

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32254 Entry Year 2019

County Marguette

Management Area: Voelker Plains

Acreage: 1,246

Revision Date: 2017-08-08 Stand Examiner: Rick Hill

Legal Description:

T46N-R28W, sections 1, 2, 11, 12, and 13.

Identified Planning Goals:

Management in the Voelker 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:

This area is characterized by sandy outwash plains with flat to rolling topography. Soils are sandy loams and silt loams in the uplands and mucks in the lowlands.

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

This compartment is mostly surrounded by non-industrial private ownerships. Land use is primarily for forest production and passive recreation.

Unique Natural Features:

The north end of the black river falls fire burned here in 2009 creating a large area of open land that is being reforested.

Archeological, Historical, and Cultural Features:

There are no known sites within the compartment.

Special Management Designations or Considerations:

Riparian management zones along the Escanaba river are managed to maintain water quality. treatments in these areas may be modified to protect the watershed.

Watershed and Fisheries Considerations:

Two sections of this compartment contain the Middle Branch of the Escanaba River. The Middle Branch of the Escanaba River is designated a Type 1 trout stream greater than 50' width. For all riparian areas, Best Management Practices should be followed.

Wildlife Habitat Considerations:

Compartment 254 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

Sections 1-2 & 11-13, T46N R28W, Marguette County

An active sand/gravel pit is located in Section 2, and there is potential for additional sand and gravel within the compartment. Bedrock granite and gneiss may be near the surface in places and could be used for dimension stone. Abandoned iron mines are located just over three miles to the north. There is no known iron ore potential within the compartment. There may be potential for other metallic minerals. There is no history of leasing within the compartment, but there has been leasing in the past to the southwest. There is no economic oil and gas production in the UP.

Vehicle Access:

Access to this compartment is good with county road Cg, county road Ch, and county road 581 accessing the majority of

the compartment. Internally the compartment has a well developed network of open and closed two tracks.

Survey Needs:

Any needed surveys for timber sales or trespass issues will be submitted as needed.

Recreational Facilities and Opportunities:

This compartment is mostly surrounded by non-industrial private ownerships. Land use is primarily for forest production and passive recreation.

Fire Protection:

This compartment is located within the 581 Zone dispatch area dictating specific response due to hazardous fuels. There is a history of large fires in the area including the black river falls fire in 2009. There are a number of residences in the area creating a wildland urban interface issue here increasing fire complexity.

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

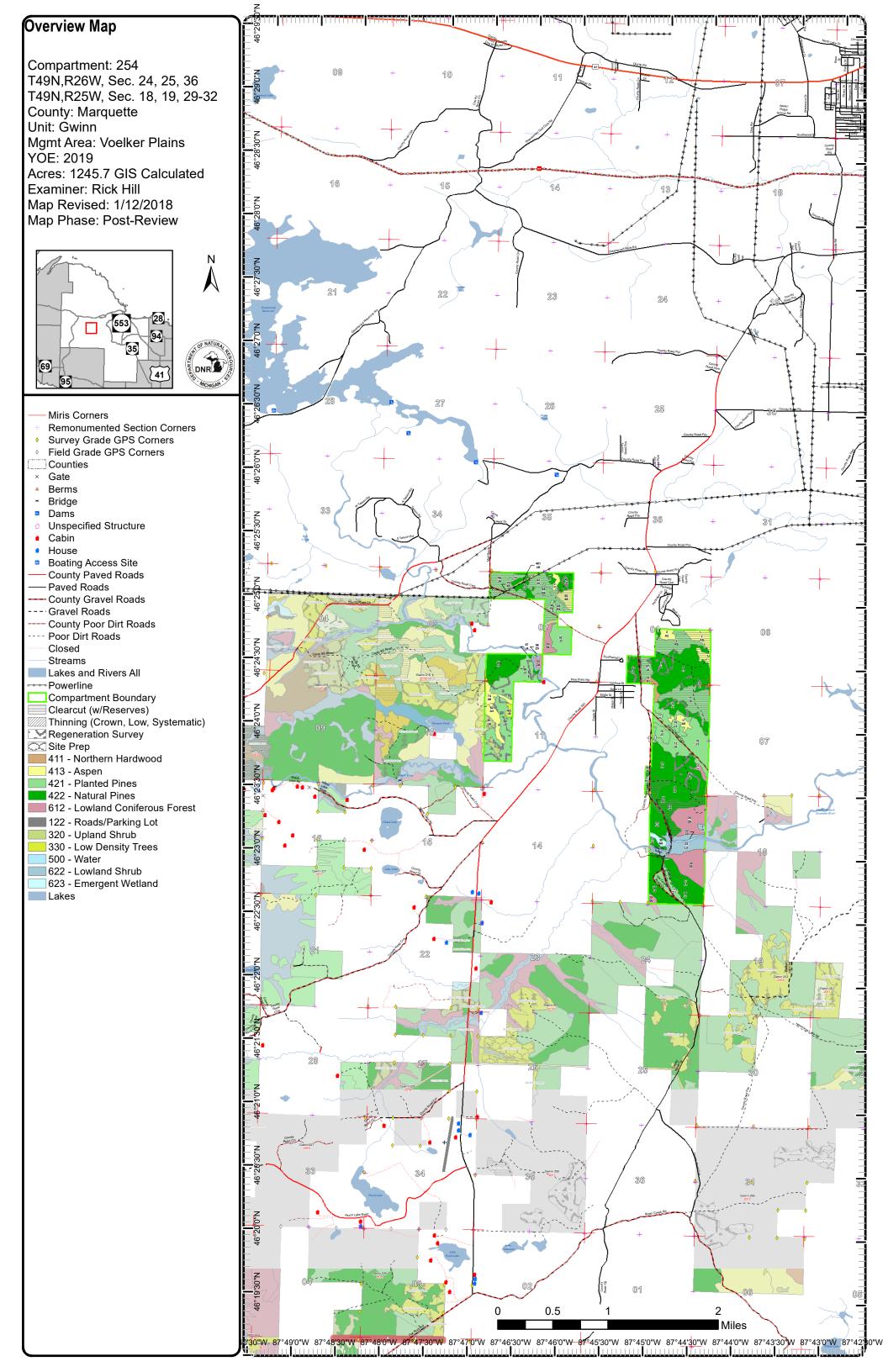
Compartment 254 Year of Entry 2019

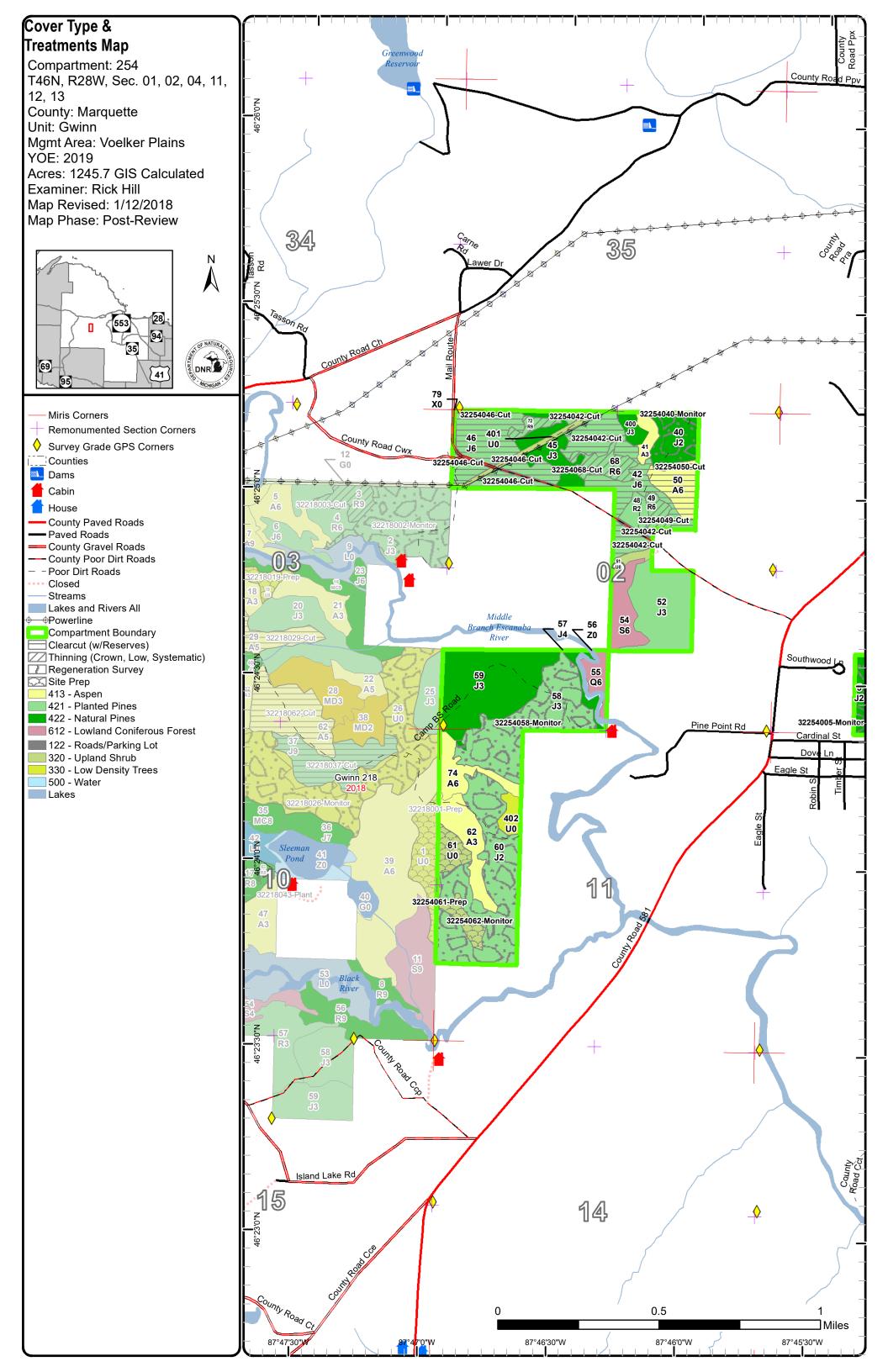
Gwinn Mgt. Unit Rick Hill : Examiner

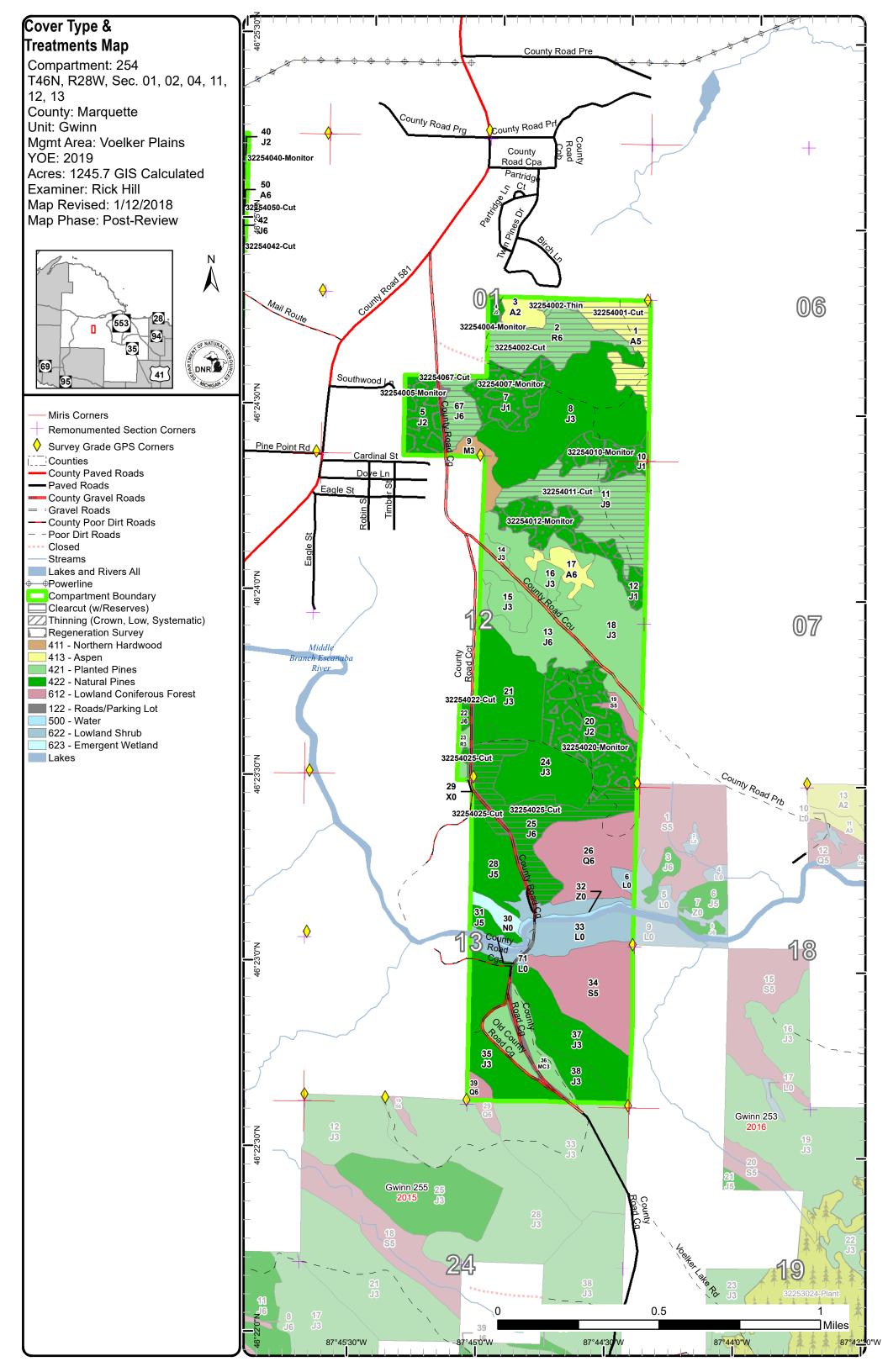


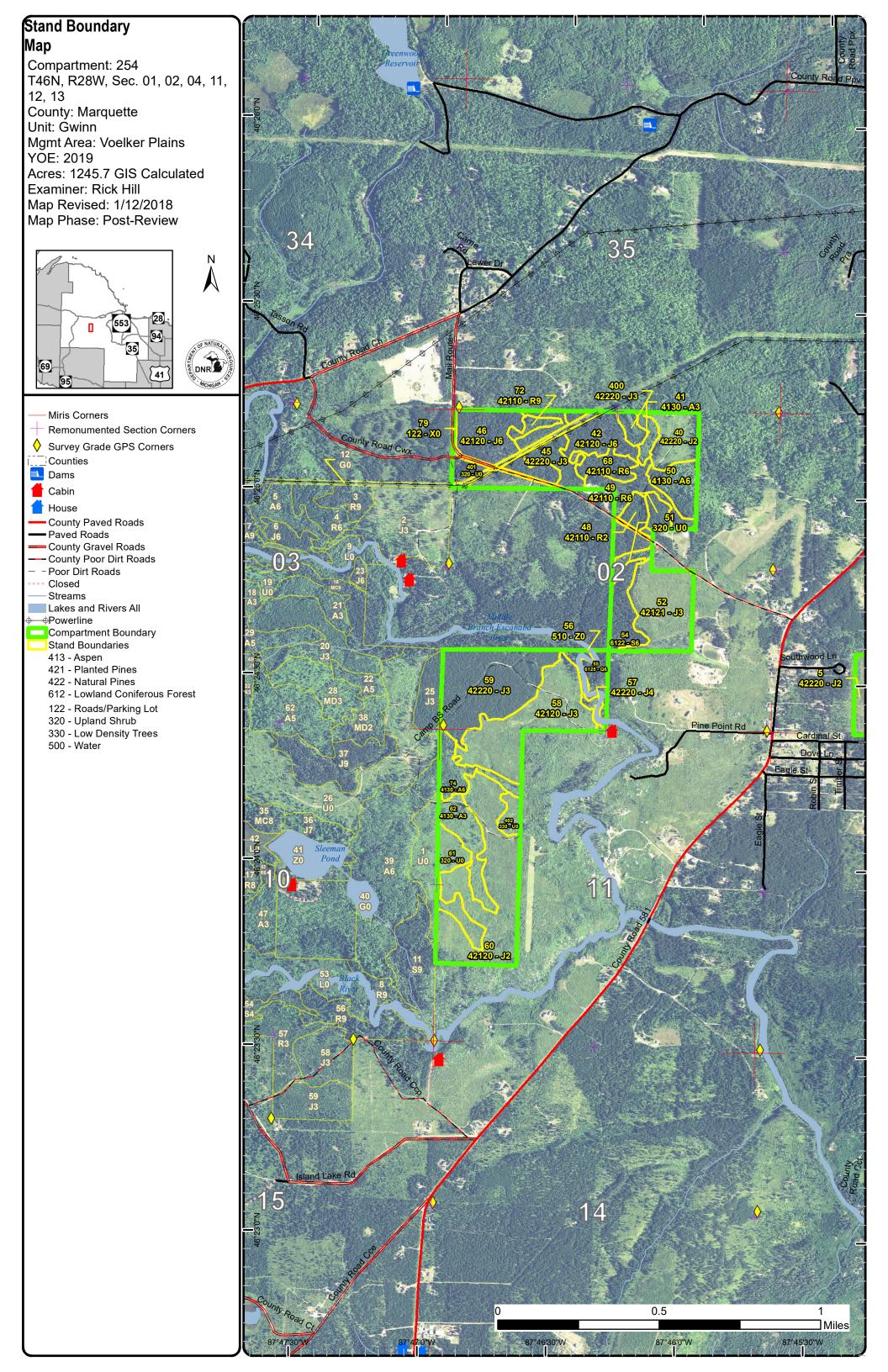
Age Class

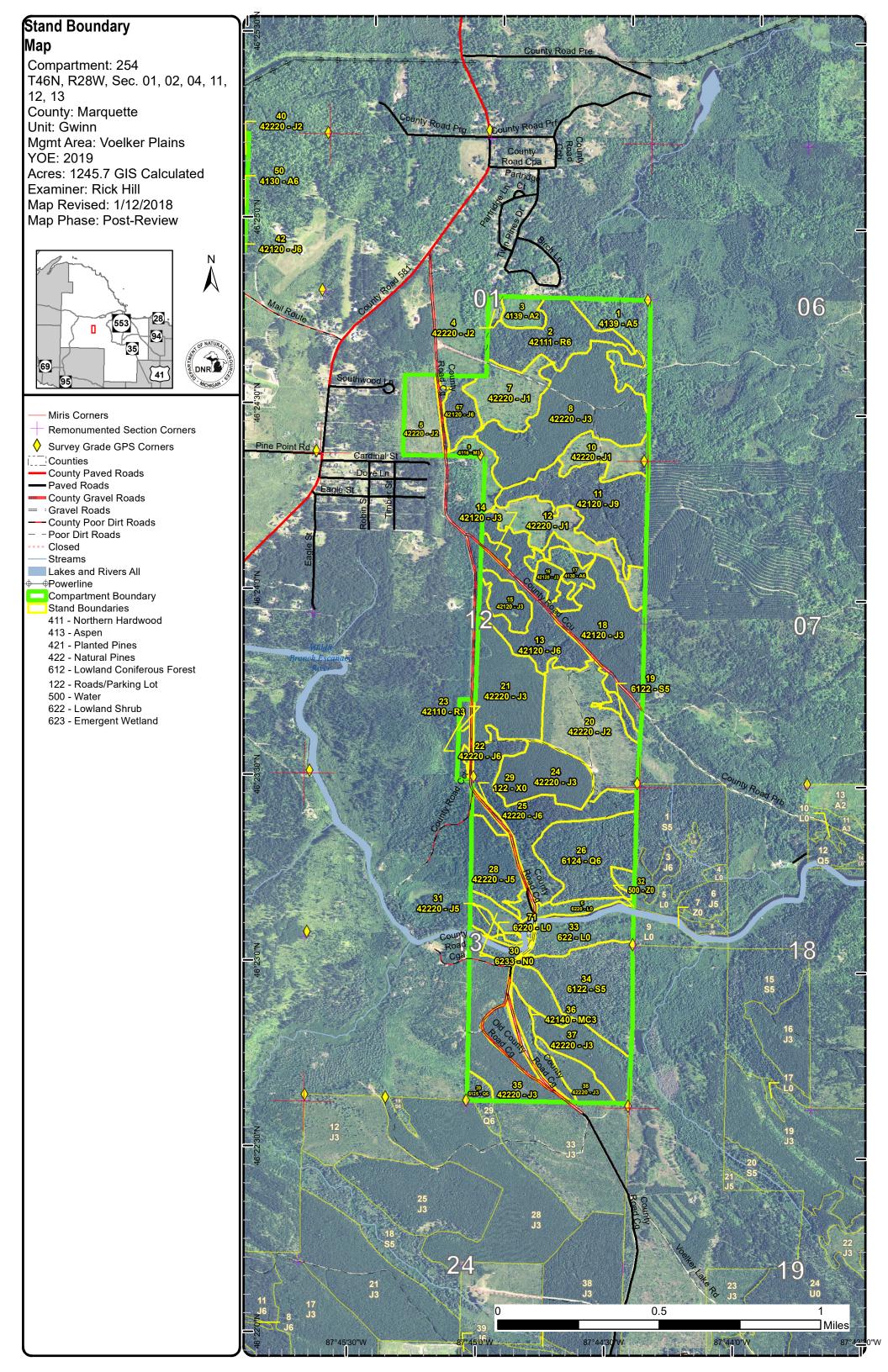
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Aspen	0	23	0	4	20	0	36	0	0	0	0	0	0	0	0	0	0	0	83
Jack Pine	0	282	95	250	46	26	33	141	0	0	0	0	0	0	0	0	0	4	877
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Conifers	0	0	0	0	0	0	0	41	0	0	6	0	0	0	0	0	0	4	51
Lowland Shrub	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Lowland Spruce/Fir	0	0	0	0	0	0	0	4	56	0	0	0	0	0	0	0	0	0	60
Marsh	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Northern Hardwood	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Planted Mixed Pines	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Red Pine	0	0	0	7	0	0	37	12	0	0	0	0	0	0	0	0	0	0	55
Upland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Urban	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	93	313	95	280	66	26	106	198	56	0	6	0	0	0	0	0	0	8	1244

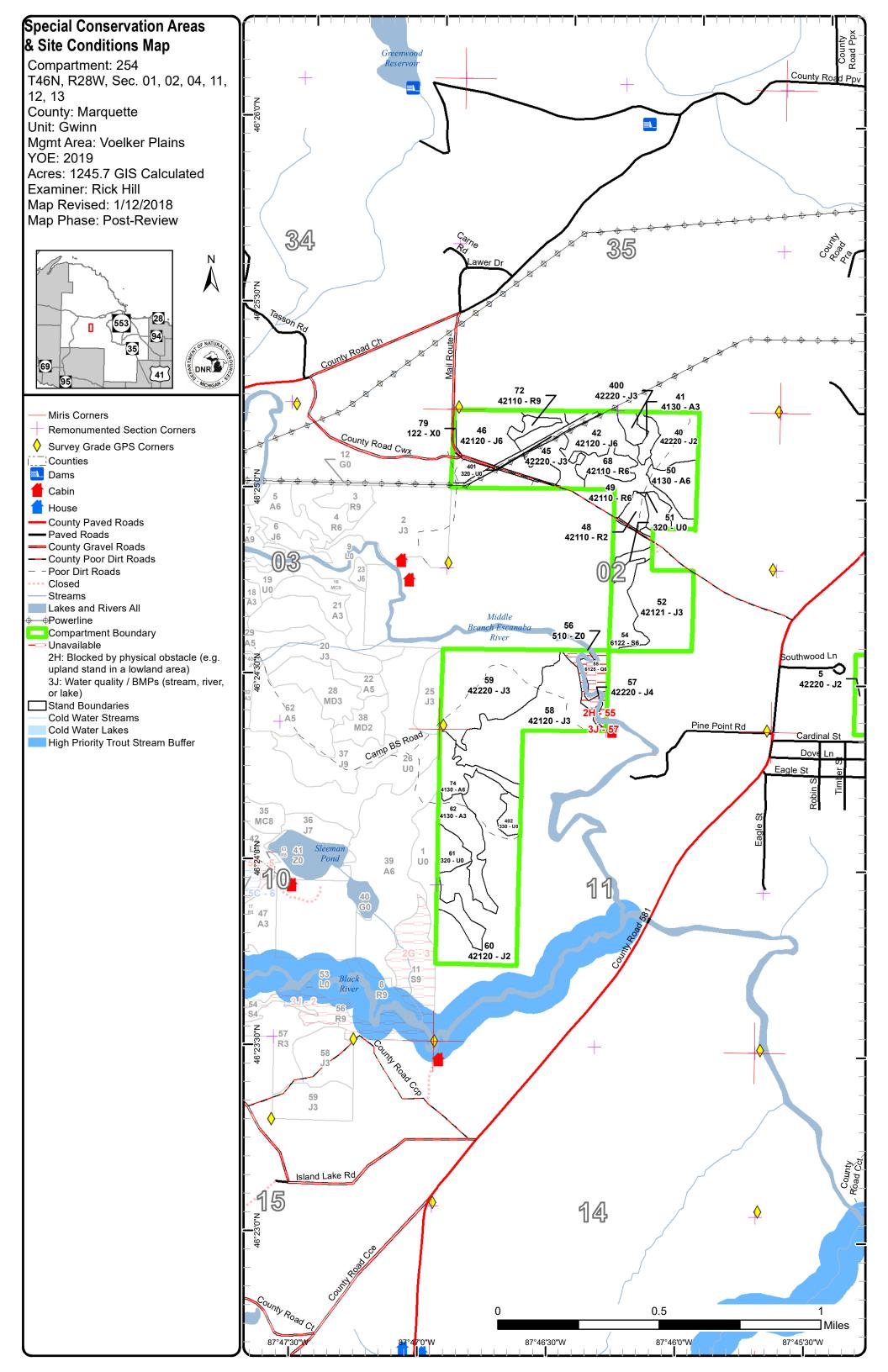


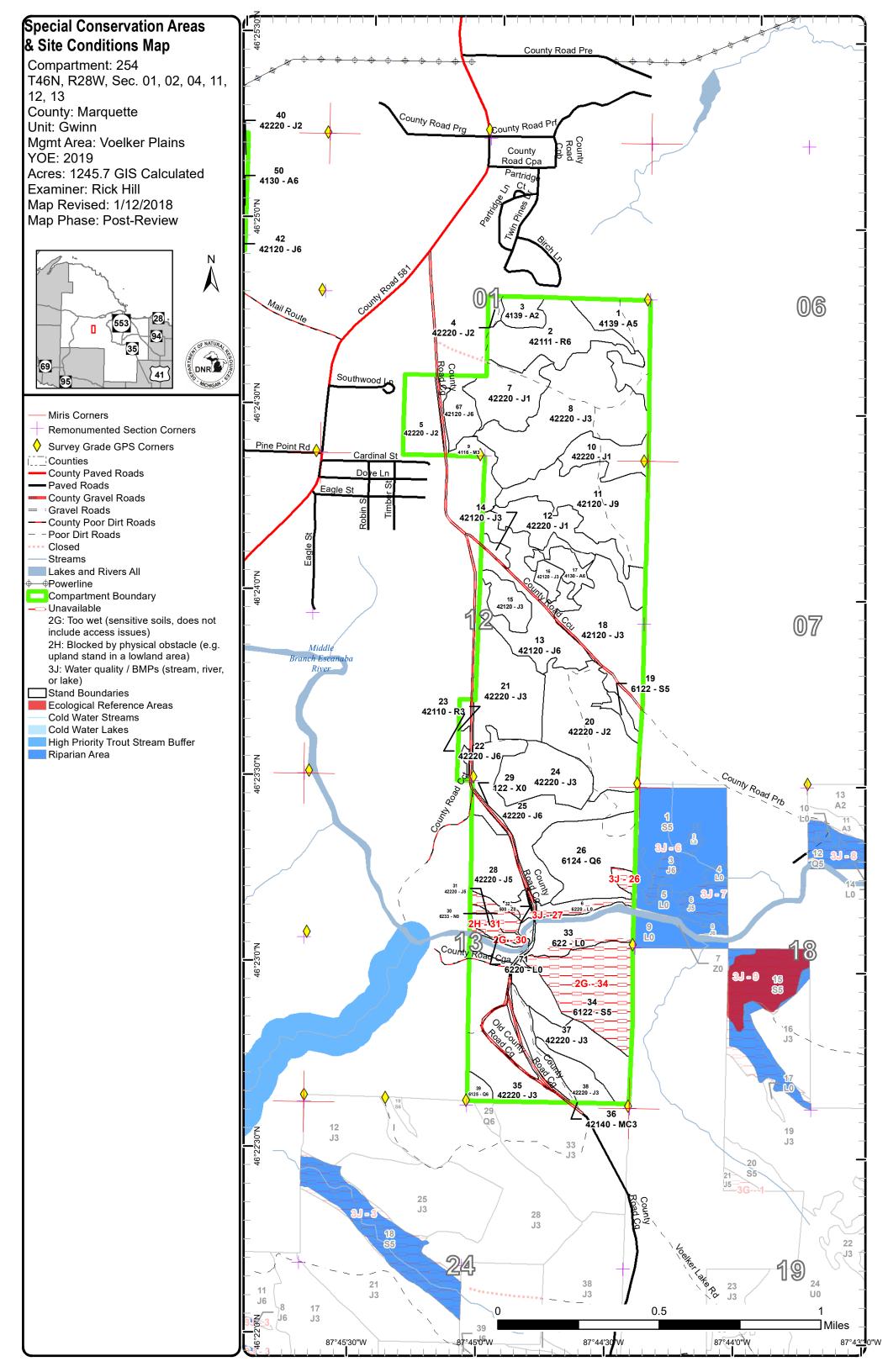














Report 2 – Treatment Summary

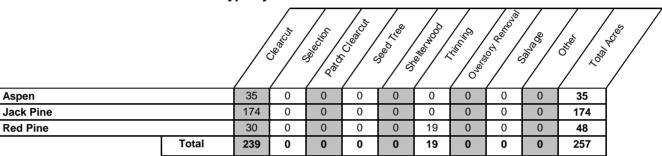
Gwinn Mgt. Unit Year of Entry: 2019

Acres of Harvest

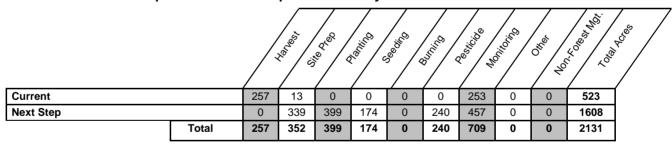
Compartment 254
Total Compartment Acres: 1,246

Commercial Harvest - 257 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Compartment: 254 Year of Entry: 2019

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n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	32254001-Cut	23.7	4139 - Aspen,	Poletimber	56	51-80	Harvest	Clearcut with	4211 - Planted	Even-Aged	Draft Field

Habitat Cut: No Site Condition:

Prescription Clearcut leaving only red pine, white pine, oak and hemlock. Leave a retention pocket in the southwest lobe of the stand.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Replant; Planting, Initial Plant; Pesticide, Skidder/Mechanical; Monitoring, Next Step

<u>Treatments:</u> Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen: Other

Post harvest spray and convert stand to red pine.

Comment:

WLD- Retain most Black Cherry (5%) (black bear), add a few future drumming logs.

10/01/2018 **Proposed Start Date:**

42111 - Planted Poletimber 51 4211 - Planted Draft Field 32254002-Cut 29.6 111-Harvest Clearcut with Even-Aged Red Pine, Mixed Well 140 Retention Red Pine Boundary Deciduous

Habitat Cut: No Site Condition:

Prescription Clearcut stand leaving some patch retention along the western edge of the stand. leave only white pine and oak.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(1yr)

Acceptable Red pine, jack pine, spruce, fir

Regen:

Other Post harvest regenerate red pine using appropriate methods.

Comment:

WLD- In addition: Retention should include Bigtooth Aspen and Paper birch (cavity nesters and raptors).

Proposed Start Date: 10/01/2018

2 32254002-42111 - Planted 51 4211 - Planted Even-Aged Draft Field 2.4 Poletimber 111-Systematic Harvest Red Pine, Mixed Well 140 Thinning Red Pine Boundary Thin Deciduous

Habitat Cut: No Site Condition:

Prescription Thin stand by cutting every third row.

Specs:

Next Step

Treatments:

Acceptable Red Pine

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

32254004-42220 - Natural Sapling Immatu Monitoring Natural Regen 4222 - Natural Even-Aged Draft Field Jack Pine Medium (Intermediate) Jack Pine Boundary Monitor re

Habitat Cut: No Site Condition:

Prescription Count per TMS spec.

Specs:

Next Step **Treatments:**

Acceptable Jack Pine

Regen:

c32-771 Other

Comment:

Proposed Start Date: 10/01/2015

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Regen: Other

Comment:

Proposed Start Date:

Acceptable Jack pine, red pine, white pine, spruce, fir

10/01/2018

Trench and seed is preferred method of reforestation.

Gwinn Mgt. Unit Report 3 -- Treatments Compartment: 254 s Year of Entry: 2019 t а **Treatment** Size Stand BA **Treatment Treatment Cover Type** Acres Stand Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure Status d Natural Regen 12 32254012-27.5 42220 - Natural Sapling 4222 - Natural Draft Field 6 Immatu Monitoring Even-Aged Jack Pine Poor (Re-Inventory) Jack Pine Boundary Monitor **Site Condition: Habitat Cut: No** Prescription Count per TMS spec. Specs: Next Step **Treatments:** Acceptable Jack Pine Regen: Other C32-771 Comment: **Proposed Start Date:** 10/01/2015 32254020-50.7 42220 - Natural Natural Regen 4222 - Natural Draft Field Sapling **Immatu** Monitoring Even-Aged Jack Pine Medium (Intermediate) Jack Pine Boundary **Monitor** re **Habitat Cut: No Site Condition:** Prescription Count per TMS spec Specs: Next Step Treatments: Acceptable Jack Pine Regen: Other C32-743 Comment: **Proposed Start Date:** 10/01/2017 32254022-Cut 2.1 42220 - Natural Poletimber 61 81-110 Harvest Clearcut with 4222 - Natural Even-Aged Draft Field Jack Pine Well Retention Jack Pine Boundary **Habitat Cut: No Site Condition:** Prescription Clearcut stand leaving all white pine and red pine. if any oak are present they should be left as well. No retention is needed in this treatment due Specs: to small size. SitePrep, Trenching; Seeding, Machine Seed; Pesticide, Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Next Step Treatments: Monitoring, Artificial Regen(3yr); Monitoring, Direct Seeding; Monitoring, Direct Seeding Acceptable Jack pine, red pine, spruce, fir Regen: Other Trench and seed is preferred for reforestation. Comment: **Proposed Start Date:** 10/01/2018 32254025-Cut 42220 - Natural Poletimber 4222 - Natural 46.4 63 51-80 Harvest Clearcut with Even-Aged Draft Field Jack Pine Well Jack Pine Retention Boundary **Habitat Cut: No Site Condition:** Prescription Clearcut stand leaving all white pine and red pine. if any oak are present they should be left as well. leave retention along the south end of the

Specs: stand near the river.

Monitoring, Direct Seeding; Pesticide, Skidder/Mechanical; Seeding, Machine Seed; SitePrep, Trenching; SitePrep, Roller Chopping; Next Step

Treatments: Planting, Initial Plant; Planting, Replant

Acceptable Jack pine, red pine, spruce, fir

Regen:

Other Preference is for trench and seed post harvest. Herbicide if necessary, hand plant if it makes sense logistically.

Comment:

Proposed Start Date: 10/01/2018

Regen: Other

Trench and seed is preferred method of reforestation.

Comment:

10/01/2018 **Proposed Start Date:**

49 32254049-Cut 4.5 42110 - Planted Poletimber 51 141-Harvest Systematic 4211 - Planted Even-Aged Draft Field Red Pine Well Thinning Red Pine Boundary 170

Habitat Cut: No Site Condition:

Prescription Thin by cutting every third row cut all jack pine and aspen. Cut other trees as needed for operations.

Specs:

Next Step **Treatments:**

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018 S t a n



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
50	32254050-Cut	11.5	4130 - Aspen	Poletimber Well	51	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Clearcut stand leaving only oak, white pine, and red pine. Leave a pocket of retention in the middle of the stand.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, mixed hardwood, oak, mixed conifer.

Regen:

Other Use a two inch spec on all hardwood.

Comment:

WLD - Retention should include Bigtooth Aspen (cavity nesters and raptors).

Proposed Start Date: 10/01/2018

42120 - Planted Draft Field 58 32254058-42.5 Sapling Immatu Natural Regen 4222 - Natural Even-Aged Monitoring Jack Pine Well (Intermediate) Jack Pine Boundary **Monitor** re

Habitat Cut: No Site Condition:

Prescription Count per TMS spec

Specs:

Next Step Treatments:

Acceptable Jack Pine

Regen:

Other C32-755

Comment:

Proposed Start Date: 11/17/2015

61 32254061- 12.8 320 - Upland Shrub Nonstocked SitePrep Roller Chopping 4211 - Planted Even-Aged Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Roller Chop, Trench, Herbicide, and plant red pine.

Specs:

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

Treatments:

Acceptable Red Pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

60 32254062-56.6 42120 - Planted Sapling **Immatu** Monitoring Artificial 4222 - Natural Even-Aged Draft Field Monitor Jack Pine Medium re Regen(3yr) Jack Pine Boundary

Habitat Cut: No Site Condition:

Prescription count Per TMS spec

Specs:

Next Step Treatments:

Acceptable Jack Pine

Regen:

Other C32-755

Comment:

Proposed Start Date: 10/01/2017

Gwinn

Mgt. Unit	Report 3 Treatments	Compartment: 254
		Year of Entry: 2019

а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Objective Name CoverType Density Age Range Type Method Structure **Status** d 32254067-Cut 12.1 42120 - Planted Poletimber 66 81-110 Clearcut with 4222 - Natural Even-Aged Draft Field 67 Harvest Jack Pine Well Retention Jack Pine Boundary

Habitat Cut: No Site Condition:

Prescription Clearcut stand leave all white pine and oak if present. Red pine should be marked for harvest if it is to thick to allow for pine regeneration. leave Specs: some clumps of red pine along county road Cg.

Monitoring, Direct Seeding; Pesticide, Skidder/Mechanical; SitePrep, Trenching; SitePrep, Roller Chopping; Seeding, Machine Seed; Next Step

Treatments: Planting, Initial Plant; Planting, Replant

Acceptable Jack pine, red pine, aspen, spruce, fir, maple

Regen:

s t

Other Comment:

Proposed Start Date: 10/01/2018

Systematic 32254068-Cut 8.4 42110 - Planted Poletimber 63 111-Harvest 42110 - Planted Even-Aged Draft Field Red Pine Well 140 Thinning Red Pine Boundary

Habitat Cut: No Site Condition:

Prescription Thin every third row or equivalent. Mark jack pine and aspen for harvest when they are impeding operations or are at risk of not surviving till next

YOF Specs:

Next Step **Treatments:**

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

72 32254072-Cut 42110 - Planted 42110 - Planted Draft Field 3.3 Sawtimber 61 111-Harvest Systematic Even-Aged Red Pine Well 140 . Thinning Red Pine Boundary

Habitat Cut: No Site Condition:

Prescription Thin every third row or equivalent. Mark jack pine to harvest.

Specs:

Next Step SitePrep, Trenching; SitePrep, Roller Chopping

Treatments:

Acceptable red pine

Regen: Other

Comment:

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed: 522.7

Gwinn Mgt. Unit

Rick Hill: Examiner

Compartment: 254 Year of Entry: 2019

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	litions
Acres	Available	With Condition	Not Available		2G	2H	3J	
81	81	0	0	Aspen				
878	848	0	30	Jack Pine	1	4	25	
5	5	0	0	Low-Density Trees				
51	45	0	6	Lowland Conifers		6		
38	0	0	38	Lowland Shrub	25	2	12	
60	16	0	44	Lowland Spruce/Fir	44			
5	0	0	5	Marsh	5			
8	8	0	0	Northern Hardwood				
19	19	0	0	Planted Mixed Pines				
55	55	0	0	Red Pine				
21	21	0	0	Upland Shrub				
16	6	0	10	Urban	5		5	
7	7	0	0	Water				
1,246	1,111		134	Total Forested Acres	81	12	42	
	89%		11%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
26	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
C	omments:						
27	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						

Report 4 - Site Conditions

Compartment: 254

Unspecified

Unspecified

Gwinn Mgt. Unit

3J: Water quality / BMPs

(stream, river, or lake)

Comments:

Comments:

Unavailable

57

Year of Entry: 2019 **Rick Hill: Examiner** 30 Unavailable 2G: Too wet (sensitive 6 Unspecified Unspecified Unspecified Unspecified soils, does not include access issues) Comments: 31 2H: Blocked by physical 5 Unspecified Unspecified Unspecified Unspecified Unavailable obstacle (e.g. upland stand in a lowland area) Comments: 2G: Too wet (sensitive Unspecified Unspecified Unspecified Unspecified 34 Unavailable 48 soils, does not include access issues) Comments: 2H: Blocked by physical Unspecified Unspecified Unspecified Unspecified 55 Unavailable 6 obstacle (e.g. upland stand in a lowland area)

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Unspecified

4

Unspecified

Mgt. Unit

Compartment: #Type! Year of Entry:



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				

Gwinn Mgt. Unit Compartment: 254
Year of Entry 2019





* 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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxyge stocked trout populations and those of other coldwater conditions for coldwater fishes may occur in Michigan groundwater inflows, or are located in colder (northern Director's action and designated as trout resources by	r fish species to persist from year to year. Suitable lakes if they are relatively deep, have substantial areas of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved ox stocked trout populations and those of other coldwater year to year. Coldwater streams in Michigan typically p contributions of groundwater to their stream flows. Suc designated as trout resources by Fisheries Order 210.	r fish species (e.g., slimy sculpin) to persist from provide these conditions due to substantial ch streams are established by Director's action and
SCA	Riparian Area	A transitional area between aquatic and terrestrial eco- influences the aquatic ecosystem and vice-versa. Beca streams and open water wetlands, riparian areas harb- communities are ecologically and socially significant in as aesthetics, habitat, bank stability, timber production	ause of the unique conditions adjacent to lakes, or a high diversity of plants and wildlife. Riparian their effects on water quality and quantity, as well

S t	Gwinr	n Mgt. Unit		Report 7	Forested	Stands Compartment: 254 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4139 - Aspen, Mixed Deciduous	Poletimber Medium	23.7	56	51-80	Aspen stand on a poor site. aspen is generally falling out of the stand with soft maple filling in.
2	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	32.0	51	111-140	Plantation has some minor aspen and jack pine inclusions and areas of ranging stocking. The red pine is wildly scattered with mature jack pine and aspen filling in around it.
3	4139 - Aspen, Mixed Deciduous	Sapling Medium	7.6	5	Immature	Stand was harvested in 2011 under timber sale #32-109-09-01. Regeneration is coming back in most areas with a mix of maple and aspen being most common.
4	42220 - Natural Jack Pine	Sapling Medium	2.5	5	Immature	Harvested in 2011: TS#109-09-01. Jack Pine has come back naturally and is stocked to an acceptable level.
5	42220 - Natural Jack Pine	Sapling Medium	17.6	6	Immature	Harvested in 2011: TS# 109-09-01. Site was trenched and seeded in the past it appears as though the seeder malfunctioned. Seedlings are mostly volunteers. Regeneration is somewhat sparse if the TMS desires we can replant in the trenches.
7	42220 - Natural Jack Pine	Sapling Poor	24.6	5	Immature	Harvested in 2011: TS# 109-09-01. Site was trenched and seeded though it appears as though the seeder was not working at the time. Stocking is variable TMS should make the call on replanting.
8	42220 - Natural Jack Pine	Sapling Well	72.1	22	Immature	Stand was harvested in 1991-1992 under PERMIT #31-005-89- 01. The stand was planted in 5/94. Now a fully stocked jack pine stand.
9	4116 - Mixed N. Hardwood - Aspen	Sapling Well	7.8	5	Immature	Harvested in 2011: TS# 109-09-01. Coming back to a mix of aspen and maple.
10	42220 - Natural Jack Pine	Sapling Poor	16.3	7	Immature	Harvested in 2011: TS#109-09-01. Site was trenched and seeded though it appears to have failed. Seedlings are all volunteers, and stocking is marginal.
11	42120 - Planted Jack Pine	Sawtimber Well	47.0	61	81-110	A mature jack pine stand that is starting to break up.
12	42220 - Natural Jack Pine	Sapling Poor	27.5	6	Immature	Harvested in 2011: TS# 109-09-01. trenched and seeded in though is appears to have failed most likely due to a malfunctioning seeder. Site should be evaluated for further action.
13	42120 - Planted Jack Pine	Poletimber Well	46.1	39	51-80	This stand was cut under permit 20-72a and was scarified in 1974. the stand was then planted in 1977. there is a small inclusion that was missed in the last harvest.
14	42120 - Planted Jack Pine	Sapling Well	2.9	24	Immature	Stand was cut in 1989 under permit 9-89. the stand was planted in 1992.
15	42120 - Planted Jack Pine	Sapling Well	10.6	24	Immature	Stand was cut in 1989 under permit 9-89. the stand was planted in may of 1992.

S	Gwinn	Mgt. Unit		Report 7	Forested	Stands Compartment: 254 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	42120 - Planted Jack Pine	Sapling Well	4.5	24	Immature	Stand was cut in 1989 under permit 9-89. the stand was planted in may of 1992.
17	4130 - Aspen	Poletimber Well	8.0	34	81-110	An offsite aspen stand that's doing ok all things considered.
18	42120 - Planted Jack Pine	Sapling Well	46.0	24	Immature	This stand was cut in 1989 under permit #31-009-89-01. The site was planted 5/92.
19	6122 - Black Spruce	Poletimber Medium	3.9	65	51-80	Surface drain that is generally wet. Ecotones on both sides that slightly slope down to lowland brush are nice lowland conifers and jack pine.
20	42220 - Natural Jack Pine	Sapling Medium	50.7	5	Immature	Harvested in 2011: TS#110-09-01. A small portion of this stand was cut in 2003 and seeded in 2006.
21	42220 - Natural Jack Pine	Sapling Well	39.5	16	Immature	Harvested in 2000, TS#112-99-01. Planted with seed fall 2000.
22	42220 - Natural Jack Pine	Poletimber Well	2.1	61	81-110	Multi-aged with ranging stocking and quality.
23	42110 - Planted Red Pine	Sapling Well	2.8	22	Immature	Was commercially cut in Fall of 1993, permit #25-93-02, "Co.Rd.CG Salvage Sale". No red pine were cut. FTP#C31-346 covered disk trenching and hand planting of red pine On 5/9/2000, a ground broadcast of herbicide (Velpar L) was applied to 3 acres here to knock back the grass & jack pine, releasing the red pine. Northern 1/3 of stand is J3.
24	42220 - Natural Jack Pine	Sapling Well	28.2	23	141-170	Stand cut in 1992 under permit 31-001-89-01. Stand was reforested under FTP C-31-283.
25	42220 - Natural Jack Pine	Poletimber Well	47.2	63	51-80	Contains larger opening due to salvage harvesting resulting from the storm of 7\21\02. Lowland conifer inclusions in drains feeding the river (exclude from future harvest). Multi-aged and ranging stocking.
26	6124 - Lowland Spruce- Fir	Poletimber Well	41.2	63	51-80	Lowland conifers in the riparian area with the Escanaba River. For BMP reasons this stand should probably be left.
28	42220 - Natural Jack Pine	Poletimber Medium	21.3	41	1-50	Area was cut in 1962. Site was scarified in November 1974. Site ranges in stocking and quality.
31	42220 - Natural Jack Pine	Poletimber Medium	4.8	47	81-110	
34	6122 - Black Spruce	Poletimber Medium	44.3	71	51-80	
35	42220 - Natural Jack Pine	Sapling Well	44.7	16	Immature	Cut in 2000, TS#113-99-01, seeded in the fall of 2000.

s t	Gwinr	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 254 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	42140 - Planted Mixed Pine	Sapling Well	19.3	21	Immature	Sale cut in 1992 under sale 31-019-89-01. Stand was regenerated under FTP 31-329. The stand was planted in may of 1995. Jack pine are about as evenly distributed as red pine and are overtopping the red pine at this time in the next 20 years jack pine should be harvested to release the red pine.
37	42220 - Natural Jack Pine	Sapling Well	23.2	24	Immature	Stand was cut in 1992 under permit 12-89. Site was trenched and left unplanted.
38	42220 - Natural Jack Pine	Sapling Well	10.9	16	Immature	stand was cut in 2000 under TS#113-99-01. Planted with seed fall of 2000.
39	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	3.5	69	51-80	
40	42220 - Natural Jack Pine	Sapling Medium	14.3	5	Immature	This site was trenched and seeded in the past however it appears the seeder was not working there are no seedlings in the trenches the site has come back to a mix of aspen, red maple, and jack pine. The MO for the site is jack pine, the site is a bit sparse with jack pine running in the range of 600-700 trees per acre. A full regeneration survey is scheduled for this year those results will inform future management direction. The Stand was harvested in 2011: TS#108-09-01 currently under ftp for jack pine regeneration.
41	4130 - Aspen	Sapling Well	4.0	25	Immature	Site was cut in 1991 under permit #16-89. all oak and cherry where left.
42	42120 - Planted Jack Pine	Poletimber Well	33.0	63	81-110	Mature jack pine stand that is starting to break up.
45	42220 - Natural Jack Pine	Sapling Well	14.0	23	Immature	Stand was harvested in 1991 under permit #31-016-89-01. All red pine were left the heaviest area has been split out into its own stand.
46	42120 - Planted Jack Pine	Poletimber Well	33.3	57	81-110	Jack pine stand with some mortality starting to show. Stand should be harvested.
48	42110 - Planted Red Pine	Sapling Medium	4.3	23	Immature	Red pine planted in 1993.
49	42110 - Planted Red Pine	Poletimber Well	4.5	51	141-170	Red pine plantation adjacent to South Ely Township Park.
50	4130 - Aspen	Poletimber Well	11.5	51	81-110	Aspen is two aged (looks like someone cut a large patch back in the 60's for the peeled pulp market). 50% motality of white birch due to overmaturity.

S t	Gwinr	Gwinn Mgt. Unit Level 4 Size		Report 7	Forested	Stands Compartment: 254 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	29.5	5	Immature	Stand harvested in February 2011 by J. Carey Logging, Inc. TS# 32-301-09-01 (Black River Falls Fire). Trees were just run over with the skidder. The Black River Falls Fire of May 2009 burned through this area. Stand was put up immediately but markets prevented this part of stand from being salvaged. Trees had no merchantability as of February. Stand will be trenched and planted back to red pine. 2007 Comments: CUT IN 1991 PERMIT #18-89. TRENCHED & PLANTED WITH RED PINE. Partial plantation failure has resulted in ranging stocking and semi-open areas.
54	6122 - Black Spruce	Poletimber Well	12.3	70	81-110	Contains minor eastern larch and lowland brush inclusions.
55	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	6.4	96	51-80	Escanaba River protection. Heavy jack pine mortality due to overmaturity.
57	42220 - Natural Jack Pine	Poletimber Poor	3.8	45	1-50	Escanaba River corridor. Stand is a combination of overmature patches of jack pine, jack pine regeneration after the 1986 Black River Fire, and upland brush along the banks of the Escanaba River. Inclusions of lowland brush occur in the north and south parts of the stand.
58	42120 - Planted Jack Pine	Sapling Well	42.1	5	Immature	Stand harvested in February 2011 by J. Carey Logging, Inc. TS# 32-301-09-01 (Black River Falls Fire). Trees were just run over with the skidder. The Black River Falls Fire of May 2009 burned through this area. Stand was put up immediately but markets prevented this part of stand from being salvaged. Trees had no merchantability as of February. Stand will be trenched and planted back to red pine. 2007 Comments: STAND BURNED MAY 6TH 1986. WAS TRENCHED IN 1990; PLANTED MAY 1991.
59	42220 - Natural Jack Pine	Sapling Well	45.0	26	Immature	Stand was harvested in 1989, under 31-002-89-01. The stand was regenerated under FTP C31-211.
60	42120 - Planted Jack Pine	Sapling Medium	56.6	5	Immature	Stand harvested in February 2011 by J. Carey Logging, Inc. TS# 32-301-09-01 (Black River Falls Fire). Trees were ground/chipped. The Black River Falls Fire of May 2009 burned through this area. Stand was put up immediately but markets prevented this part of stand from being salvaged. Stand will be trenched and planted back to jack pine.
62	4130 - Aspen	Sapling Well	14.9	8	Immature	WILDFIRE MAY 6TH 1986. Contains semi-open to open areas. Buried in 2009
67	42120 - Planted Jack Pine	Poletimber Well	12.1	66	81-110	Mixed age stand containing some planted red pine in blocks and as individuals. Contains a couple acre aspen stand along Co. Rd. CG and some semi-open to open areas.
68	42110 - Planted Red Pine	Poletimber Well	8.4	63	111-140	A red pine stand with quite a bit of jack pine mixed in.
72	42110 - Planted Red Pine	Sawtimber Well	3.3	61	111-140	A small red pine stand with jack pine inclusions.
74	4130 - Aspen	Poletimber Well	11.5	30	Immature	

S t	Gwin		Report 7	– Forested	I Stands Compartment: 254 Year of Entry: 2019		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	/
400	42220 - Natural Jack Pine	Sapling Well	3.7	23	81-110	A former wildlife opening this stand has filled in completely with jack pine. The stand is past the point of being saved as the trees growing in the opening are 4 plus inches in diameter.	

Compartment: 254 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
6	6220 - Alder/willow	11.7	No	Lowland Alder bordering the Escanaba River.
29	122 - Road/Parking Lot	12.8	No	Steel Bridge road.
30	6233 - Wet Meadow	5.2	No	Drain that feeds the Escanaba River. Some ponding due to beaver activity.
32	500 - Water	5.2	No	Escanaba River.
33	622 - Lowland Shrub	25.3	No	Lowland alder bordering the Escanaba River.
51	320 - Upland Shrub	3.0	No	Drainage ravine grading to lowland brush to the west.
56	510- Water (OI)	2.2	No	Escanaba River.
61	320 - Upland Shrub	12.8		WILDFIRE MAY 6TH 1986. Contains semi-open to open areas.
71	6220 - Alder/willow	1.5	No	Lowland alder and willow bordering the Escanaba River.
79	122 - Road/Parking Lot	3.6	No	County Road CH
401	320 - Upland Shrub	4.7	No	Power line right of way. A two track passes though this stand as well.
402	330 - Low-Density Trees	4.5	No	stand was created in 1992.