



# Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32300

Entry Year 2017

Acreage: 603

County Marquette

Management Area: Voelker Plains

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**Revision Date:** 2015-07-31

**Stand Examiner:** Rick Hill

**Legal Description:**

T46N-R28W, sections 34, 35.

**Identified Planning Goals:**

Vegetative management in the Voelker Plains management area (MA) (Figure 4.34.1) 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 comprises the bulk of this compartment. Topography is mostly level to slightly rolling. Soils are well to excessively drained sands to loamy sands

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

This compartment is part of a large block of State ownership interspersed with non-industrial private ownerships. Land use is primarily for forest production and passive recreation with some parcels being residential.

**Unique Natural Features:**

Kirtland's warbler are present in this area.

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

None known at this time.

**Special Management Designations or Considerations:**

None known

**Watershed and Fisheries Considerations:**

**Wildlife Habitat Considerations:**

Compartment 300 is found within the Voelker Plains Management Area; on an Outwash Plain in central Marquette County. The dominant Natural Communities are dry northern forests and dry mesic northern forests. Wildlife considerations in the Voelker Plains management area consist of: managing jack pine habitat with strategies that more closely mimic natural fire disturbance regimes, and increasing stand size and striving to accommodate many species associated with xeric forest habitat is desirable. Wildlife management issues in the management area are: early successional forest conditions (associated with alder, riparian zones, or forested wetlands), mast (hard and soft); habitat fragmentation, early successional forest; and large open land complexes.

The following have been identified as featured species for Voelker Plains Management Area: American woodcock, beaver, black bear, and Kirtland's warbler.

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

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 50 and 100 feet. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone. A gravel pit is located one mile to the west and there could be some potential. The abandoned Republic iron mine is located nine miles to the northwest. This compartment has not been leased for metallic exploration recently, but active leases are located one mile to the northwest. There is no economic oil and gas production in the UP.

**Vehicle Access:**

Most of the compartment is accessible through a system of two tracks.

**Survey Needs:**

None at this time.

**Recreational Facilities and Opportunities:**

Dispersed recreation such as hunting, trapping and fishing are popular in this area.

**Fire Protection:**

This compartment is located within the 581 zone, fire response will be in accordance to to preset fire plans. Jack pine is the most prominent tree in the area making this area high risk for large fires. there are also a lot of camps and homes in the area making wildland urban interface a large issue.

**Additional Compartment Information:**

In 1987 this compartment was split out from compartment 228. The change was made to enhance age and size class diversity of the jack pine type on the Unit.

**The following reports from the Inventory are attached:**

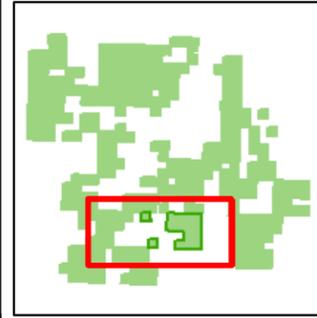
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

**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**

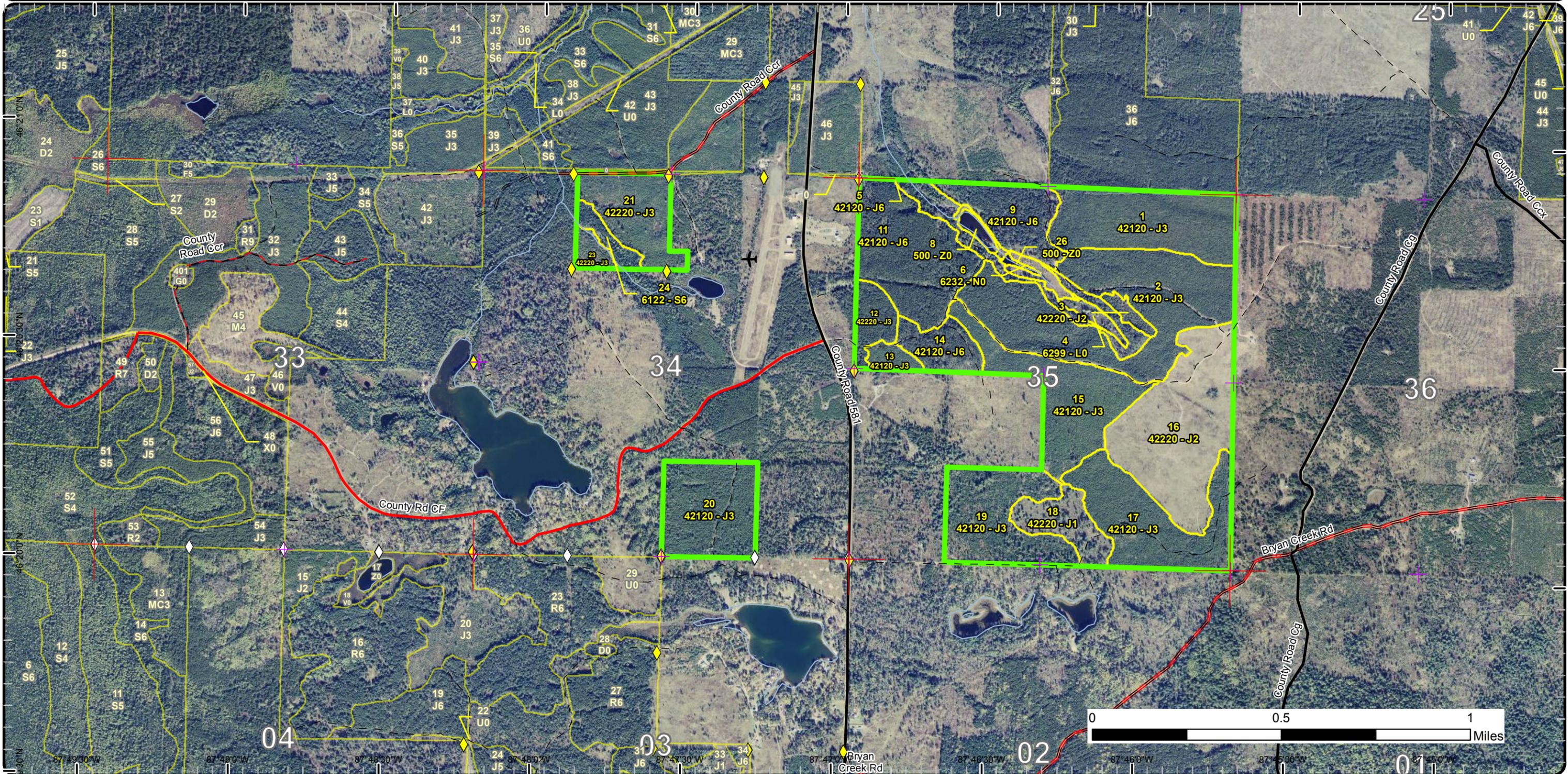


# Stand Boundary Map



Compartment: 300  
 T46N,R28W, Sec. 34, 35  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Voelker Plains  
 YOE: 2017  
 Acres: 603 GIS Calculated  
 Examiner: Rick Hill  
 Map Revised: 7/1/2015  
 Map Phase: Pre-Review

- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- = Gravel Roads
- - Poor Dirt Roads
- County Poor Dirt Roads
- ✈ Airport
- Rivers
- Stand Boundaries
- Forest Covertype
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 612 - Lowland Coniferous Forest
- Non-Forest Covertype
  - 500 - Water
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland

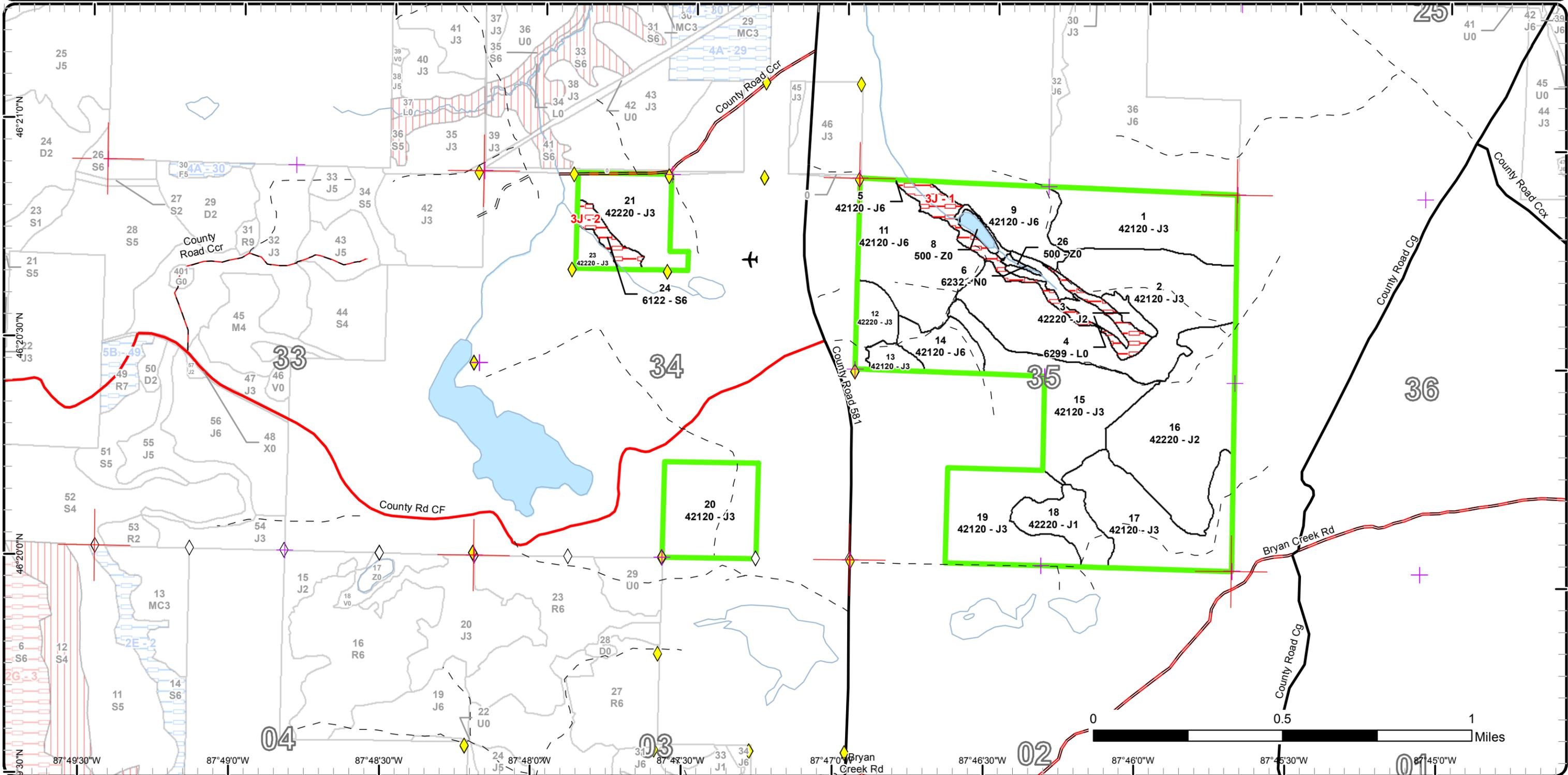


# Special Conservation Areas & Site Conditions Map

Compartment: 300  
 T46N,R28W, Sec. 34, 35  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Voelker Plains  
 YOE: 2017  
 Acres: 603 GIS Calculated  
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 Map Revised: 7/1/2015  
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- ✚ Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- ✈ Airport
- Rivers
- ▭ Stand Boundaries
- Site Condition
- Unavailable
- Unavailable Factors
- 3J: Water quality / BMPs (stream, river, or lake)
- Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes



# Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit  
Rick Hill : Examiner

Compartment 300 Year of Entry 2017



## 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	91	181	186	11	78	15	0	0	20	0	0	0	0	0	0	0	0	582
Lowland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Marsh	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
<b>Total</b>	<b>14</b>	<b>91</b>	<b>181</b>	<b>186</b>	<b>11</b>	<b>78</b>	<b>15</b>	<b>0</b>	<b>7</b>	<b>20</b>	<b>0</b>	<b>603</b>							



## Report 2 – Treatment Summary

Gwinn Mgt. Unit  
Year of Entry: 2017

Acres of Harvest

Compartment 300  
Total Compartment Acres: 603

Commercial Harvest - 15  
Harvests with Site Condition - 0  
Next Step Harvest - 18  
Habitat Cut - 0

### Cover Type by Harvest Method

		Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Jack Pine		15	0	0	0	0	0	0	0	0	15
	<b>Total</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>

### Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		15	4	0	0	0	91	0	0	0	110
Next Step		18	52	92	38	0	92	19	0	0	312
	<b>Total</b>	<b>34</b>	<b>56</b>	<b>92</b>	<b>38</b>	<b>0</b>	<b>92</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>422</b>



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
3	32300003-Prep	3.8	42220 - Natural Jack Pine	Sapling Medium	23	Immature	SitePrep	Trenching	4222 - Natural Jack Pine	Even-Aged	Proposal

**Habitat Cut: Yes****Site Condition:**

Prescription Old opening that is filling in, trench and seed to fill in stand.

Specs:

Next Step Seeding, Machine Seed; Monitoring, Natural Regen (Intermediate); Pesticide, Skidder/Mechanical; Planting, Interplant Treatments:

Acceptable jack pine

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

14	32300014-Cut	15.5	42120 - Planted Jack Pine	Poletimber Well	55	111-140	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clearcut all species, except do not cut red pine, white pine or oak if present. Use stump height spec to allow for easier planting operations.

Specs:

Next Step SitePrep, Trenching; Seeding, Machine Seed; Monitoring, Natural Regen (Intermediate); Pesticide, Skidder/Mechanical; Planting, Interplant Treatments:

Acceptable Acceptable regeneration is red pine, jack pine and spruce.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

16	32300016-Monitor	72.7	42220 - Natural Jack Pine	Sapling Medium	3	Immature	Monitoring	Natural Regen (Intermediate)	4222 - Natural Jack Pine	Even-Aged	Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Under FTP# 32-742 (Regen check in 2015)

Specs:

Next Step Planting, Replant; Pesticide, Skidder/Mechanical

Treatments:

Acceptable Jack pine, red pine, and spruce

Regen:

Other See comments regarding 2015 regen survey under stand info/comments. Old next step comments:

Comment:

Proposed Start Date: 3 /11/2015

18	32300018-Monitor	18.5	42220 - Natural Jack Pine	Sapling Poor	3	Immature	Monitoring	Natural Regen (Intermediate)	4222 - Natural Jack Pine	Even-Aged	Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Under FTP#32-742 (count in summer of 2015)

Specs: (05/2015 RFT): Site was not actually trenched and seeded. Regen survey indicates about 106 JP seedlings per acres, plus 17 RP and 58 WP volunteers per acre. RE-SURVEY IN 2017 -If sufficient natural regen is not present by then, consider starting this stand over via overstory removal, followed by herbiciding to reduce competition, then trench and seed jack pine.

Next Step SitePrep, Other - Specify; SitePrep, Trenching; Seeding, Machine Seed

Treatments:

Acceptable Jack pine, red pine, spruce

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 3 /11/2015

**Total Treatment Acreage Proposed: 110.4**

## Report 5 – Site Conditions

Gwinn Mgt. Unit  
Rick Hill : Examiner

Compartment: 300  
Year of Entry: 2017

### Dominant Site Conditions

3J

Jack Pine	20
Lowland Shrub	
Lowland Spruce/Fir	7
Marsh	
Water	
Total Forested Acres	26
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)	20	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

Mgt. Unit

Compartment: #Type!

Year of Entry:



**Report 6 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS**

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

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SCA Name	SCA Category	Detail Type	Recommendation	Acres
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**Comments**

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### Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42120 - Planted Jack Pine	Sapling Well	50.6	19	Immature	CUT IN 94 PERMIT #5-94. PLANTED 5/96. Fully stocked and growing well.
2	42120 - Planted Jack Pine	Sapling Well	91.1	23	Immature	CUT IN 90 PERMIT #20-87.TRENCHED IN 90.WEST PART PLANTED 5/91. EAST PART PLANTED 5/92.
3	42220 - Natural Jack Pine	Sapling Medium	3.8	23	Immature	This stand was a constructed wildlife opening that has seeded into jackpine. Seedling sizes range from 1 to 6 feet tall. Stocking is around 400 trees per acre.
5	42120 - Planted Jack Pine	Poletimber Well	19.8	80	81-110	This stand is a buffer for the spring creek and associated beaver ponds occurring in this draw. Habitat ranges from well stocked pine uplands to pine/spruce swamp.
9	42120 - Planted Jack Pine	Poletimber Well	25.9	45	81-110	Machine planted mixed with natural regeneration. Significant areas planted to red pine. Pockets of remnant older jack pine occur as inclusions.
11	42120 - Planted Jack Pine	Poletimber Well	52.1	45	81-110	Machine planted. Some areas planted to red pine. Pockets of older remnant jack pine occur as inclusions.
12	42220 - Natural Jack Pine	Sapling Well	11.5	35	Unspecified	STAND RESULTED FROM A WILDFIRE SPRING 1980, NATURAL SEEDING. A couple of rows of red pine along the west edge of this stand were planted when stand 13 was treated.
13	42120 - Planted Jack Pine	Sapling Well	5.6	16	Immature	Cut in 1999, TS#12-97-01. Part of this stand along south line planted to red pine and showing evidence of frost damage. Approximately 1700 jack pine seedlings per acre in the stand. Where the red pine was planted there are 400 red pine and 1700 jack pine seedlings per acre.
14	42120 - Planted Jack Pine	Poletimber Well	15.5	55	111-140	Some remnant old jack pine dying out.
15	42120 - Planted Jack Pine	Sapling Well	46.3	16	Immature	Cut in 1999, TS#12-97-01. Planted to jack pine-C31-400. As of 2005 seedlings are 3 to 4 feet tall.
16	42220 - Natural Jack Pine	Sapling Medium	72.7	3	Immature	Stand under FTP #32- 742, stand was trenched and seeded in fall of 2012 by DNR resources, Count to where done in summer of 2014. Results from that count are 168T/A and 513V/A. Stand will be recounted in summer of 2015. (5-15-15, RF Tylka): Regeneration survey now indicates that the avg JP trees/acre = 801, but only 59.7 % of the plots were fully stocked to 600 trees/acre. An additional 9% were stocked to 500 trees/acre, but this still only accounts for about 2/3 of the stand area. The remaining third of the stand was understocked, generally averaging about 250 planted and volunteer JP seedlings per acre. As a result, this stand will be kept in monitoring status, and should be surveyed again during the 2017 YOY; a decision on whether to initiate supplemental planting will be made at that time.
17	42120 - Planted Jack Pine	Sapling Well	50.7	23	Immature	COMM CUT 1991 BY HOLLI, PERMIT #11-88. PLANTED SPRING 1992

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Gwinn Mgt. Unit

## Report 8 – Forested Stands

Compartment: 300  
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	42220 - Natural Jack Pine	Sapling Poor	18.5	3	Immature	Harvested in 2010: TS#107-07-01. White pine, red pine, and a few hardwoods retained. Stand under FTP #32- 742, stand was trenched and seeded in fall of 2012 by DNR resources, Count to was done in summer of 2014. stand to be recounted in 2015. (05/2015 RFT): Site was not actually trenched and seeded. Regen survey indicates about 106 JP seedlings per acres, plus 17 RP and 58 WP volunteers per acre. RE-SURVEY IN 2017 -If sufficient natural regen is not present by then, consider starting this stand over via overstory removal, followed by herbiciding to reduce competition, then trench and seed jack pine.
19	42120 - Planted Jack Pine	Sapling Well	43.0	16	Immature	Was comm.cut in Jan/Feb. 1999 by Holli Forest Products, permit # 11-97, "Lake Francoeur Sale". Planted to red pine-C31-390. Approximately 800 seedlings per acre, 1/2 red pine and 1/2 jack pine. Some of the red pine showing signs of frost damage.
20	42120 - Planted Jack Pine	Sapling Well	40.1	25	Immature	CUT IN 88-89.SPRAYED & TRENCHED 89.PLANTED IN 1990.
21	42220 - Natural Jack Pine	Sapling Well	29.5	16	Immature	Was comm. cut during Dec.1998 thru Jan. 1999 by Holli Forest Products, permit # 16-97, "Co.Rd. CCR Jack Pine". FTP for disk trenching and seeding is C31-388.
23	42220 - Natural Jack Pine	Sapling Well	5.4	16	Immature	Was comm. cut as part of sale # 16-97, cut by Holli Forest Products in Dec.1998/ Jan.1999, "Co.Rd.CCR Jack Pine". Left to regenerate naturally. Stocking ranges from good to poor in spots. Average 700 seedlings per acre. Some remnant white birch not included in sale are experiencing high mortality.
24	6122 - Black Spruce	Poletimber Well	6.6	70	Unspecified	



Stand	Cover Type	Acres	Managed Site	General Comments:
4	6299 - Lowland Shrub (OI)	4.2	No	
6	6232 - Wet Prairie	5.8	No	This stand is a buffer for the spring creek and associated beaver ponds occurring in this draw.
8	500 - Water	3.1	No	
26	500 - Water	1.0	No	