

# **Compartment Review Presentation**

**Gwinn Forest Management Unit** 

Compartment 32277 Entry Year 2020 Acreage: 1,965

**County Marquette** 

Management Area: Palmer Moraine

**Revision Date: 2018-08-06** 

Stand Examiner: Jason Caron

**Legal Description:** 

T46N-R26W, Sections 13-15 & 23-25.

### **Identified Planning Goals:**

Planning goals consist of managing the harvestable stands within the compartment to create an even-age distribution and to improve wildlife habitat.

# Soil and topography:

Topography is rolling to very steep and rugged with rock outcropings and cliffs. Soils are mostly sandy in the south with some loamy soils and igneous bedrock in the north. Soil associations consist of Baraga, Champion, Michigamme, and Rubicon.

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

Private land parcels with residences exist along the M-35 corridor. Larger blocks of private land exist within the southern portion. Tilden Mining Company lands exist within the north portion.

### **Unique Natural Features:**

Rocky and rugged ground exists within the central and north portions of this compartment, making access and timber production difficult.

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

None known.

# **Special Management Designations or Considerations:**

None known.

# Watershed and Fisheries Considerations:

The northwest region of this compartment contains Fifteen Creek and the East Branch of the Escanaba River. Fifteen Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Fifteen Creek in riparian areas susceptible to Aspen regeneration (specifically stand 2). For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices. The East Branch of the Escanaba River is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the East Branch of the Escanaba River in riparian areas susceptible to Aspen regeneration (specifically stand 39). For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

The central region of this compartment contains unnamed waterbodies and unnamed stream reaches which serve as tributaries to O'Neal Creek. Additionally, this compartment contains O'Neal Creek which serves as a tributary to the East Branch of the Escanaba River. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to the unnamed waterbodies. The unnamed stream reaches are designated Type 1 trout streams less than 50' width. A 300' buffer is recommended for the unnamed stream reaches in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices. O'Neal Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for O'Neal Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

The southern region of this compartment contains an unnamed waterbody which serves as a tributary to O'Neal Creek. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to the unnamed waterbody (specifically stand 53).

# Wildlife Habitat Considerations:

Compartment 277 is found within the Palmer Moraine Management Area; on a Bedrock-Controlled Ground Moraine in central Marquette County. The dominant Natural Communities is boreal forests,

mesic northern forests, and dry mesic northern forests. Major forest cover types include Aspen, White Pine, and Jack Pine. Wildlife priorities in this management area include maintaining white pine, red pine, and oak especially on rocky outcrops and maintaining wildlife movement corridors along riparian areas. Some of the most significant wildlife management issues in the management area are: early successional forest conditions (associated with alder, riparian zones, or forested wetlands), mast (hard and soft); mature forest (coniferous and deciduous stands); retention or development of large living and dead standing trees (for cavities), and mesic conifer.

The following have been identified as features species for the Palmer Moraine Management Area: American woodcock, black bear, pileated woodpecker, and red crossbill.

# Mineral Resource and Development Concerns and/or Restrictions

Active sand/gravel pits are located four miles to the northeast. There may be some sand & gravel potential within the compartment, but bedrock is generally near the surface in this area. Abandoned iron mines are located three miles to the north. There is no known metallic mineral potential beneath the compartment, but part of this compartment was previously leased for metallic mineral exploration. There is no potential for economical oil and gas production in the UP.

#### Vehicle Access:

A state owned poor dirt road exists just north of fifteen creek which provides good access into a portion of the northern part of this compartment. County roads MP and MU provide access into portions of the southern end of the compartment.

# **Survey Needs:**

A survey will be required within the northern portion of this compartment with the areas I have prescribed for harvest.

# **Recreational Facilities and Opportunities:**

No recreational facilities exist within this compartment. Limited hunting and fishing opportunities exist within portions of this compartment.

#### **Fire Protection:**

Fire risk within this area is moderate given the rocky outcrops and inacessible areas within the compartment. Lightning strike fires or human caused fire could be a concern during the dry seasons.

# **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 277 Year of Entry 2020

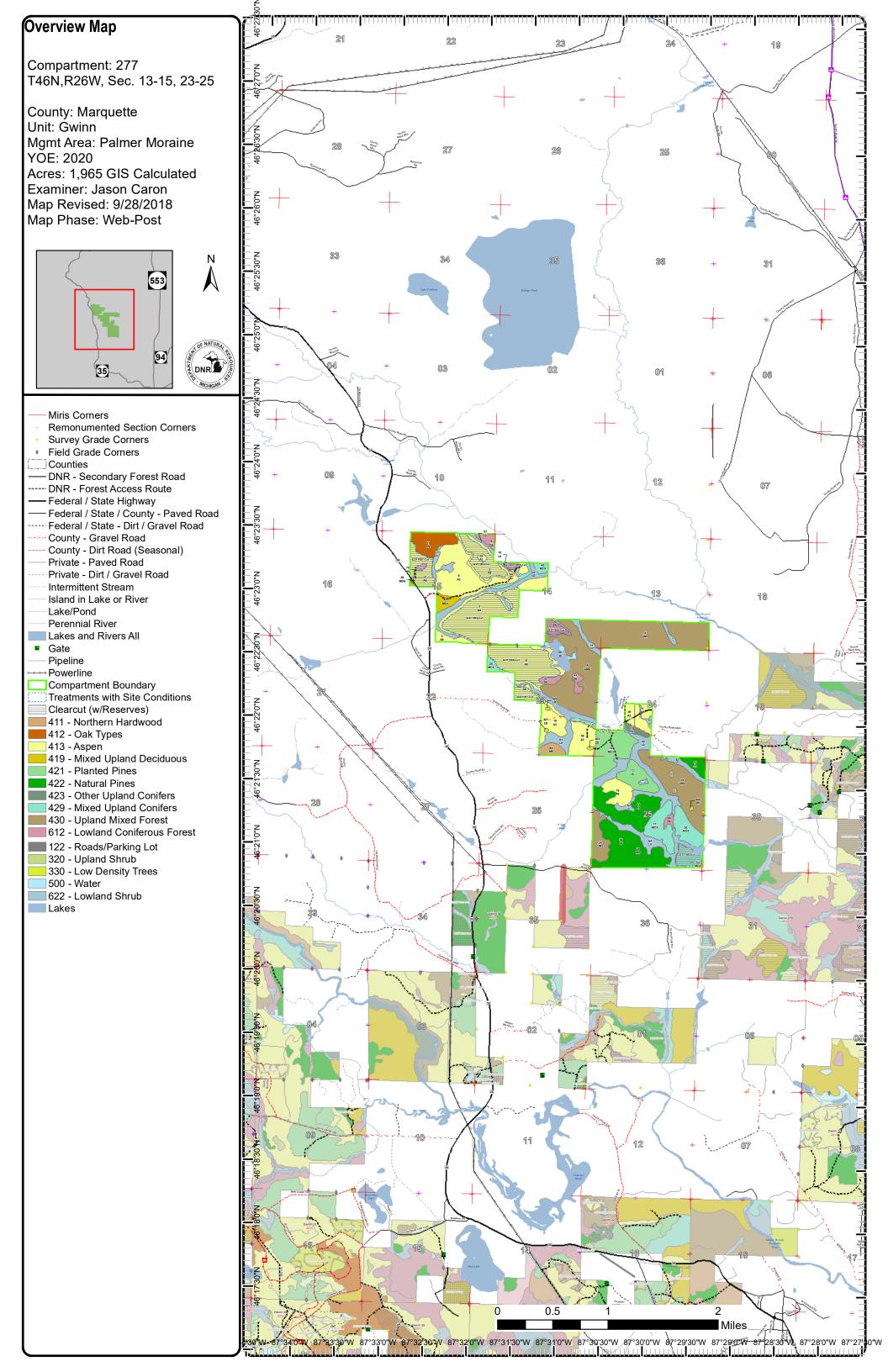
Gwinn Mgt. Unit

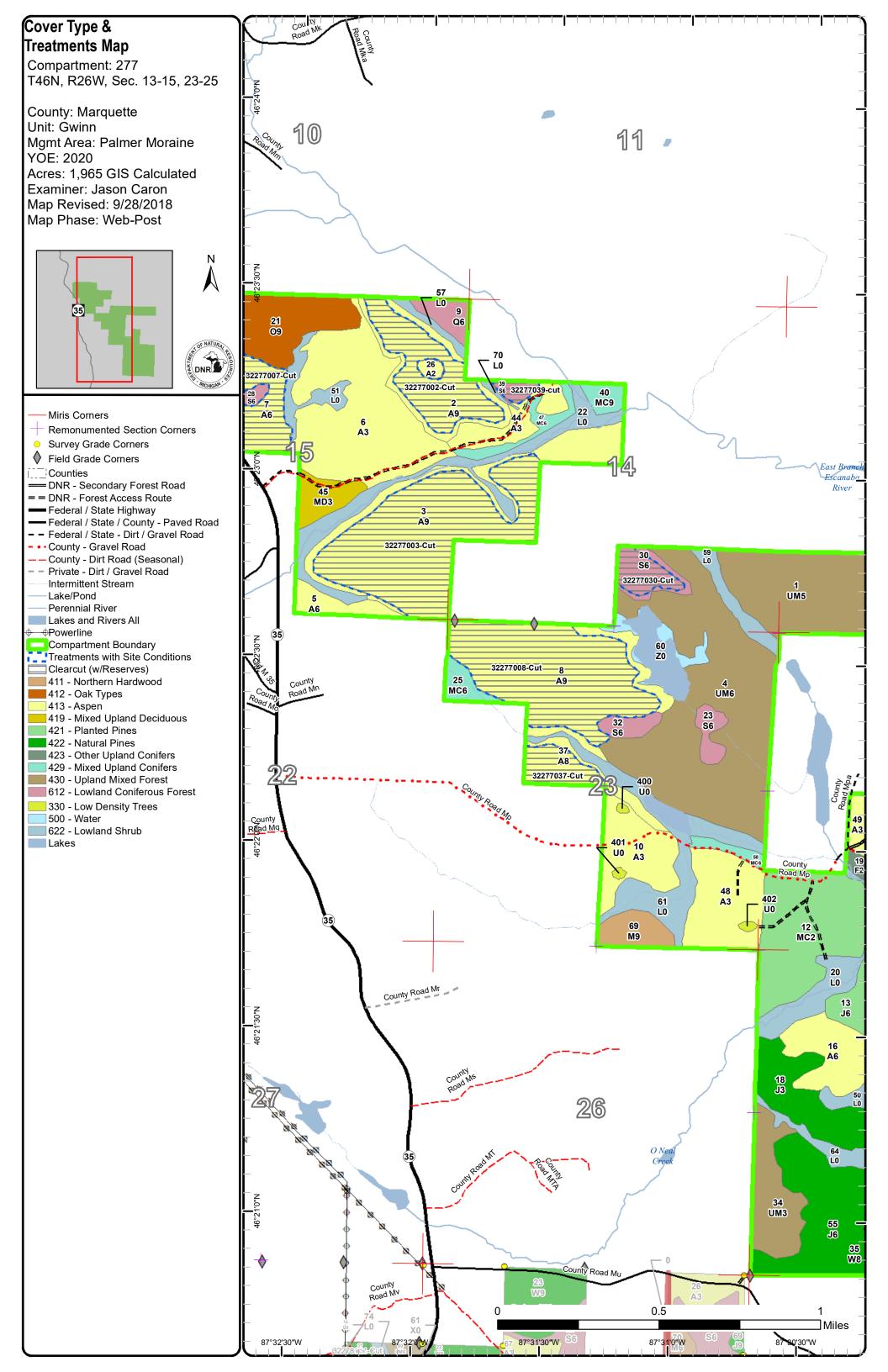
Jason Caron: Examiner

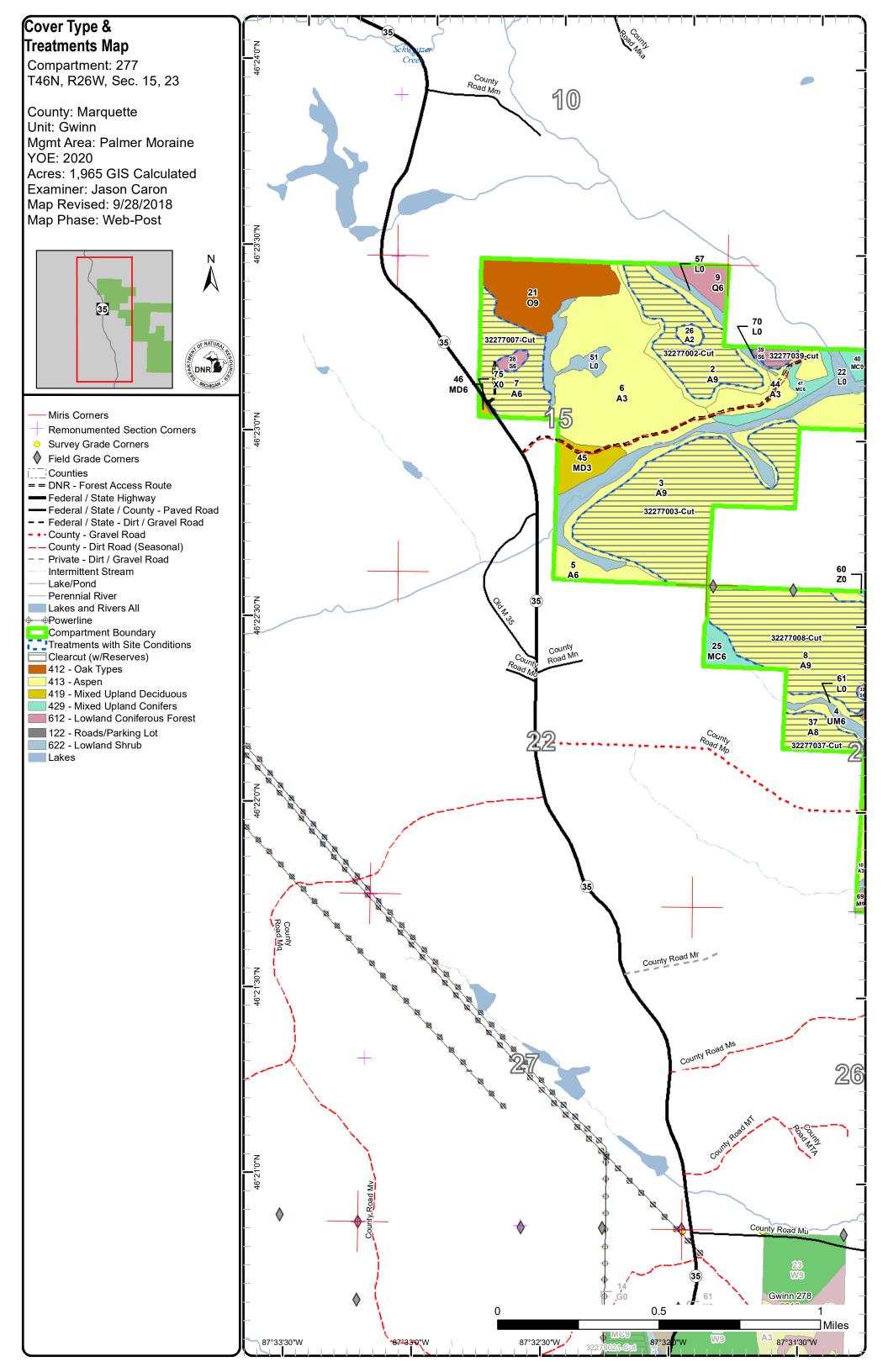


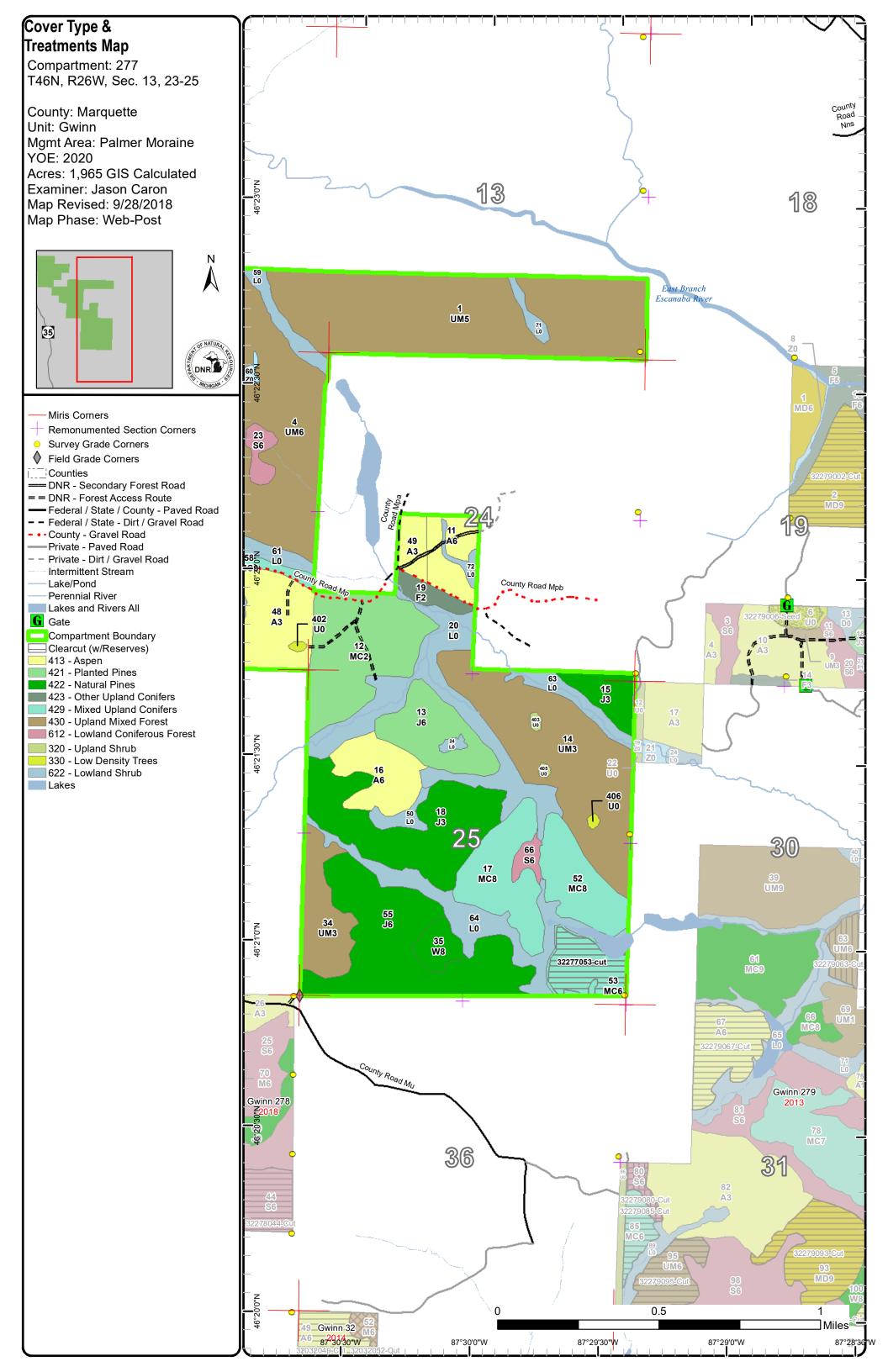
# Age Class

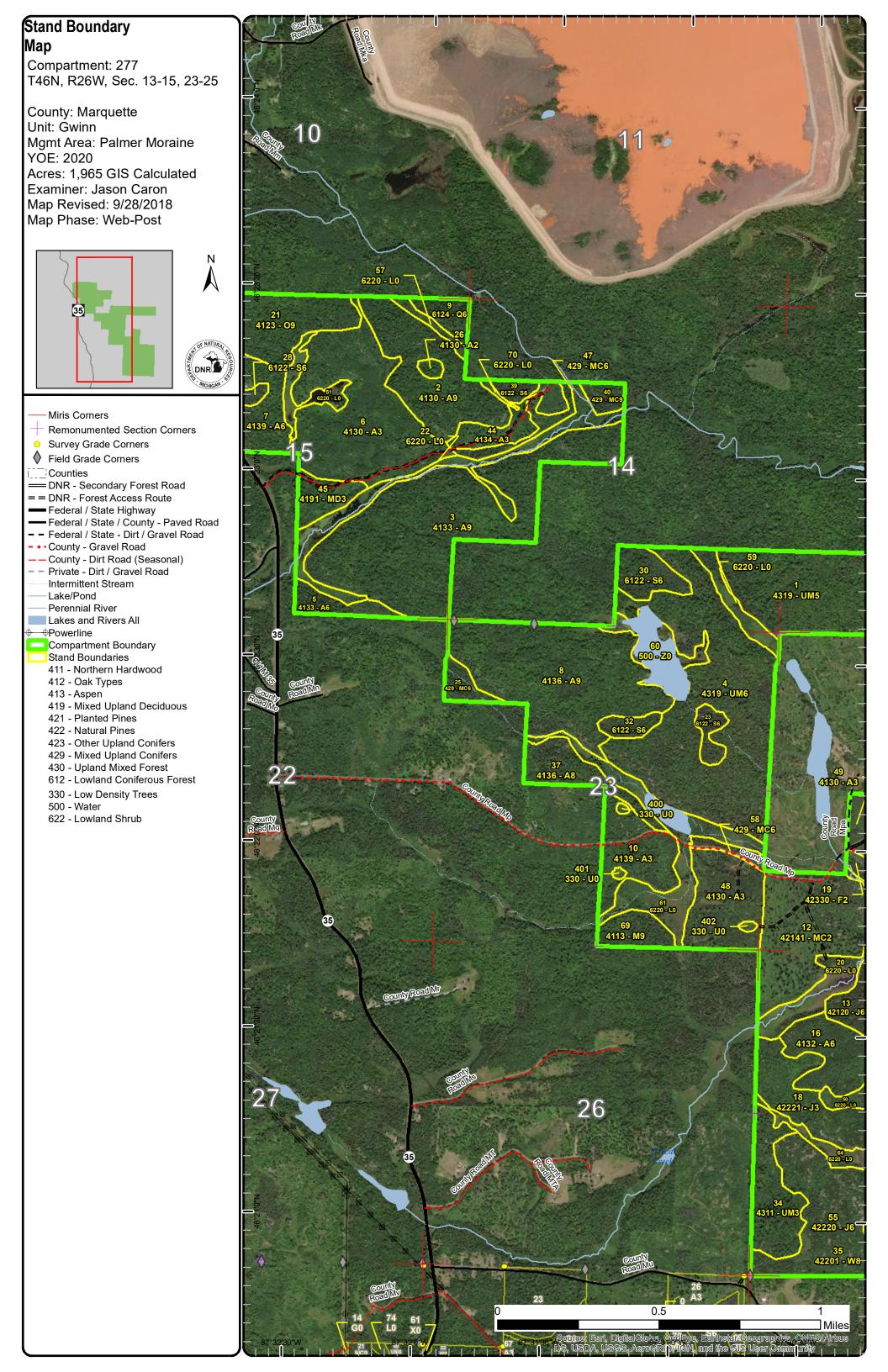
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Aspen	0	0	32	173	31	21	36	58	111	181	0	0	0	0	0	0	0	0	641
Jack Pine	0	0	0	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	223
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Conifers	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10
Lowland Shrub	241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	241
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	7	24	13	0	0	0	0	0	0	0	44
Mixed Upland Deciduous	0	0	14	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	15
Northern Hardwood	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	14
Oak	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	41
Planted Mixed Pines	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
Upland Conifers	0	0	0	0	0	0	0	0	18	107	5	0	7	0	0	0	0	0	137
Upland Mixed Forest	0	0	0	144	0	0	177	0	0	0	155	0	0	0	0	0	0	0	476
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Water	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11
Total	270	9	119	540	31	21	269	58	136	322	173	0	7	0	0	0	0	11	1963

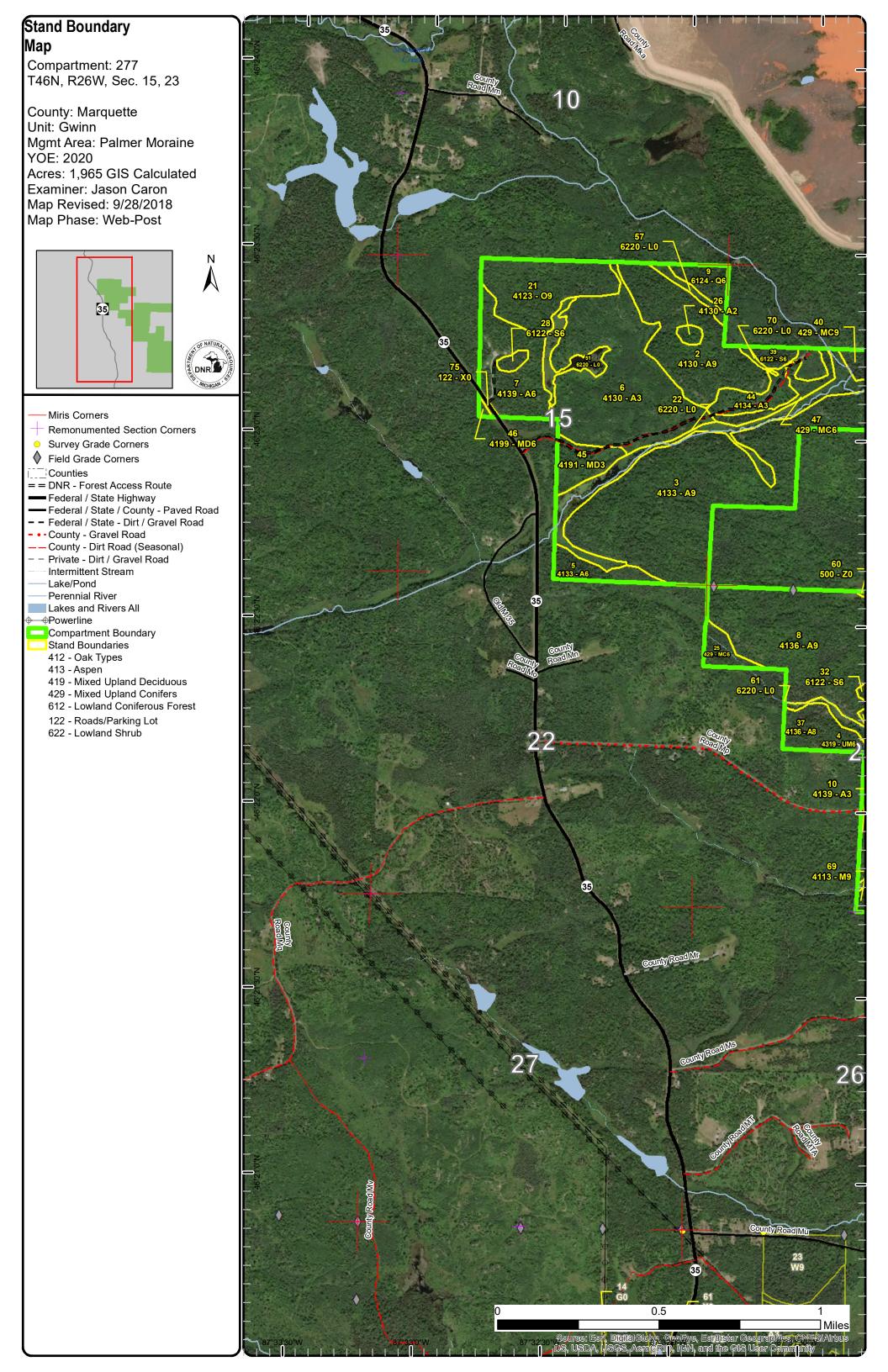


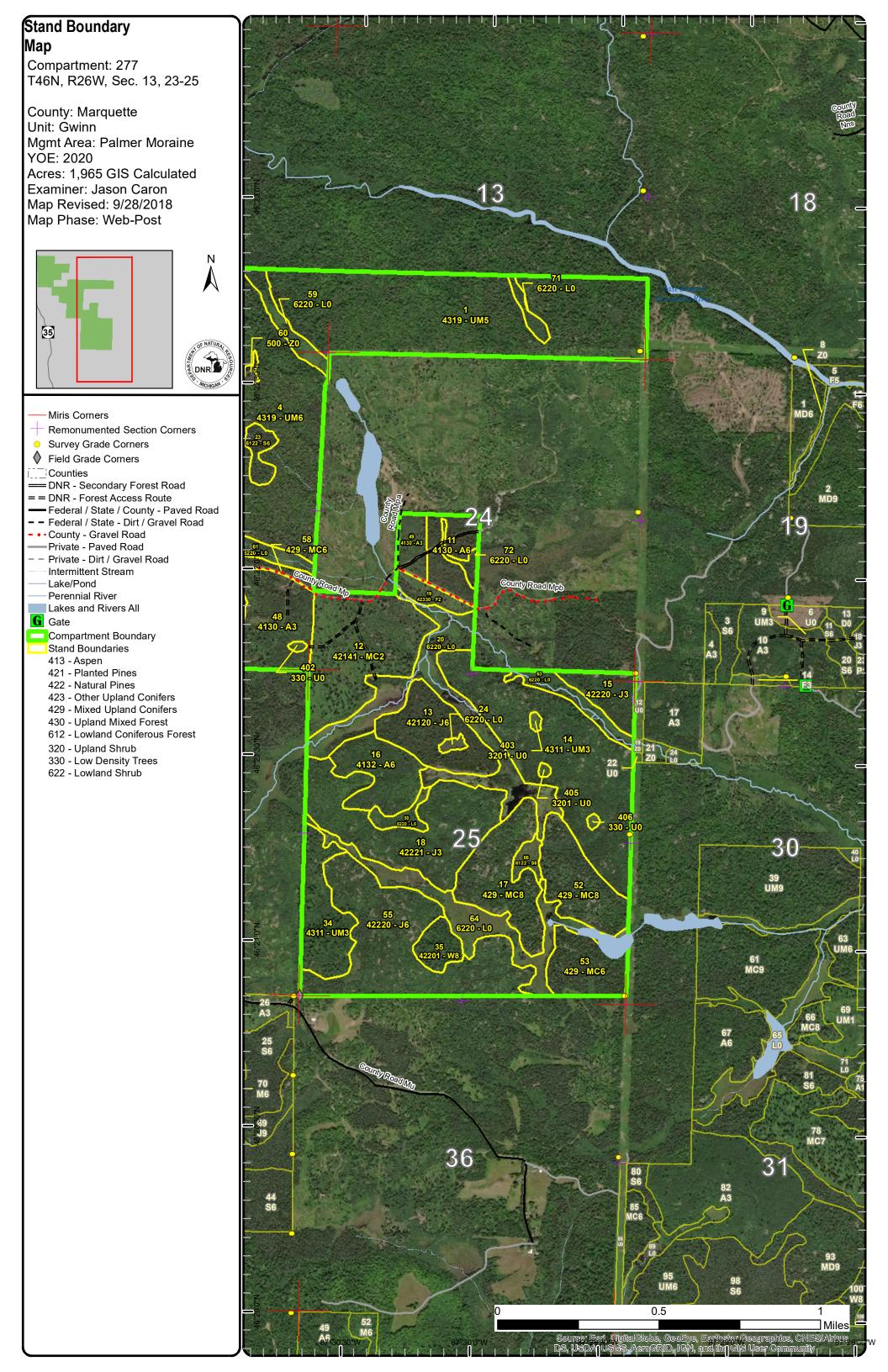


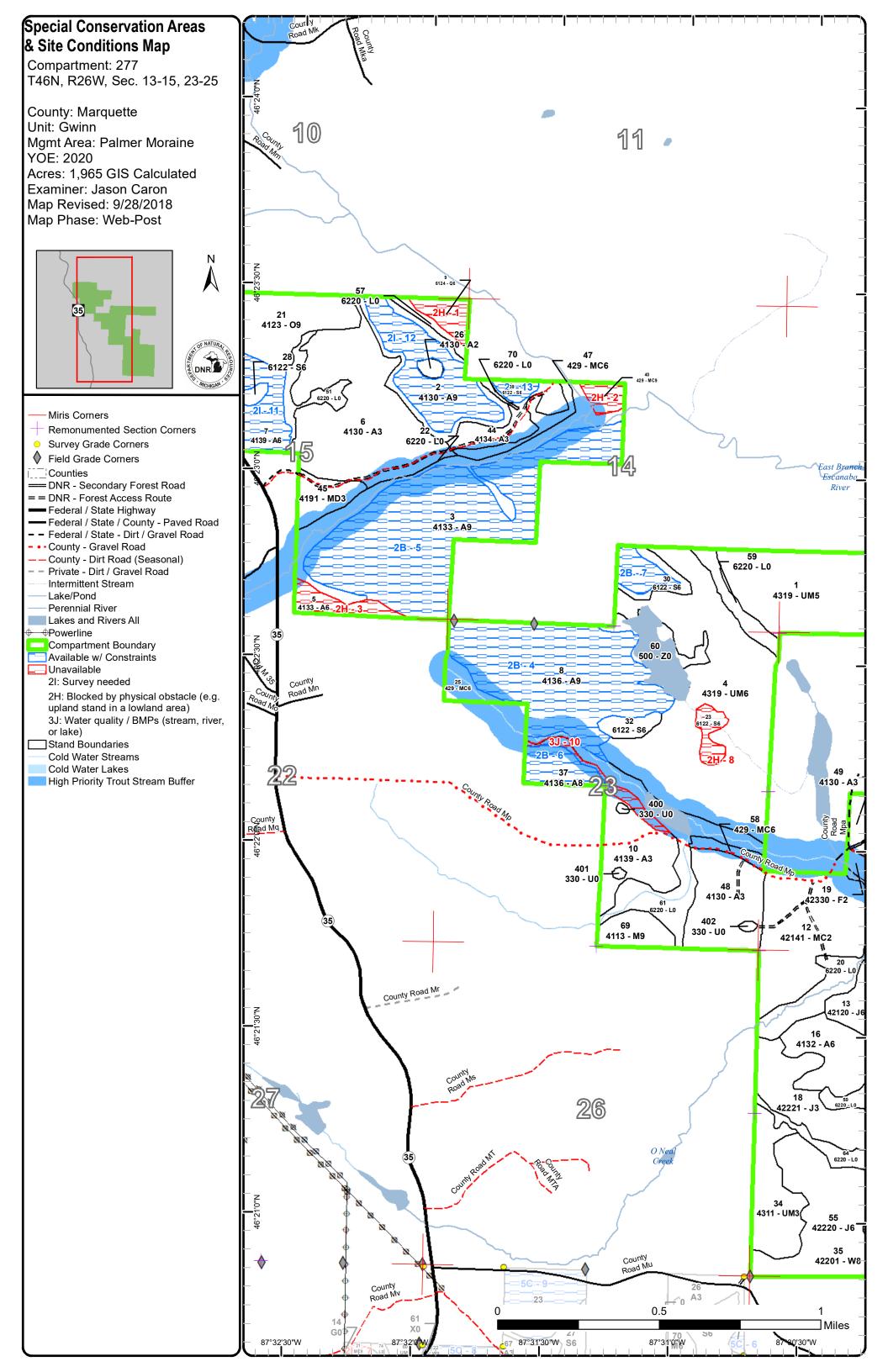


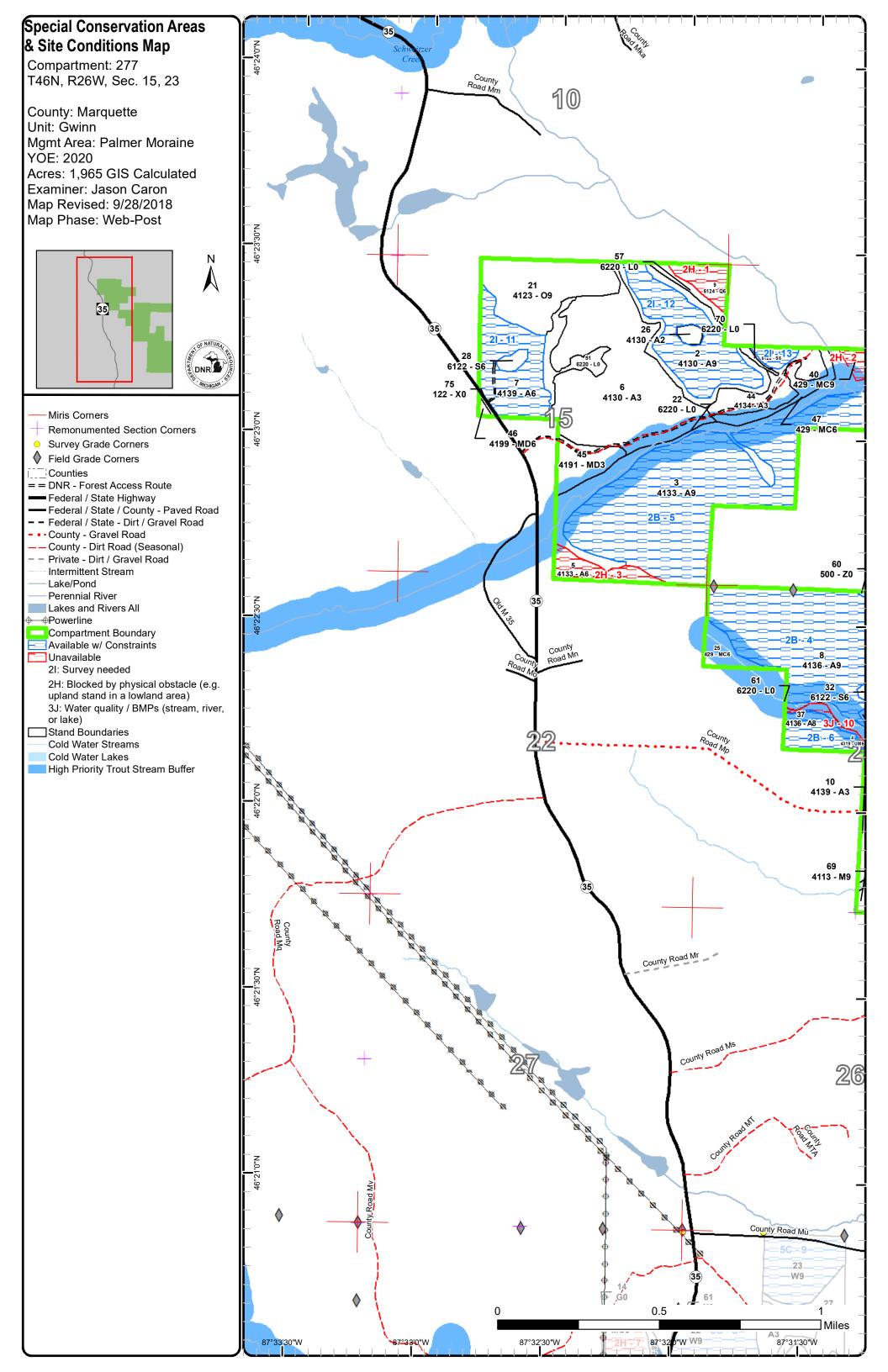


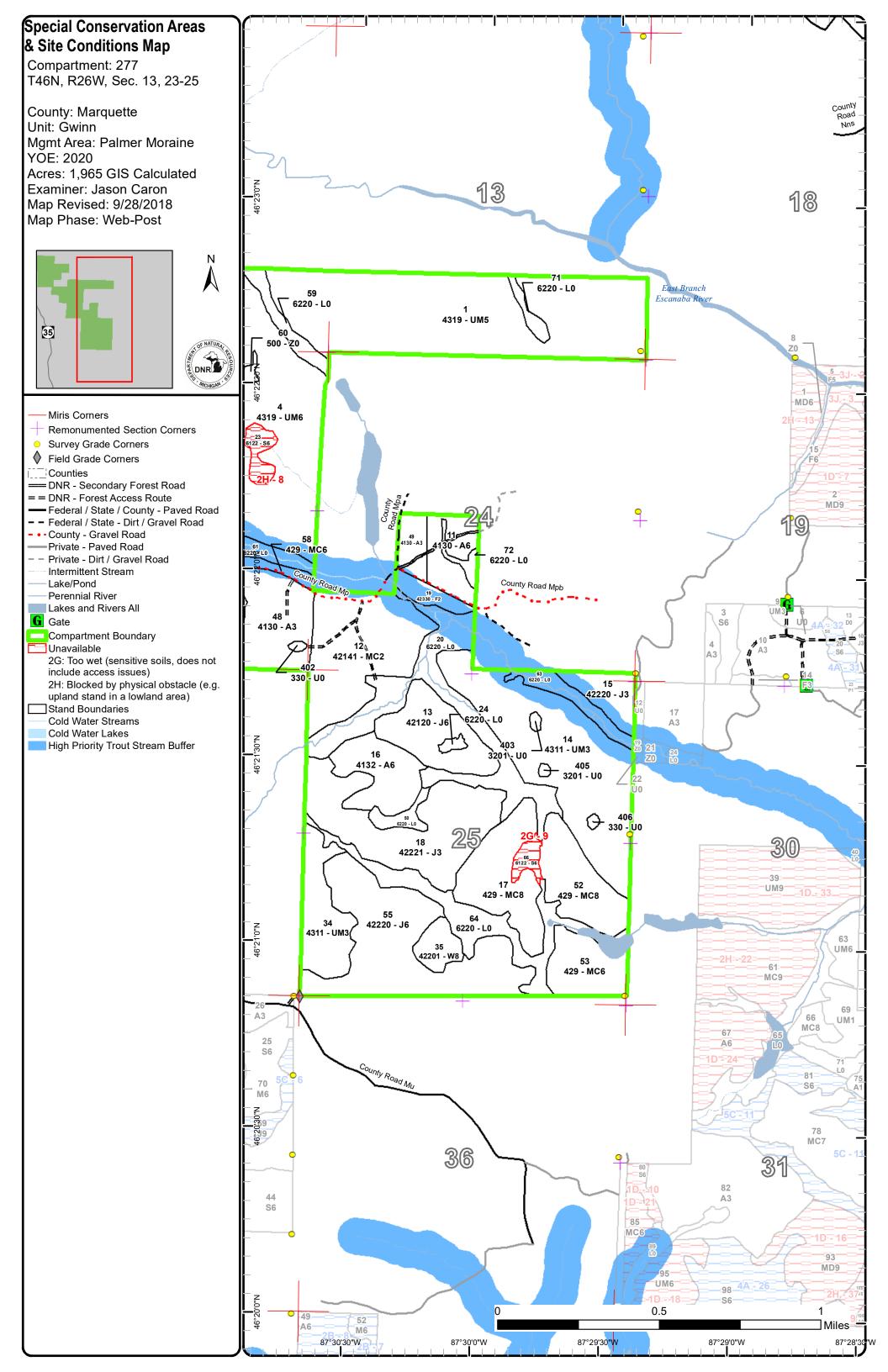














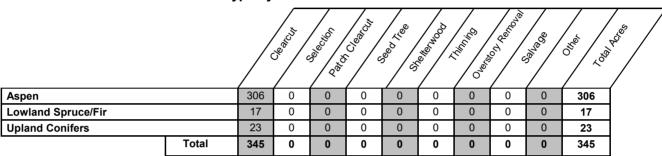
# **Report 2 – Treatment Summary**

# **Gwinn Mgt. Unit**

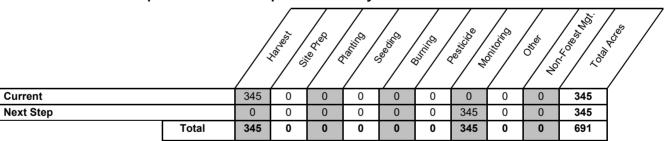
Compartment 277 Year of Entry: 2020 **Total Compartment Acres: 1,965 Acres of Harvest** 

> Commercial Harvest -Harvests with Site Condition - 238 Next Step Harvest - 0 Habitat Cut - 107

# **Cover Type by Harvest Method**



# **Proposed and Next Step Treatments by Method**



Compartment: 277

Year of Entry: 2020

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	32277002-Cut	43.3	4130 - Aspen	Sawtimber Well	65	51-80	Harvest	Clearcut with	4319 - Mixed Upland Forest	Even-Aged	Draft Proposal

Habitat Cut: Yes Site Condition: Survey Needed

<u>Prescription</u> Clearcut with reserves. Numerous areas of retention will exist within this stand due to the topography and red line exclusions. Do not harvest any white pine over 15" (adjust this diameter slightly during cruising if needed). Do not harvest under-represented trees such as oak, yellow birch, or

red pine

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Aspen, maple, oak, fir, spruce, cherry, birch.

Regen:

S

Other Wildlife - Retention should also include some BT aspen – Goshawk and cavity nesters. There is only (10%) White Pine keep 15 dbh spec –

Comment: Black Bea

Proposed Start Date: 10/01/2019

3 32277003-Cut 113.8 4133 - Aspen, Sawtimber 85 51-80 Harvest Clearcut with 4134 - Aspen, Even-Aged Draft Proposal Retention Spruce/Fir

Habitat Cut: No Site Condition: Unknown Access

Prescription Specs: Clearcut with reserves. Numerous areas of retention will exist within this stand due to the topography and red line exclusions. Do not harvest any white pine over 15" dbh(adjust this diameter slightly during cruising if needed). Do not harvest under-represented trees such as oak, cedar,

yellow birch, or red pine.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, spruce, fir, maple, birch, and oak.

Regen:

Other Comment:

Proposed Start Date: 10/01/2019

7 32277007-Cut 36.0 4139 - Aspen, Poletimber 51 51-80 Harvest Clearcut with 4319 - Mixed Deciduous Well Retention Upland Forest

Habitat Cut: Yes Site Condition: Survey Needed

<u>Prescription</u> Clearcut with reserves. Red line out a patch of mature timber to meet retention guidelines. Do not harvest under-represented trees such as oak

Specs: and pine.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, maple, fir, spruce, pine, and oak.

Regen:

Other Wildlife - Retention should also include some BT aspen – Goshawk and cavity nesters.

Comment:

Proposed Start Date: 10/01/2019

8 32277008-Cut 97.7 4136 - Aspen, Sawtimber 74 81-110 Harvest Clearcut with 4134 - Aspen, Even-Aged Draft Proposal Retention Spruce/Fir

Habitat Cut: No Site Condition: Unknown Access

<u>Prescription</u> Clearcut with reserves. Numerous areas of retention will exist within this stand due to the topography and red line exclusions. Do not harvest any white pine over 15" (adjust this diameter slightly during cruising if needed). Do not harvest under-represented trees such as oak, yellow birch, or

red pine.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Aspen, spruce, fir, maple, oak, hemlock, and birch.

Regen:

Other Comment:

Proposed Start Date: 10/01/2019

Report 3 -- Treatments

Compartment: 277

Year of Entry: 2020

Forest

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
30	32277030-Cut	12.2 6	3122 - Black Spruce	Poletimber Well	80	51-80	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Even-Aged	Draft Proposal

**Habitat Cut: No** Site Condition: Unknown Access

Prescription Clearcut with retention. Do not harvest under-represented species within the stand. Do not cut oak and pine. Stand boundary was adjusted to Specs: buffer nearby wet areas and stagnant spruce.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable maple, aspen, pine, spruce, fir, and birch.

Regen:

Put a SC on this stand due to access. Not sure if producer would utilize the existing logging road when cutting stand 8 to the south. Doesn't make Other sense to add this small stand to the sale if producer needs to put a lot of time to connect haul road within stand 8 to the existing private road on Comment: Jordan Triest property to the north of stand 8. If there is interest make it a direct sale.

Wildlife - Retention should include some White Birch (5%) - pileated woodpecker

Proposed Start Date: 10/01/2019

32277037-Cut 14.7 4136 - Aspen, Sawtimber 82 51-80 4134 - Aspen, Even-Aged Draft Proposal Harvest Clearcut with Mixed Conifer Medium Spruce/Fir Retention

**Habitat Cut: No** Site Condition: Unknown Access

Prescription Clearcut with reserves. Numerous areas of retention will exist within this stand due to the topography and red line exclusions. Do not harvest any white pine over 15" (adjust this diameter slightly during cruising if needed). Do not harvest under-represented trees such as oak, yellow birch, or Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable maple, aspen, spruce, fir, pine, oak, birch, and cedar.

Regen:

Other Comment:

10/01/2019 **Proposed Start Date:** 

4.4 6122 - Black Spruce Poletimber 612 - Lowland 32277039-cut 51-80 Harvest Clearcut with Even-Aged Draft Proposal Retention Coniferous

Site Condition: Survey Needed **Habitat Cut: Yes** 

Prescription Clearcut with reserves. Do not harvest under-represented trees such as pine. Red line along western edge (riparian area) will serve as retention.

Exclude a patch of mature black spruce for a seed source within the stand. Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Tamarack, spruce, fir, aspen, maple, and yellow birch.

Regen:

Other Wildlife - Retention patch of mature black spruce should be 15+ trees - Red crossbill

Comment:

Proposed Start Date: 10/01/2019

32277053-cut 23.2 429 - Mixed Upland Poletimber 82 81-110 Clearcut with 4319 - Mixed Even-Aged Draft Proposal Harvest Conifers Well Retention **Upland Forest** 

**Habitat Cut: Yes Site Condition:** 

Prescription Clearcut with reserves. Do not harvest under-represented trees within the stand. Retention will include a buffer along the northern and western

edge for BMP purposes. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable pine, aspen, maple, birch, fir, and spruce.

Regen:

Other Wildlife - Retention should also include some paper birch (10%) pileated woodpecker and cavity nesters. Retain all White Pine- Black Bear

Comment:

**Proposed Start Date:** 10/01/2019 Gwinn Mgt. Unit

Size

Density Age

Stand

ВА

Range

Stand

CoverType

Report 3 -- Treatments

**Treatment** 

Type

**Treatment** 

Method

Compartment: 277 Year of Entry: 2020

> Age Structure

Cover Type Objective Approval Status

Total Treatment Acreage Proposed:

Treatment

Name

s

t a

n

345.3

Acres

Gwinn Mgt. Unit

Jason Caron : Examiner

Compartment: 277
Year of Entry: 2020

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	S
Acres	Available	With Condition	Not Available		2B	21	2G	2H	3J
642	271	353	19	Aspen	273	79		12	7
223	223	0	0	Jack Pine					
3	3	0	0	Low-Density Trees					
10	0	0	10	Lowland Conifers				10	
241	241	0	0	Lowland Shrub					0
44	16	15	13	Lowland Spruce/Fir	11	4	5	8	
15	15	0	0	Mixed Upland Deciduous					
14	14	0	0	Northern Hardwood					
41	41	0	0	Oak					
73	73	0	0	Planted Mixed Pines					
139	132	0	7	Upland Conifers				7	
476	476	0	0	Upland Mixed Forest					
2	2	0	0	Upland Shrub					
9	9	0	0	Upland Spruce/Fir					
1	1	0	0	Urban					
23	23	0	0	Water					
11	11	0	0	White Pine					
1,967	1,552	368	48	Total Forested Acres	284	84	5	36	7
	79%	19%	2%	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.

1 Unavailable 2H: Blocked by physical 10 Unspecified U	obstacle (e.g. upland stand in a lowland area)	Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Comments:	Comments:	1	Unavailable	obstacle (e.g. upland	10	Unspecified	Unspecified	Unspecified	Unspecified
		(	Comments:						

# **Report 4 – Site Conditions**

Gwinn Mgt. Unit

Jason Caron : Examiner

Compartment: 277
Year of Entry: 2020

2	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	2B: Unknown if access through adjacent landowner(s) is possible	111	2I: Survey needed	Unspecified	Unspecified	Unspecified
	Comments: Survey needed alor	ng the NW corner of Section 23.					
5	Available	2B: Unknown if access through adjacent landowner(s) is possible	148	2I: Survey needed	Unspecified	Unspecified	Unspecified
	Comments: Survey needed alor	ng the south line of section 15.					
6	Available	2B: Unknown if access through adjacent landowner(s) is possible	15	2l: Survey needed	Unspecified	Unspecified	Unspecified
	Comments:						

# **Report 4 – Site Conditions**

Gwinn Mgt. Unit Compartment: 277 Year of Entry: 2020 Jason Caron : Examiner

7	Available	2B: Unknown if access through adjacent landowner(s) is possible	11	Unspecified	Unspecified	Unspecified	Unspecified
		and is questionable. If producer sible. Add as a direct sale if prod				rivate land to the west of th	is stand, access
8	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Small black spruce	stand. No access.					
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
	Comments: Stagnant stand of b	olack spruce. No access to this	stand.				
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Available	2l: Survey needed	36	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
12	Available	2l: Survey needed	43	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

# **Report 4 – Site Conditions**

Gwinn Mgt. Unit

Jason Caron : Examiner

Compartment: 277
Year of Entry: 2020

13 Available 21: Survey needed 4 Unspecified Unspecified Unspecified Unspecified 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: 277





# 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.

Conservation 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 oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable y are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condi- stocked trout populations and those of other coldwater fish speci- year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high d communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	unique conditions adjacent to lakes, iversity of plants and wildlife. Riparian cts on water quality and quantity, as well

S	Gwinr	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 277 Year of Entry: 2020
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4319 - Mixed Upland Forest	Poletimber Medium	177.1	51	1-50	Stand consists of low density red maple, paper birch, and spruce/fir. Scattered large diameter white pine and red pine exist throughout the stand. Rugged ground exists throughout the stand. Paper birch is falling apart due to age. Fir and spruce are in poor condition due to the budworm infestation. The eastern side of the stand contains mostly young balsam with scattered red maple and paper birch. A lot of old blowdown exists on the east side of the stand. In a lot of areas the sub-canopy balsam is actually the canopy. Pockets of this exist throughout the stand.
2	4130 - Aspen	Sawtimber Well	58.2	65	51-80	Stand consists of mixed conifer and deciduous. Aspen is old and in poor condition. Rocky and rugged ground throughout the entire stand.
3	4133 - Aspen, Mixed Pine	Sawtimber Well	147.7	85	51-80	Stand consists of mixed conifer and deciduous. Aspen is old and in poor condition. Rocky and rugged ground throughout the entire stand. Large white pine scattered throughout the stand as well.
4	4319 - Mixed Upland Forest	Poletimber Well	155.2	97	81-110	Inaccessible large bigtooth aspen stand with white pine, white birch and red maple. Additional scattered species include red oak, jack pine, white spruce, and red pine. Terrain again varies from rocky ledges to alder lowlands with wet black spruce swamp pockets. Central portion of the stand has seen significant blowdown areas. These areas are regenerating with birch, oak, and red maple seedlings. Fir and spruce contain budworm damage.
5	4133 - Aspen, Mixed Pine	Poletimber Well	11.6	85	51-80	Very rugged, shear rock bluffs prevent access. Pole size aspen, white pine, white birch, red maple, black spruce.
6	4130 - Aspen	Sapling Well	98.0	25	Immature	Stand of young aspen of decent quality. Red maple stump sprouts throughout the stand. Ground is rocky and rugged. A few large diameter white pine scattered throughout the stand.
7	4139 - Aspen, Mixed Deciduous	Poletimber Well	36.0	51	51-80	This stand is a mix of hardwoods, red maple, white birch, aspen, fir and white pine. Occasional red oak. Terrain consists of rock ledges and low wet ravines. Much of the the stand has a good brush layer of hazel.
8	4136 - Aspen, Mixed Conifer	Sawtimber Well	110.6	74	81-110	Inaccessible large bigtooth aspen stand with white pine, white birch, and red maple. Additional scattered species include red oak, white spruce, and red pine. Terrain varies from rocky ledges to alder lowlands with wet black spruce swamp pockets. Western half of the stand received significant blowdown 15+ years ago. These blowdown areas are regenerating with birch, oak, white pine, and red maple seedlings. Nice oak regeneration exists in some locations where blowdown was the worst. Large white pine are scattered throughout the stand. Some tag alder pockets exist throughout the stand. Some smaller and poorer quality hardwood pockets exist as well. Aspen is old but is holding up fairly well given it's age. The only access to this stand for harvest is from the north, much too rocky and rugged to the south.
9	6124 - Lowland Spruce- Fir	Poletimber Well	9.7	85	81-110	Stand contains mostly low ground. A small portion of the stand was cut 20+ years ago, within the SE corner. The remainder of the stand contains a mix of both conifer and deciduous species.  A few rocky knobs exist within the stand which contain large diameter white pine.

S t	Gwinn	Mgt. Unit		Report 7	– Forested	Stands Compartment: 277 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
10	4139 - Aspen, Mixed Deciduous	Sapling Well	33.7	25	Immature	Stand consists of mostly aspen and red maple stump sprouts.  Some pockets of young white pine exist within the stand as well.  Large diameter white pine scattered throughout the stand.
11	4130 - Aspen	Poletimber Well	21.3	41		Poor quality aspen with a heavy fir component underneath. Fir is in very poor condition due to budworm. Aspen is small diameter given it's age.
12	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Medium	73.0	14	Immature	Stand was harvested in 2004: TS#120-00-01, the stand has a medium stocking of jack pine and aspen seedlings with scattered groups of white pine sawtimber that was excluded from the harvest.
13	42120 - Planted Jack Pine	Poletimber Well	36.9	28	Immature	Stand was harvested in 1984. TS# 8-82, "Paint Can Creek Sale". Access was from the north off Co.Rd. MP and across newly installed culverts on Paint Can creek. 2018- Jack pine is doing well within the stand. Scattered aspen exist within the stand as well.
14	4311 - Pine, Aspen Mix	Sapling Well	110.9	24	Immature	Stand was cut in 1994. TS #25-91. Stand consists of aspen with fir in the understory. A decent amount of jack pine exists along the western and southern portion of this stand.
15	42220 - Natural Jack Pine	Sapling Well	16.8	29	Immature	Stand was cut the summer of 1989. TS #14-83. Stand consists of jack pine that looks healthy. Scattered aspen exists within the stand.
16	4132 - Aspen, Jack Pine	Poletimber Well	30.5	32	Immature	Stand harvested in 1985 - 86. TS # 8-82. Good quality aspen throughout the stand. A few pockets of jack pine mixed in.
17	429 - Mixed Upland Conifers	Sawtimber Medium	43.9	82	51-80	Very rugged terrain inaccessible because of rock bluffs and ridges. Jack pine mortality is moderate to high, and the stand has incurred significant blowdown in the north. Dense red maple seedlings have regenerated in these blowdown areas. Scattered white pine regeneration is also present. To the east the stand degrades to black spruce. Stand contains large white pine on rock knobs within the southern half of the stand. North half contains mature jack pine but at least 50% of it is dead. Ground is too rugged to access for timber harvest.
18	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Well	75.8	24	Immature	Stand harvested in 1993-94. TS # 15-91. Access from north Co.Rd. MP. Stand consist of a mix of both jack pine and aspen of decent quality.
19	42330 - Upland Fir	Sapling Medium	8.7	7	Immature	Stand harvested in October, 2011. TS #32-116-10 (5 acres). Residual red and white pine within, as well as pockets of smaller S/F. Retention buffer strip left along south stand boundary (for O'Neal Creek). 2018: Stand contains patchy balsam & spruce regeneration at best. A few red maple stump sprouts exist. Overall poor regeneration. Stand should fill in over time.
21	4123 - Red Oak	Sawtimber Well	41.3	51	81-110	Stand of oak mixed with red maple and scattered aspen. The oak is multi-aged with a fair number of smaller oak existing within the understory of various diameters and heights. The aspen is in poorer condition. Rugged and rocky ground throughout the stand.

s t	Gwinn	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 277 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	6122 - Black Spruce	Poletimber Well	7.6	97	51-80	Small stand of black spruce with a few tamarack and occasional white pine.
25	429 - Mixed Upland Conifers	Poletimber Well	8.3	77	51-80	Southwest corner of the stand contains high ground. Stand slopes to the NE and down into a black spruce swamp. High ground contains white pine and mixed deciduous. Low ground contains smaller diameter black spruce with a few white pine.
26	4130 - Aspen	Sapling Medium	2.5	13	Immature	Pocket of blowdown that has regenerated back to aspen.
28	6122 - Black Spruce	Poletimber Well	2.7	80	51-80	Small, wet black spruce swamp pockets found within stand 7. Black spruce with a few tamarack and occasional white pine.
30	6122 - Black Spruce	Poletimber Well	16.7	80	51-80	The center of the stand contains rocky high ground with large white pine scattered throughout. A mix of red maple, paper birch, and fir exist within the canopy gaps. The remainder of the stand contains lowland black spruce. A lot of budworm damage exists on the fir. The east side of the stand grades into stagnant black spruce due to a higher water table.
32	6122 - Black Spruce	Poletimber Well	7.3	71	51-80	A small stand of black spruce that consists of small diameter black spruce and tamarack. A few scattered white pine exist as well.
34	4311 - Pine, Aspen Mix	Sapling Well	33.2	24	Immature	Stand was harvested in 1994. TS # 15-91. Stand has regenerated nicely to aspen and jack pine. Scattered white pine sawtimber remain in the over story.
35	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Medium	10.9	90	81-110	A mixed stand of larger diameter trees surrounded by young regeneration. White pine predominates with white birch, aspen, soft maple, and fir poles.
37	4136 - Aspen, Mixed Conifer	Sawtimber Medium	22.2	82	51-80	Do a field check on this stand ASAP.
39	6122 - Black Spruce	Poletimber Well	4.8	85	51-80	Stand consists of black spruce mixed with scattered large diameter white pine. Scattered aspen also exists within the stand. The black spruce is good quality. A couple of rocky knobs exist within the stand.
40	429 - Mixed Upland Conifers	Sawtimber Well	6.7	110	51-80	Steep and rugged terrain throughout the stand. I looked across the flowage at it but did not get into the stand.
44	4134 - Aspen, Spruce/Fir	Sapling Well	17.8	15	Immature	Stand was harvested in 2003: TS#119-00-01. Stand currently consists of decent quality aspen mixed with balsam. Some areas have a heavier component of balsam than others.
<b>45</b>	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	13.9	15	Immature	Stand was harvested in 2003: TS#119-00-01. Stand consists of heavy balsam regeneration with good red maple stump sprouts.

heavy balsam regeneration with good red maple stump sprouts.

The southern part of stand contains more aspen. Large diameter white pine scattered throughout the stand.

S t	Gwin		Report 7	- Forested	Stands Compartment: 277 Year of Entry: 2020	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	4199 - Other Mixed Upland Deciduous	Poletimber Well	0.9	51	51-80	Small rocky stand just west of M-35.
47	429 - Mixed Upland Conifers	Poletimber Well	9.7	70	51-80	Stand of mature timber that was left to act as a buffer against adjacent stream- Fifteen Creek. A mix of spruce, pine, fir, maple and aspen. Fir is in poor condition due to both age and budworm damage.
48	4130 - Aspen	Sapling Well	41.2	25	Immature	Stand was cut in 1993 under permit #13-91-01. Stand consists of poorer quality aspen mixed with fir. On the north side an old gravel pit exists that has grown in with some young jack pine.
49	4130 - Aspen	Sapling Well	11.0	14	Immature	Stand was harvested in 2004: TS#120-00-01. Aspen is decent quality. Very little fir within the understory.
52	429 - Mixed Upland Conifers	Sawtimber Medium	36.0	82	81-110	Very rugged terrain inaccessible because of rock bluffs and ridges. Jack pine mortality is moderate to high. Scattered white pine regeneration is also present. To the west the stand drops to black spruce.
53	429 - Mixed Upland Conifers	Poletimber Well	26.9	82	81-110	Stand consists of jack pine, black spruce, white birch and white pine with a scattering of soft maple and aspen. Access is poor and the actual operable area will be reduced significantly by the rock ledges.
55	42220 - Natural Jack Pine	Poletimber Well	93.7	24	Immature	Stand was cut in 1994. TS#15-91. Stand contains jack pine with scattered aspen and red maple.
58	429 - Mixed Upland Conifers	Poletimber Well	5.1	97	81-110	Upland black spruce and fir with aspen and a few white pine. Retain as a buffer along Oneal Creek to protect the riparian values and wildlife corridor along the creek.

6122 - Black Spruce

4113 - R.Maple, Conifer

66

69

Poletimber

Well

Sawtimber

Well

5.2

14.1

97

50

51-80

81-110

Stand of stagnant black spruce due to a high water table.

Stand consists of poorer quality red maple mixed with scattered aspen, spruce, and fir. Large diameter white pine scattered throughout the stand.

Compartment: 277 Year of Entry: 2020



Stand	Cover Type	Acres	Managed Site	General Comments:
20	6220 - Alder/willow	64.2	No	Extensive riparian area with numerous flowages throughout.
22	6220 - Alder/willow	34.0	No	Stand consists of Fifteen Creek and it's riparian area. Mostly tag alder along the edges.
24	6220 - Alder/willow	1.8	No	Small wetland pocket. The stand may be an old beaver flooding?
50	6220 - Alder/willow	6.2	No	Previous inventory states this is a tag alder and willow stand.
51	6220 - Alder/willow	11.1	No	Pond and wetland area. Riparian area consists of mostly tag alder.
57	6220 - Alder/willow	4.4	No	Tag alder and willow
59	6220 - Alder/willow	10.8	No	Small flowage. Heavy to tag alder.
60	500 - Water	22.5	No	Large beaver "lake".
61	6220 - Alder/willow	43.9	No	Composed primarily of beaver floodings.
63	6220 - Alder/willow	12.3	No	Riparian area with a small flowage.
64	6220 - Alder/willow	42.7	No	Extensive riparian area with numerous flowages throughout.
70	6220 - Alder/willow	1.2	No	Low ground. Stand consists of mostly tag alder and willow.
71	6220 - Alder/willow	4.5	No	Tag alder and willow
72	6220 - Alder/willow	3.9	No	Tag alder and willow. A 2+ acre patch of stunted black spruce exists on the east side of this stand, next to the compartment boundary. Former inventory notes state it was a treed bog.
75	122 - Road/Parking Lot	0.9	No	Highway M-35.
400	330 - Low-Density Trees	0.6	No	This opening and the trail are filling in with sweetfern.
401	330 - Low-Density Trees	0.7	No	This opening and the trail are filling in with sweetfern.
402	330 - Low-Density Trees	0.9	No	This opening and the trail are filling in with sweetfern.

Compartment: 277 Year of Entry: 2020



Stand	Cover Type	Acres	Managed Site	General Comments:
403	3201 - Sweet Fern	1.1	No	Small grass opening that is filling in with sweet fern and jack pine.
405	3201 - Sweet Fern	0.8	No	This opening is filling in with sweet fern and jack pine.
406	330 - Low-Density Trees	0.8	No	This opening and the trail are filling in with sweetfern.