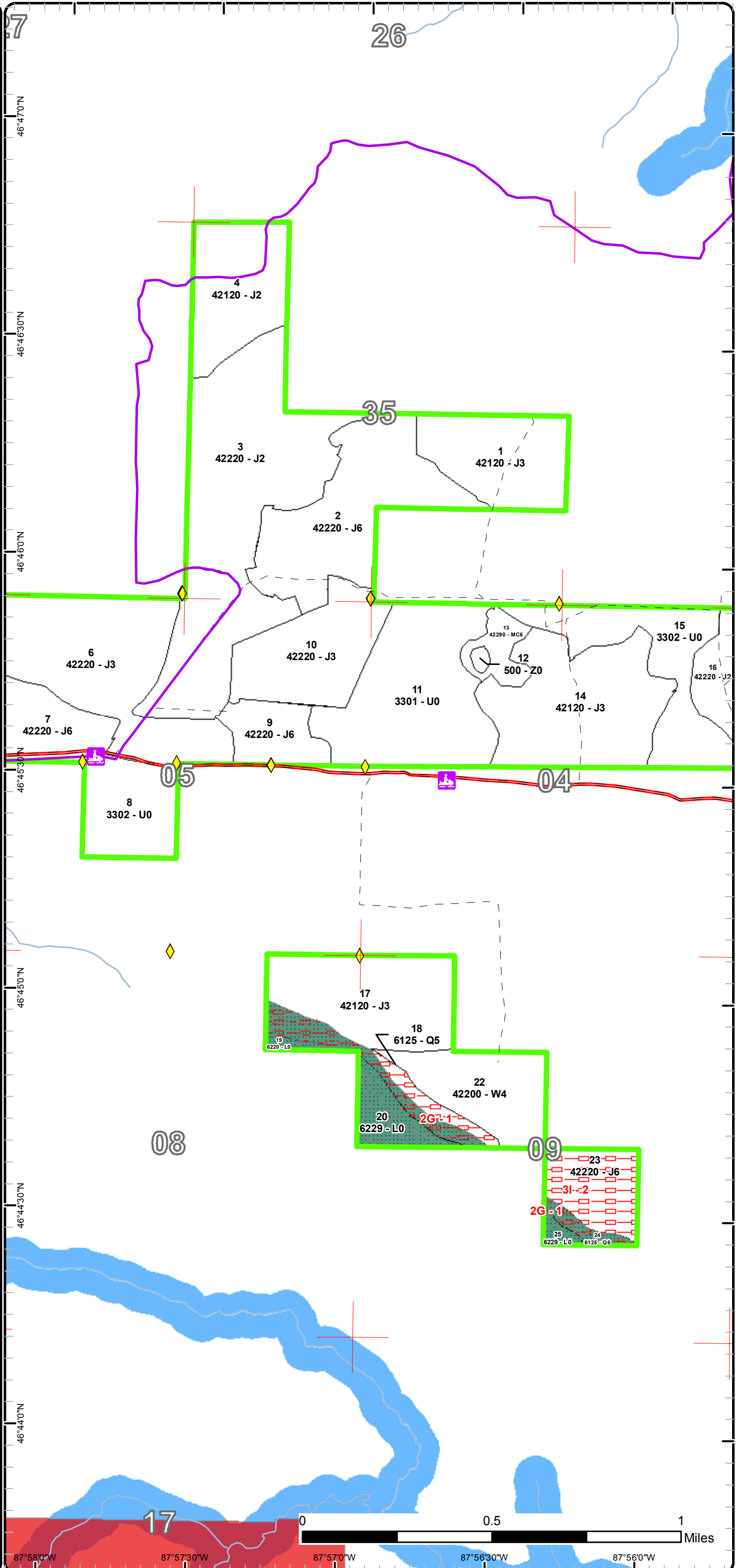
87°58'00"W 87°57'30"W 87°57'00"W 87°56'30"W 87°56'00"W

Special Conservation Areas & Site Conditions Map

Compartment: 208
 T50N, R29W, Sec: 04, 05, 08, 09
 T51N, R29W, Sec: 35
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Yellowdog Plains
 YOE: 2018
 Acres: 1113.8 GIS Calculated
 Examiner: Rick Hill
 Map Revised: 2/8/2017
 Map Phase: Post-Review



- Miris Corners
- ◆ Survey Grade GPS Corners
- Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Poor Dirt Roads
- Rivers
- Compartment Boundary
- SCA Proposed
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 3I: Historical / archeological (add locked comments)
- Stand Boundaries
- Ecological Reference Areas
- Wild & Scenic Streams (USFS Lands)
- Cold Water Streams
- High Priority Trout Stream Buffer
- Habitat Corridor



Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit
Rick Hill : Examiner

Compartment 208 Year of Entry 2018



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
Jack Pine	0	163	187	267	0	0	0	90	93	0	0	0	0	0	0	0	0	0	800
Low-Density Trees	196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196
Lowland Conifers	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	32
Lowland Shrub	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
White Pine	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	46
Total	223	163	187	267	0	0	0	90	125	60	0	0	0	0	0	0	0	0	1115



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 208

Total Compartment Acres: 1,114

Commercial Harvest - 62
 Harvests with Site Condition - 118
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Jack Pine	180	0	0	0	0	0	0	0	0	180
Total	180	0	0	0	0	0	0	0	0	180

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	180	41	0	0	0	202	0	0	0	422
Next Step	0	267	274	31	0	422	510	0	0	1503
Total	180	308	274	31	0	422	712	0	0	1926



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	32208002-Cut	86.7	42220 - Natural Jack Pine	Poletimber Well	65	51-80	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition: Survey Needed**

Prescription Clearcut stand , Leave all oak, white pine, and red pine if present. To protect Kirtland Warbler during the nesting and fledging period no operations will be allowed from 6/1-7/15. Retention Will be a 3-4 small clumps placed around the edges of the stand using red line totaling about an acre.

Next Step SitePrep, Scarification; Pesticide, Aerial; Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Jack pine, spruce
Regen:

Other An additional area will left along the edge of the stand to achieve the minimum retention for this stand.
Comment:

To protect nesting neo-tropical migrant birds and any potential Kirtland warblers during the nesting and fledging period work should be restricted from 6/1 – 7/15. Retention should include a few clumps of 15+ trees

Proposed Start Date: 10/01/2017

7	32208007-Cut	36.5	42220 - Natural Jack Pine	Poletimber Well	74	51-80	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clearcut stand, leave red pine, oak and white pine if present. To protect Kirtland Warbler during the nesting and fledging period no operations will be allowed from 6/1-7/15. Leave 3-5 patches of jack pine totaling 1.5 acres using the sale boundary for retention.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate); Pesticide, Aerial
Treatments:

Acceptable Jack pine, spruce
Regen:

Other To protect nesting neo-tropical migrant birds and any potential Kirtland warblers during the nesting and fledging period work should be restricted from 6/1 – 7/15. Retention should include a few clumps of 15+ trees
Comment:

Proposed Start Date: 10/01/2017

8	32208008- Prep	40.7	3302 - Low Density Conifer Trees	Nonstocked	0	Unspec ified	SitePrep	Trenching	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Trench per tms spec. (C32-767)
Specs:

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Pesticide, Aerial; SitePrep, Trenching
Treatments:

Acceptable jack pine, spruce, white pine, red pine.
Regen:

Other
Comment:

Proposed Start Date: 10/21/2015

9	32208009-Cut	25.6	42220 - Natural Jack Pine	Poletimber Well	74	51-80	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clearcut stand, leave red pine, oak and white pine if present. To protect Kirtland Warbler during the nesting and fledging period no operations will be allowed from 6/1-7/15. Leave 3-5 patches of jack pine totaling 1 acre using the sale boundary for retention.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate); Pesticide, Aerial
Treatments:

Acceptable Jack pine, spruce
Regen:

Other To protect nesting neo-tropical migrant birds and any potential Kirtland warblers during the nesting and fledging period work should be restricted from 6/1 – 7/15. Retention should include a few clumps of 15+ trees
Comment:

Proposed Start Date: 10/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
11	32208011- Monitor	96.1	3301 - Low Density Deciduous Trees	Nonstocked	0	Unspec ified	Monitoring	Artificial Regen(1yr)	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Plant per TMS spec. C32-752

Specs:

Next Step ; Pesticide, Skidder/Mechanical; Planting, Replant; Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Jack pine, red pine, spruce

Regen:

Other Percent to Treat = 100%

Comment:

Proposed Start Date: 04/01/2017

15	32208015- Monitor	59.5	3302 - Low Density Conifer Trees	Nonstocked	0	Unspec ified	Monitoring	Artificial Regen(1yr)	42220 - Natural Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Count Per TMS spec. 32-752

Specs:

Next Step Planting, Replant; ; Pesticide, Skidder/Mechanical; Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable jack pine, red pine, spruce

Regen:

Other Percent to Treat = 100%

Comment:

Proposed Start Date: 04/01/2007

22	32208022- Monitor	46.4	42200 - Natural White Pine	Poletimber Poor	81	Unspec ified	Monitoring	Natural Regen (Intermediate)	4222 - Natural Jack Pine	Even-Aged	Completed - Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Check regen per WI and TMS spec c32-769.

Specs:

Next Step Planting, Initial Plant; SitePrep, Trenching; Pesticide, Aerial; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/22/2015

23	32208023-Cut	30.9	42220 - Natural Jack Pine	Poletimber Well	78	51-80	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition: Historical/Archaeological**

Prescription Cut all trees except do not cut red pine or white pine. To protect Kirtland Warbler during the nesting and fledging period no operations will be

Specs: allowed from 6/1-7/15.

Next Step SitePrep, Scarification; Seeding, Machine Seed; Monitoring, Natural Regen (Intermediate); Planting, Initial Plant; Pesticide,

Treatments: Skidder/Mechanical

Acceptable Jack pine, spruce, fir and mixed conifer.

Regen:

Other Retention will be a buffer along stand 24 not to exceed 10% of the stand area.

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 422.4**

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rick Hill : Examiner

Compartment: 208
Year of Entry: 2018

Availability for Management

Total	Acres	Acres Avail	Acres
Acres	Available	<i>With Condition</i>	Not Available

Dominant Site Conditions

2I 2G 3I

Total	Acres	Acres Avail	Acres	Dominant Site Conditions	2I	2G	3I
Acres	Available	<i>With Condition</i>	Not Available				
799	681	87	31	Jack Pine	87		31
196	196	0	0	Low-Density Trees			
32	0	0	32	Lowland Conifers		32	
25	25	0	0	Lowland Shrub			
14	14	0	0	Natural Mixed Pines			
2	2	0	0	Water			
46	46	0	0	White Pine			
1,114	964	87	63	Total Forested Acres	87	32	31
	87%	8%	6%	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	2G: Too wet (sensitive soils, does not include access issues)	32	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	3I: Historical / archeological (add locked comments)	31	2I: Survey needed	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	2I: Survey needed	87	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	Habitat Areas or Corridors	Habitat Corridor	SCA Removal	9
Comments	Habitat Areas or Corridors	Habitat Corridor	SCA Removal	39
Unspecified Comments SCA = Wet willow marsh-unique lowland wildlife habitat..	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	3
Unspecified Comments SCA = Wet willow marsh-unique lowland wildlife habitat..	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	4
Unspecified Comments SCA= Leave as a buffer between marsh and harvest area.	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	5
Unspecified Comments SCA= Leave as a buffer between marsh and harvest area.	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	10
Unspecified Comments SCA = Wet willow marsh-unique lowland wildlife habitat..	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	12
Unspecified Comments SCA= Leave as a buffer between marsh and harvest area.	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	14



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
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Report 7 – Forested Stands

Compartment: 208
Year of Entry: 2018



Stand	Gwinn Mgt. Unit		Report 7 – Forested Stands			Compartment: 208 Year of Entry: 2018
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42120 - Planted Jack Pine	Sapling Well	54.2	24	Immature	This stand was trenched and planted in 1993.
2	42220 - Natural Jack Pine	Poletimber Well	90.3	65	51-80	Multi-aged stand ranging from overmature to immature with a ratio of about 50\50.
3	42220 - Natural Jack Pine	Sapling Medium	163.0	6	Immature	This stand was harvested in 2011, TS#101-08-01 Anderson Homestead Sale. Scarified by anchor chaining post sale in 2011 at a cost of \$11016.00. Regeneration count to come in 2016. Count Results show 95.4% of stand is well stocked at 1244 trees per acre this unit is being closed.
4	42120 - Planted Jack Pine	Sapling Medium	54.7	23	Immature	Stand was cut in 1990, it was planted 1994.
6	42220 - Natural Jack Pine	Sapling Well	102.4	17	Immature	Harvested in 2000: TS#23-98-01. Regeneration has filled in over past 15 years there are some sparse area but over all the stand is well stocked.
7	42220 - Natural Jack Pine	Poletimber Well	36.5	74	51-80	
9	42220 - Natural Jack Pine	Poletimber Well	25.6	74	51-80	Multi-aged stand due to past harvesting practices. Ranges from overmature to mature to immature.
10	42220 - Natural Jack Pine	Sapling Well	57.2	17	Immature	Cut in 2000, TS#24-98-01.
13	42290 - Natural Mixed Pine	Poletimber Well	13.5	81	51-80	CUT IN 92 PERMIT #23-88. TRENCHED '92. PLANTED W/RED PINE SPRING 93. Natural jack and white pine regeneration rivals the planted red pine. Stand is roughly 50\50 white and red pine sawtimber.
14	42120 - Planted Jack Pine	Sapling Well	90.9	24	Immature	CUT 92 PERMIT #23-88.TRENCHED FALL 92.PLANTED SPRING OF 93.
16	42220 - Natural Jack Pine	Sapling Medium	26.6	17	Immature	Cut in 2000, TS#24-98-01. Planted with seed fall 2000.
17	42120 - Planted Jack Pine	Sapling Well	66.6	27	Immature	CUT IN 88-89 PERMIT #24-88.PLANTED 5/90.
18	6125 - Lowland Black Spruce, Jack Pine	Poletimber Medium	26.3	73	1-50	
22	42200 - Natural White Pine	Poletimber Poor	46.4	81	Unspecified	Stand was harvested in 2011 TS#104-08-01 fetching yellow dog sale. under FTP C32-769.
23	42220 - Natural Jack Pine	Poletimber Well	30.9	78	51-80	Jack pine here is starting to decline. A harvest is recommended here before the stand losses more volume. The remains of the Bentley trial pass though this stand, archeological importance and protection need to be decided before the harvest can be prepared. Access this stand from plumb creek lands to the west.

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Gwinn Mgt. Unit

Report 7 – Forested Stands

Compartment: 208
Year of Entry: 2018



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	5.9	73	51-80	



Stand	Cover Type	Acres	Managed Site	General Comments:
8	3302 - Low Density Conifer Trees	40.7		Harvested in 2011: TS#101-08-01. Scarified using anchor chains post sale(c32-767). Pending regeneration survey results trench and plant.
11	3301 - Low Density Deciduous Tree	96.1		Harvested in 2010, TS#102-08-01 Bentley Pond Sale. Under FTP C32-752, for jack pine regeneration. Site was scarified in 2011 this treatment failed in the summer of 2015 this site was trenched. Stand was planted by Superior Forestry Services in spring of 2016 at a rate of 1000 jp/ac. Planting costs where \$29940.00.
12	500 - Water	1.7	No	a small pond.
15	3302 - Low Density Conifer Trees	59.5	No	Harvested in 2010, TS#102-08-01 Bentley Pond sale. FTP# C32-752, Scarified in 2011 by Holli FP, at a cost of \$8532.00. Stand was planted by Superior Forestry Services in spring of 2016 at a rate of 1000 jp/ac.
19	6220 - Alder/willow	2.8	No	
20	6229 - Mixed lowland shrub	18.6	No	
25	6229 - Mixed lowland shrub	3.5	No	