

# **Compartment Review Presentation**

**Grayling Forest Management Unit** 

Compartment 72023 Entry Year 2026 Acreage: 1,549

County Oscoda

Management Area: High Sand Plains

Stand Examiner: Cole Michaud

**Legal Description:** 

T28N R1E Sections 1, 12, & 13 and T28N R2E Sections 6 & 7 Greenwood and North Elmer Townships, Oscoda County

#### **Identified Planning Goals:**

To maintain species and structural diversity while managing for health, productivity, and sustainability throughout the compartment. To provide multiple use opportunities and incorporate any visual management needed to optimize these uses.

#### Soil and topography:

This compartment is comprised mainly of Grayling sands, slopes ranging from 0-10%. There are a few potholes within the compartment that slopes increase to 10 - 30%, but these stands do not sustain merchantable timber, having little effect on management concerns with respect to topography.

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

This compartment consists of a mix of private and state ownership. There are several parcels of state land where contiguous ownership is limited to 80 acres within the section. These parcels are widely used by the surrounding landowners for various activities. The compartment has several forest trail roads that are being used heavily by ORV's. Several of the roads are used as illegal access for the nearby landowners to get to the designated ORV trail with out having to trailer their ORV's. The designated trail is located in the north east corner of the compartment.

#### **Unique Natural Features:**

Rough fescue occurs just south and east of section 13 and just east of section 6. Hill's thistle and rough fescue occurs to the north. Pale agoseris and rough fescue are known to exist to the southwest of this compartment. Alleghany plum was found to occur to the southeast. Ram's head orchid is reported to the northeast of compartment 023. Kirtland's warbler and prairie warbler inhabit areas just east of sections 6 and 7, and Loon exists to the west of these sections. There is potential for dry prairie plants in grassy openings of this compartment. These species include Hill's thistle, rough fescue, Alleghany plum, and pale agoseris. There is also potential for Kirtland's warbler and prairie warbler within the compartment boundaries. Potential also occurs for such insects as the dusted skipper, grizzled skipper, and red legged spittlebug in grassy openings and young jack pine of compartment 023. There is potential for Loon in the kettle lakes that exist within the compartment boundaries.

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

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

#### **Special Management Designations or Considerations:**

There are no special management designations or considerations for this compartment.

#### **Watershed and Fisheries Considerations:**

No waterways or significant lakes are located on state land. An un-named kettle lake exists in section 1, labeled as stand 7. Moon Lake, Oak Lake, and Perry Lake are located within the compartment boundaries on private ownership.

#### Wildlife Habitat Considerations:

There are two maintained wildlife openings in compartment 23, both located in the SE ¼ of Section 13. They are labeled stands 47 and 49 on the compartment map. These wildlife openings were planted with an annual crop that is doing well. Note: there is illegal ORV use around the perimeter of stand 47 (i.e. the opening is being used as an ORV track).

#### 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 200 and 400 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. A gravel pit is located four miles to the northeast, but there should be some potential. This compartment is leased for oil and gas development and most of it has been developed for the Antrim Shale.

#### **Vehicle Access:**

County roads of Williams road and Townline road provide paved vehicle access into the compartment. There are several county maintained gravel roads as well, including Eastwood road, Pennsylvania Crossing rd, and Oak lake road. The compartment has several miles of forest trail roads providing adequate access to the compartment.

#### **Survey Needs:**

The potential for surveys exist in this compartment.

#### **Recreational Facilities and Opportunities:**

#### **Fire Protection:**

There are several locations available as a water source, most located on private lands. All water sources are accessible to fire protection equipment. Forest trail roads, in combination with closed or abandoned roads within the compartment, provide access to within a ¼ mile of nearly all of the state owned land. The private land is mostly subdivided, with paved access to a majority of the land.

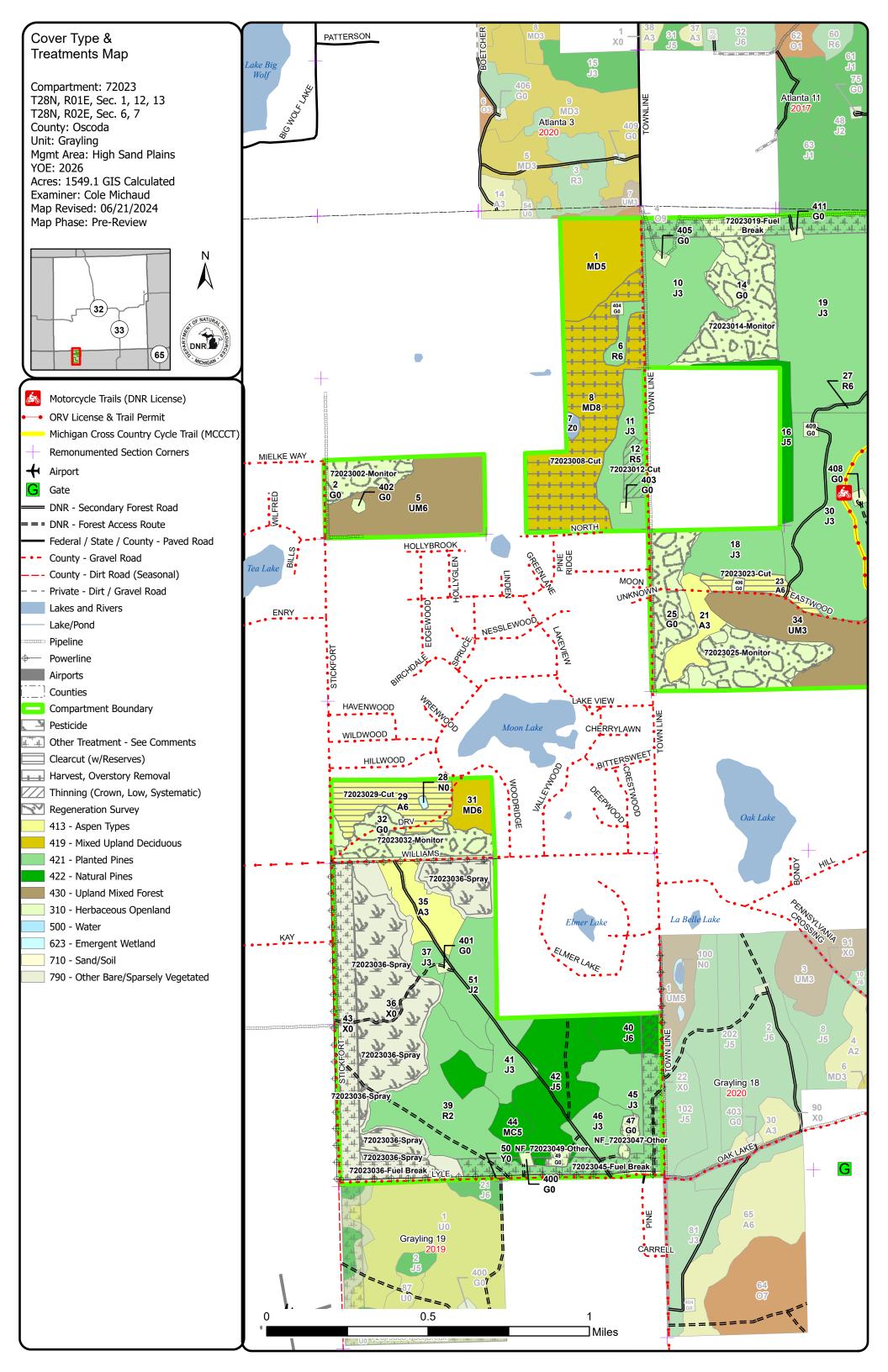
#### **Additional Compartment Information:**

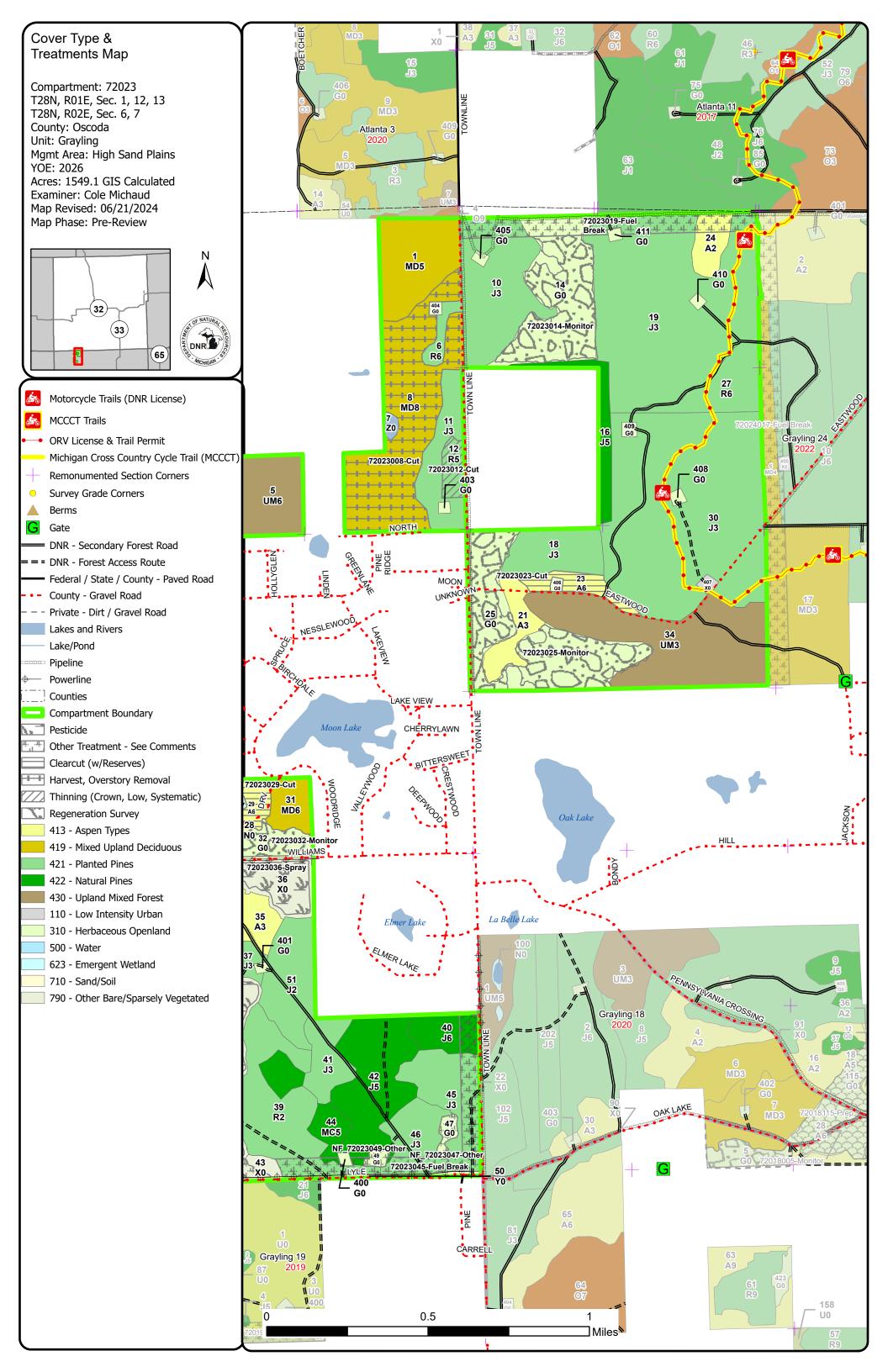
The following reports from the Inventory are attached:

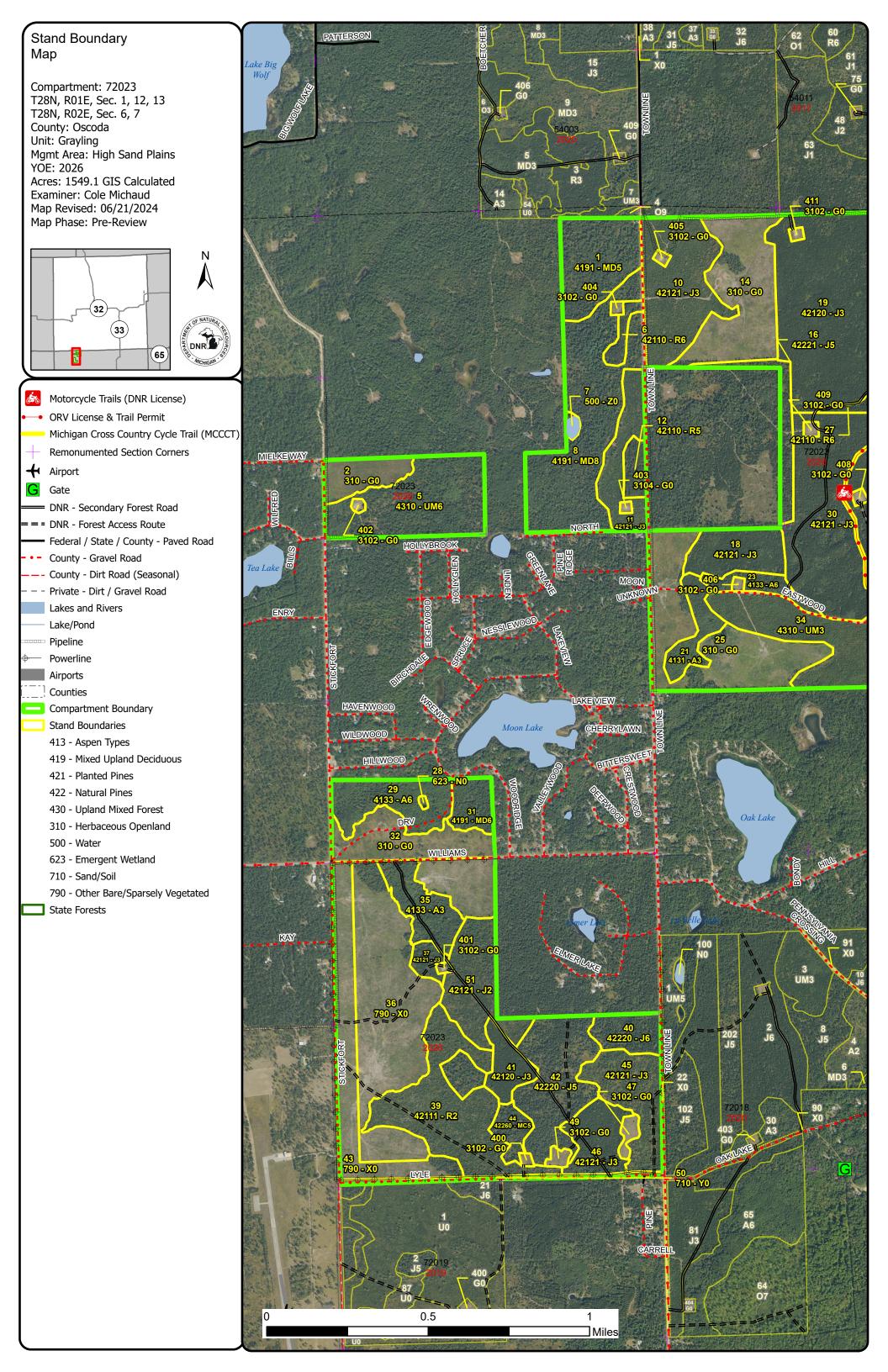
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

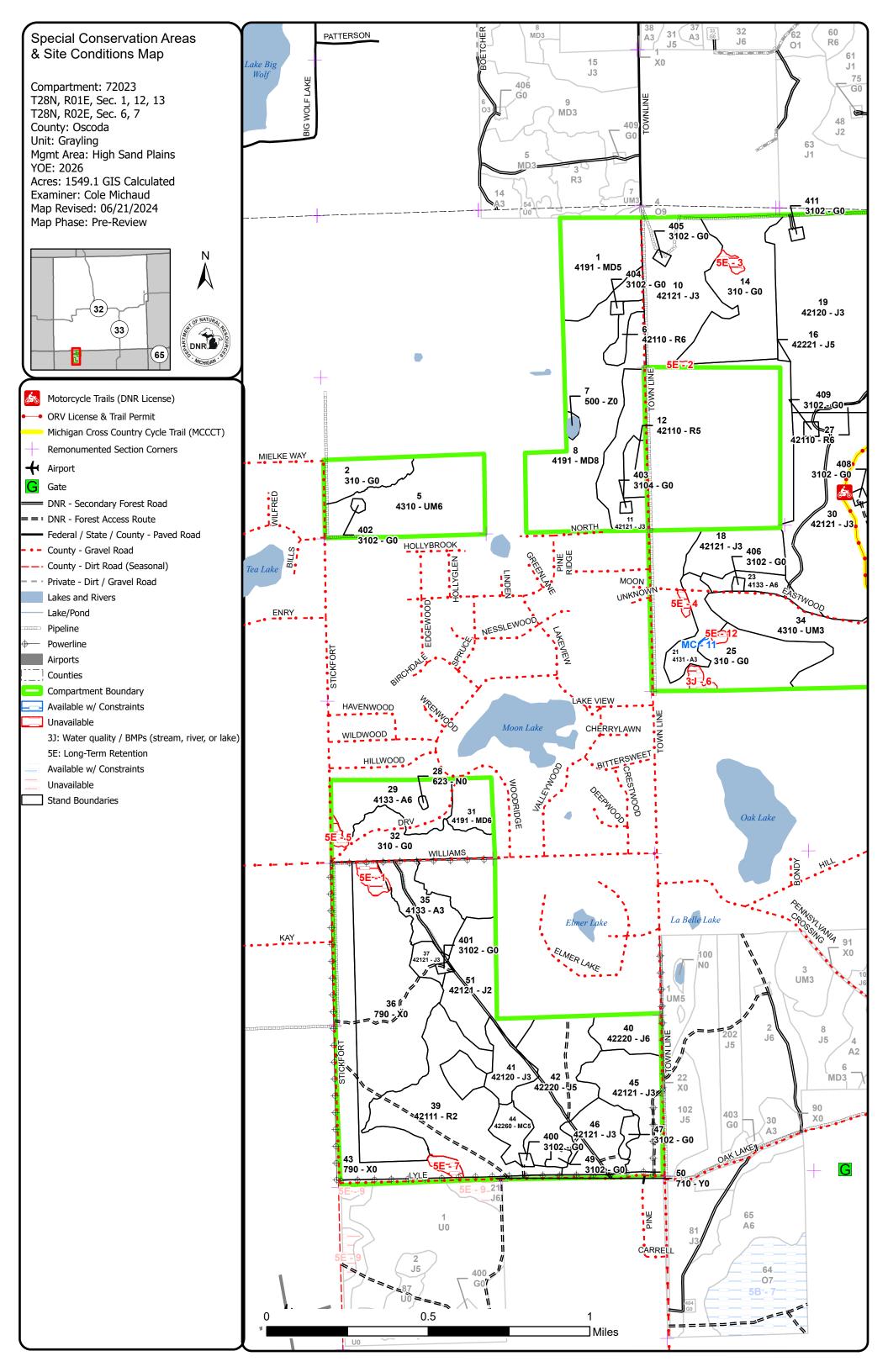
The following information is displayed, where pertinent, on the attached compartment maps:

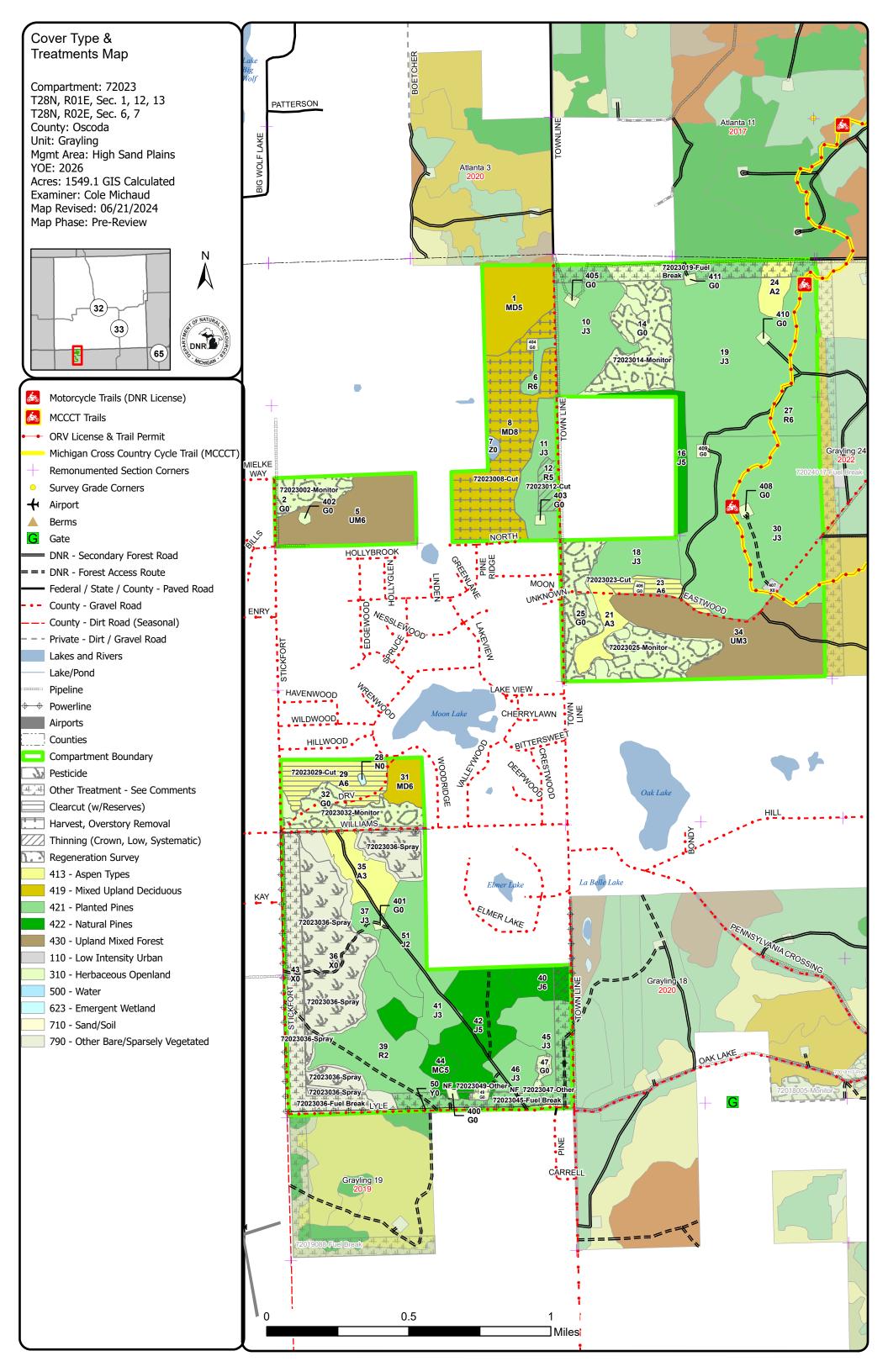
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

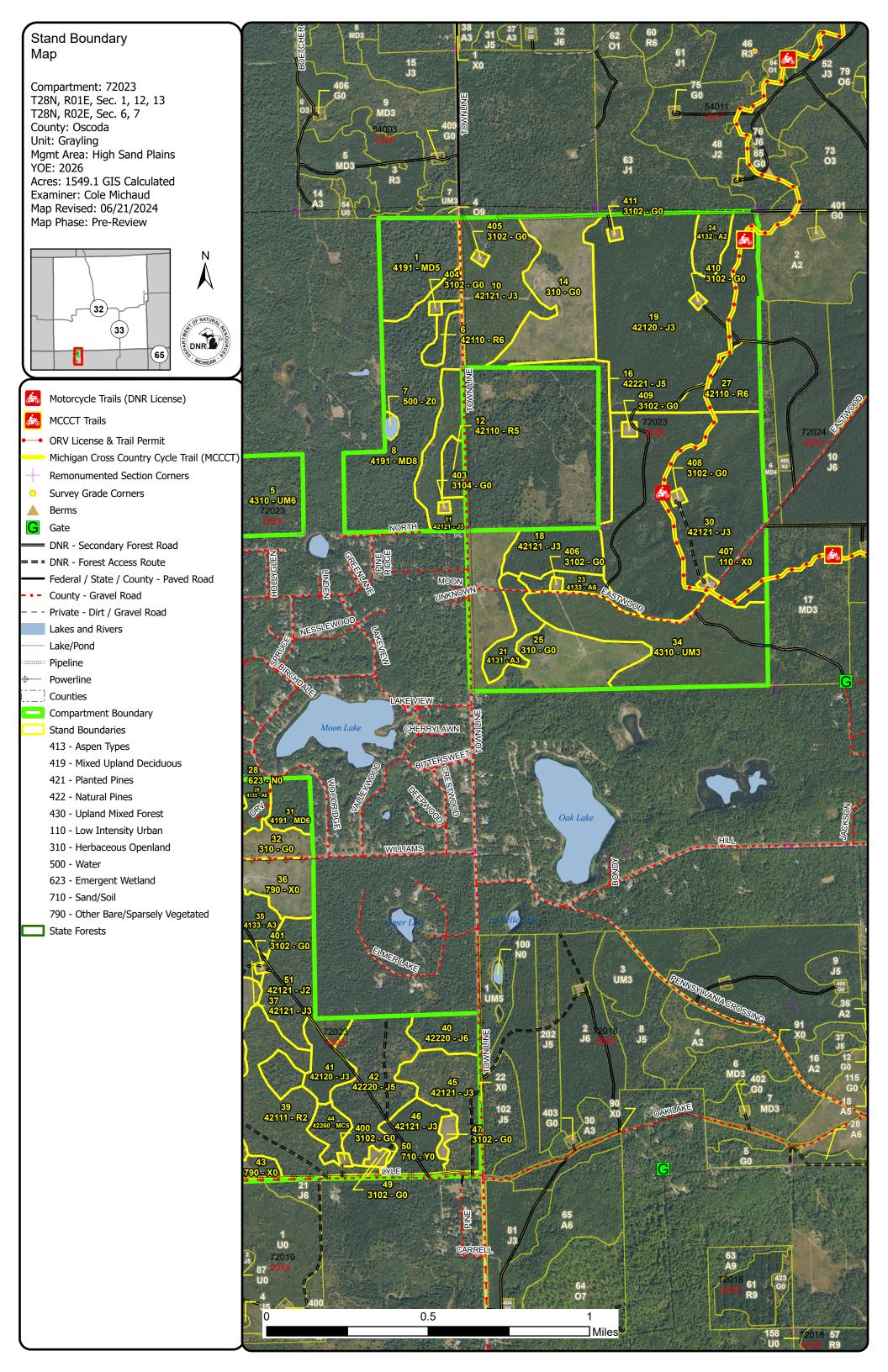


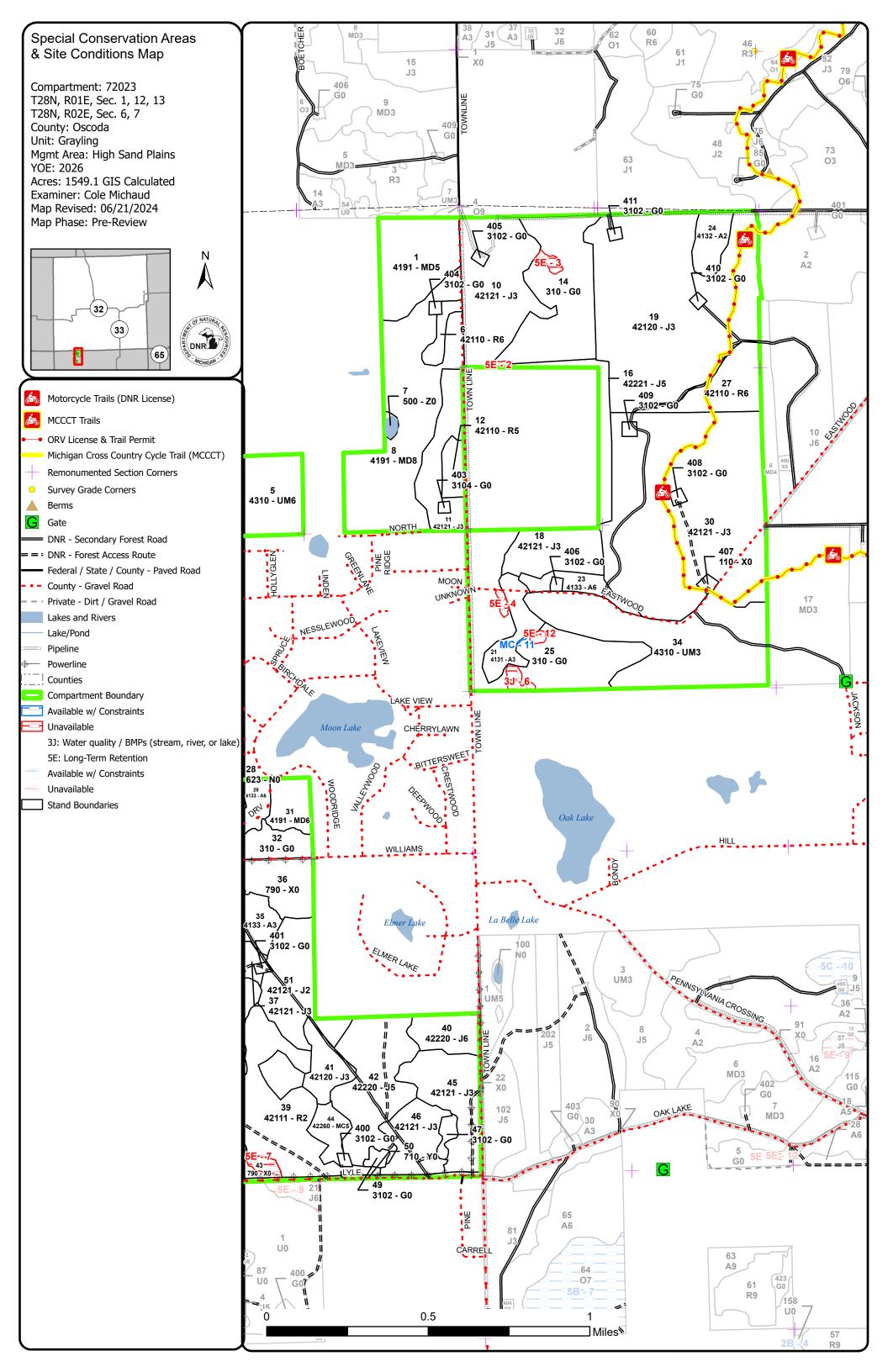












**Cole Michaud : Examiner** 

**Grayling Mgt. Unit** 



#### Age Class

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	Now York	Color C				S K		, 3 8					Ø 22 22 22 22 22 22 22 22 22 22 22 22 22					\$	TO TO
Aspen	0	0	0	51	0	0	42	0	0	0	0	0	0	0	0	0	0	0	93
Bare/Sparsely Vegetated	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175
Herbaceous Openland	203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203
Jack Pine	0	0	156	228	183	83	0	0	0	0	0	0	0	0	0	0	0	0	650
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mixed Upland Deciduous	0	0	0	0	41	0	0	0	0	0	92	0	0	0	0	0	0	0	132
Natural Mixed Pines	0	0	0	0	13	17	0	0	0	0	0	0	0	0	0	0	0	0	30
Red Pine	0	0	69	0	25	0	6	8	0	0	0	0	0	0	0	0	0	0	108
Sand, Soil	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Upland Mixed Forest	0	0	88	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	148
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	390	0	313	279	322	100	48	8	0	0	92	0	0	0	0	0	0	0	1551



# **Report 2 – Treatment Summary**

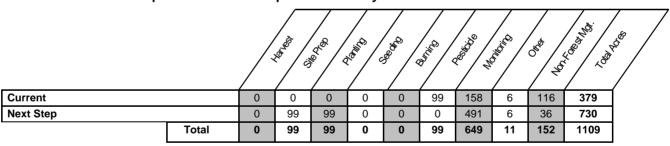
# Grayling Mgt. Unit Year of Entry: 2026

#### **Acres of Harvest**

Compartment 23
Total Compartment Acres: 1,549

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

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



Grayling Mgt. Unit Report 3 -- Treatments Compartment: 23 Year of Entry: 2026

Name Ч

**Treatment** 

Stand CoverType

Acres

Size Stand Density Age

BA Range **Treatment** Type

**Treatment** Method

**Cover Type** Age Objective Structure

Habitat Cut

**Proposed Treatments:** 

72023019-**Fuel Break** 

42120 - Planted 36.4 Jack Pine

Sapling Well

ified

Unspec NonForestMgt Other - Specify

330 - Low-**Density Trees** 

Jack Pine

No

No

S

t а

n

Prescription Maintain a 5 chain wide fuel break using methods such as mulching, mastication, brushing, mowing, or burning. Leave scattered fire-

Specs:

resistant trees where possible to soften the visual impact without compromising fuel break functionality.

This fuel break is part of a long-range fire control plan.

Next Step

**Treatments:** 

Acceptable Fire Break

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2015

**Approved Treatments:** 

16.8 310 - Herbaceous Nonstocked Natural Regen 72023002-0 Unspec Monitoring 4121 - Oak, Even-Aged Openland (Intermediate) Aspen

**Monitor** 

Prescription regen survey

Specs:

Next Step ; Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Let stand regenerate natrually. Oak, aspen, pine, maple is acceptable regeneration.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/3 /2022

72023014-47.6 310 - Herbaceous Nonstocked Unspec Natural Regen 4222 - Natural Even-Aged No 14 Monitoring Openland ified (Intermediate)

Monitor

Prescription regen survey

Specs:

Next Step ; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Let stand regenerate naturally, jack pine is acceptable regen.

Regen:

Other Percent to Treat = 100%

Comment: Site Condition

Proposed Start Date: 10/3 /2022

Proposed Start Date: 10/1 /2023

Regen: Other 4 2 2

Comment: Site Condition

Acceptable Being Planted to RP

Percent to Treat = 100%

Grayling Mgt. Unit Report 3 -- Treatments Compartment: 23 S Year of Entry: 2026 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Name CoverType Density Age Range Type Method Objective Structure Cut Ч 45 72023045-36.0 42121 - Planted Sapling 12 Immatu NonForestMgt Other - Specify 330 - Low-No **Fuel Break** Jack Pine, Mixed Well re **Density Trees** Deciduous Prescription Maintain a 5 chain wide fuel break using methods such as mulching, mastication, brushing, mowing, or burning. Leave scattered fireresistant trees where possible to soften the visual impact without compromising fuel break functionality. Specs: Next Step Monitoring, Natural Regen (Re-Inventory); NonForestMgt, Other - Specify Treatments: Acceptable Fuel Break. Regen: This fuel break is part of a long-range fire control plan. Renew the treatment every inventory cycle. **Other** Comment: Site Condition Proposed Start Date: 10/1 /2023 47 NF\_72023047-3.4 3102 - Grass Nonstocked Other Other 310 -No Herbaceous Other Openland Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, Specs: brushing, burning and herbicide application. Next Step Other, Other **Treatments:** Acceptable Regen: Other 6 2 2 Comment: Site Condition Proposed Start Date: 2 /17/2015 49 NF 72023049-2.3 3102 - Grass Nonstocked Other Other 310 -No Other Herbaceous Openland Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application. Specs: Next Step Other, Other Treatments: Acceptable Regen: Other 6 2 2 Comment:

Total Treatment 379.1 Acreage Proposed:

Proposed Start Date: 2 /17/2015

Site Condition

**Grayling Mgt. Unit** 

Cole Michaud : Examiner

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	ditions
Acres	Available	With Condition	Not Available		MC	3J	5E	
93	93	0	0	Aspen			0	
175	167	0	7	Bare/Sparsely Vegetated			7	
203	193	0	10	Herbaceous Openland	0	3	7	
649	649	0	0	Jack Pine				
1	1	0	0	Marsh				
132	132	0	0	Mixed Upland Deciduous				
31	31	0	0	Natural Mixed Pines				
107	107	0	0	Red Pine			0	
7	7	0	0	Sand, Soil				
148	148	0	0	Upland Mixed Forest				
1	1	0	0	Urban				
2	2	0	0	Water				
1,549	1,531	0	17	Total Forested Acres	0	3	15	
	99%	0%	1%	Relative Percent				-

<sup>\*</sup>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	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
2	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
3	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

# **Report 4 – Site Conditions**

Grayling Mgt. Unit

Cole Michaud : Examiner

4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
11	Available	Minor Change in Acreage	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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				

Mgt. Unit Compartment:
Year of Entry





\* 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	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area

Grayling Mgt. Unit



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
1	4191 - Mixed Upla Co	and Deciduo onifer	ous with Po	letimbei	· Medium	n 40.5	37	Unspecified	N/A		Seedtree done in 1987- regen is mostly pin oak, single stem and stump sprouts- some aspen as well. Some areas heavier to aspen and red
	Canopy Species	% Cover	Size Class	DBH	Age						maple regen. Regen is doing well. Log sized stems are starting to decline in places.
	Red Pine	15	Log	11							decline in places.
	Jack Pine	15	Pole	5							
	Quaking Aspen	30	Sapling	5	37						
N	Northern Pin Oak	15	Log	10							
2	310 - Herbac	eous Openi	and	Nonsto	ocked	17.4	0	Unspecified	412 - Oak T	-ypes	Harvested in 2019 under contract Comp 23 Mix 72-015-16. Regen is present but will require more in depth survey during re-inventory next year. Oak is getting old. Health is still decent in most places. Understory is coming in strong. Regeneration should not be an issue. Ground water monitoring wells installed after a release on west side of road. Ground water monitoring wells are authorized under a land use permit to Riverside Energy. Site is commonly referred to as the "Wolf Lake" site.
5	4310 - Pi	ne, Oak Mix	(	Sapling	y Well	59.8	36	1-50	N/A		Jack Pine is reaching merch Size in some areas, 1 stck tall. Most still submerch. About 10 BA of residual oak from harvest in 86. Old
	Canopy Species	% Cover	Size Class	DBH	Age						Comment. JP is merchantable in most places. Oak is decent quality.
١	Northern Pin Oak	30	Sapling	3							
	Pin Cherry	20	Sapling	3							Ground water monitoring wells installed after a release on west side of road. Ground water monitoring wells are authorized under a land use
١	Northern Pin Oak	10	Log	10							permit to Riverside Energy. Site is commonly referred to as the "Wolf
	Jack Pine	40	Sapling/Pole	6	36						Lake" site.
6	42110 - Pla	nted Red P	ne F	Poletimb	er Well	5.9	57	81-110	N/A		Stand was third row thinned under tsale 720040601 in 2008-2009. BA
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	was quite variable due to size variation in trees. Stand is small acreage. Quality is fair.
١	Northern Pin Oak	5	Log	11		Northe	ern Pin Oak	Low	Variable	Sapling	
	Red Pine	85	Pole/Log	9	57						•
	Jack Pine	5	Sapling/Pole	5							
١	Northern Pin Oak	5	Sapling	3							
7	500	- Water		Nonsto	cked	1.9			No		
8	4191 - Mixed Upla Co	and Deciduo onifer	ous with Sa	wtimber	Medium	91.5	98	1-50	N/A		Stand was shelterwooded in 1997. RP quality is decent. Oak is variable. Regen is dense in the understory. Lots of nice oak regen
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	coming in. Featured the large diameter trees. Understory is coming in nicely.
	Red Pine	25	Log	11		Pir	n Cherry	Low	Variable	Sapling	
	Jack Pine	10	Pole	6		Re	d Maple	Medium	Variable	Sapling	
	Red Maple	15	Pole	7		Re	ed Pine	Low	Variable	Sapling	
	rtea mapie	.0								- 1 3	



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed Site	General Comments
10		2121 - Planted Jack Pine, Mixed Deciduous		Sapling	Well	57.5	13	Immature	N/A	Stand was harvested under tsale contract 720040601 in 2006-2008. FTP was submitted, C72-614. JP is doing well, just reaching the 3' mark.
	Canopy Species	% Cover	Size Class	DBH	Age					Oak regen is very dense. Some heavy patches of BTA throughout.  Decision was made at compt review to accept existing regeneration from
	Bigtooth Aspen	10	Sapling	1	17					previous treatment. Drop old FTP C72-614. JC update: was trenched in
	Jack Pine	60	Sapling	1	13					2009 (C72-614), planted to JP in 2010, and re-planted in 2011. Passed
	Northern Pin Oak	30	Sapling	1	17					Year 3 regen survey with a mix of planted JP and significant deciduous components (O-A-BC). Canopy updates based on the treatment reports
				'						& past inventory data, not a site visit.
11	42121 - Planted Dec	I Jack Pine, iduous	Mixed	Sapling	Well	25.5	13	Immature	N/A	Stand was final harvested in 2006-2008 under tsale 720040601. FTP was submitted, C72-614. JP plantation. JP survival is decent, most is
	Canopy Species	% Cover	Size Class	DBH	Age					not past the 3' mark. Well site adjacent to the stand. Decision was made to accept existing regeneration at compartment review. Drop old
	Northern Pin Oak	27	Sapling	1	18					FTP C72-614. JC update: was trenched in 2010 (C72-614) and planted
	Black Cherry	10	Sapling	1	18					to JP in 2011. Passed Year 3 regen survey with a mix of planted JP and
	Jack Pine	60	Sapling	1	13					significant deciduous components (O-BC-A). Canopy updates based on the treatment reports & past inventory data, not a site visit.
12	42110 - Pla	nted Red P	ine P	oletimber	Medium	7.9	60	81-110	N/A	Stand was third row thinned under tsale contract 720040601 in 2008-
	Canopy Species	% Cover	Size Class	DBH	Age					2009. RP plantation bordering townline rd. rows running N/S. Quality is decent. RP has responded to thinning fairly well.
	Red Pine	95	Pole	8	60					door The macrosponada to animing tamy from
	Jack Pine	5	Pole	6						
14	310 - Herbac	eous Open	land	Nonsto	cked	60.5	0	Unspecified	4222 - Natural Jack Pine	Harvested in Winter 2021/2022 whole tree. Comp 23 Mix 72-015-16.
										Natural Jack Pine stand. JP is showing its age in places, starting to drop individual stems. Aspen is in poor shape as well. Oak is decent. Good access to the stand.
16	42221 - Natural Dec	Jack Pine, iduous	Mixed P	oletimber	Medium	15.6	42	Unspecified	N/A	Stand created by trespass harvest- Old fence wire still exists. Some portions regenerated to JP poles, others have filled in with a U type,
	Canopy Species	% Cover	Size Class	DBH	Age					Aspen saplings as well. Old Comment.
	Quaking Aspen	15	Sapling	3						
	Northern Pin Oak	15	Sapling/Pole	e 4						
	Jack Pine	60	Pole	5	42					
	Pin Cherry	10	Sapling	2						
18	42121 - Planted Dec	I Jack Pine, iduous	Mixed	Sapling	Well	25.9	27	Unspecified	N/A	Stand was final harvested in 1997, was replanted to JP, some aspen regen as well, one pocket near well site did not get planted- came back to
	Canopy Species	% Cover	Size Class	DBH	Age					heavy A3, rest of stand is doing well as jack pine. Old Comments. JP is doing well, starting to get close to pole sized in some places.
	Quaking Aspen	20	Sapling	3						asing itsin, statung to get stood to pole sized in solite places.
	Northern Pin Oak	20	Sapling	3						

Report 7 - Stands

/	OF NATURAL
RTIME	
	DNR
\	MICHIGAN

Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments	
19	42120 - Pla	nted Jack F	Pine	Sapling Well	159.0	27	Unspecified	N/A		Planted 1997. Nice plantation, growing well.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Specie	s Density	Avg. Height	Size		
	Northern Pin Oak	2	Log	10	Chol	ke Cherry	Low	Variable	Sapling		
	Quaking Aspen	5	Sapling	1				1		_	
	Northern Pin Oak	3	Sapling	1							
	Jack Pine	90	Sapling	2 27							
21		Aspen, Oak		Sapling Well	15.7	27	Unspecified	N/A		Stand was final harvested in 1997, MO said JP previously, stand is now a well regenerated stand of Aspen, was perscribed for planting, never was	
	Canopy Species	% Cover								done. Stand is now fully established as an aspen stand.	
	Pin Cherry	10	Sapling	2							
	Northern Pin Oak	20	Sapling	2							
	Jack Pine	10	Sapling	2							
	Quaking Aspen	60	Sapling	3 27							
23	4131 - A	Aspen, Oak		Poletimber Well	10.4	56	51-80	N/A		Aspen stand, pole sized , along Seasonal County RD. Mixed stand.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	Previously typed as an A6. Stand is fairly healthy. Oak is coming in well in the understory.	
	Quaking Aspen	50	Pole	6 56	Northe	ern Pin Oak	Low	Variable	Sapling		
	Northern Pin Oak	35	Pole	8	Pir	Cherry	Low	Variable	Sapling		
	Jack Pine	15	Pole	8			,			-	
24	4132 - Asp	en, Jack Pi	ne	Sapling Medium	12.2	26	Unspecified	N/A		This is a sparse stand. Excluded from the JP plantation, looks like the	
	Canopy Species	% Cover	Size Class	DBH Age						an area that the plantation may have failed and the aspen filled in.  Aspen is small and patchy. Oak and JP are poor form	
	Quaking Aspen	70	Sapling	3 26						,	
	Jack Pine	20	Sapling	3 26							
	Northern Pin Oak	10	Sapling	3 26							
25	310 - Herbac	ceous Open	aland	Nonstocked	73.3	0	Unspecified	4222 - Natural C	Jack Pine	Portion along Townline harvested in 2020 and contains fair aspen regen along with mix oak and maple. East portion harvested in 2021. Both harvested under contract Comp 23 Mix 72-015-16. M.O is natural Jack Pine but will accept any mix of Oak, Aspen, Pine. Stand should transition to aspen but may have a UM component. **TREATMENT NOTE**: Maintain a 3-5 chain strip along the west side of stand 25 as a fuel break. Monitor regeneration to determine if fuel break maintenance is needed.	
										Nice mixed stand. Health is decent. JP is showing its age. Dense reger in the understory in places.	
27	42110 - Pla	nted Red P	Pine	Poletimber Well	24.8	36	51-80	N/A		RP Plantation. Has not started to self prune yet. Decent quality, not	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	much in the understory.	
	Red Pine	100	Pole	6 36	Northe	ern Pin Oak	Low	Variable	Sapling		
28	623 - Emei	rgent Wetla	ind	Nonstocked	0.6		Unspecified	No		Previously mapped as gas well, appears to be a wetland in air photos.	



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments			
29	4132 - Asp	en, Jack Pi	ne	Poletimbe	er Well	31.3	52	Unspecified	N/A		Well stocked stand of Aspen, mostly poles, a few reaching sawlog size.			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Specie	s Density	Avg. Height	Size	June berry present in the understory, also a component of RM/WP/pin Oak Old Comment. Stand has a good mix of oak/jp/asp. Aspen is fai			
	Red Pine	5	Pole	6		Jac	k Pine	Low	Variable	Sapling	quality, sawlog sized stuff is declining. Oak is poor quality in some			
1	Northern Pin Oak	10	Pole	5		Northe	rn Pin Oak	Low	Variable	Sapling	places.			
	Quaking Aspen	60	Pole	5	52									
	Jack Pine	20	Pole	6										
١	Northern Pin Oak	5	Log	10										
30	42121 - Planted Dec	Jack Pine, duous	Mixed	Sapling	Well	183.4	36	Unspecified	N/A		Planted 1988. Seems to be growing well, some pockets of aspen growing up along with the JP. Some oak mixed in as well.			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Specie	s Density	Avg. Height	Size				
1	Northern Pin Oak	20	Sapling	3		Chok	e Cherry	Low	Variable	Sapling				
	Jack Pine	70	Sapling	4	36									
	Quaking Aspen	10	Sapling	2										
31	42250 -	42250 - Pine, Oak Poletimber We		er Well	13.3	34	1-50	N/A		Sparse stand of sawlog sized Pin Oka, understory of JP, Rp poles				
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Specie	s Density	Avg. Height	Size	alsosapling sized pin cherry and pin oak stump sprouts. Hold- Oak is no worth the distruction to the the J1-J2 understory. Old Comments.			
1	Northern Pin Oak	30	Log	14		Northe	rn Pin Oak	Low	Variable	Sapling	Previous comments still hold true. Oak is not very good quality. Some			
	Red Pine	15	Sapling/Pole	e 4		Jac	k Pine	Low	Variable	Sapling	stems are dropping out. JP understory is doing well, Oak was featured			
	Jack Pine	55	Sapling/Pole	e 4	34						previously, JP is now featured with some large diameter oak in the overstory as well.			
32	310 - Herbac	eous Open	land	Nonsto	cked	34.7	0	Unspecified	4222 - Natural	Jack Pine	Stand harvested in 2019 under contract 72-016-16(2) Williams Jack Pin			
						Sub-Can	opy Specie	s Density	Avg. Height	Size	Current stand conditions are trending towards a poorly to moderately stocked Aspen stand with clumps of scrubby oak and cherry. Some			
						Red	d Maple	Low	5 - 10 feet	Sapling	scattered advanced oak regen. Originally a coded as a MC6 stand with			
						Black	k Cherry	Low	< 5 feet	Sapling	pockets of aspen. Overall age of the stand was 52.			
						Jac	k Pine	Low	< 5 feet	Seeding				
						Northe	rn Pin Oak	Medium	< 5 feet	Seeding				
						Quaki	ng Aspen	Medium	5 - 10 feet	Sapling				
34	4310 - Pi	ne, Oak Mix	(	Sapling	Well	88.1	14	Immature	N/A		Stand harvested under tsale 720040601 in 2006-2007. It was decided that this stand was going to be planted to JP and ETP was submitted			
	Canopy Species		Size Class	DBH							that this stand was going to be planted to JP and FTP was submitted, C72-614. JP has good survival, just reaching the 3' mark. Oak is doin very well and competing with the JP. JC update: edited JP canopy age to reflect 2010 planting completion.			
1	Northern Pin Oak	25	Sapling	1	18									
	Pin Cherry	25	Sapling	1	18									
	Jack Pine	50	Sapling	1	14									



Stand	Level 4 Co	over Type		Size D	Density	Acres	Stand Age	BA Range	Managed 9	Site	General Comments	
35	4133 - Aspe	en, Mixed P	Pine	Poletim	nber Well	23.6	27	Unspecified	N/A		Mixed stand. Stand was final harvested in 1997. It is approaching pole	
	Canopy Species	% Cover	Size Class	DB	SH Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	sized in most places. Aspen is decent quality, regeneration is extremely dense, very tough to walk through. There is a small patch of RP	
	Quaking Aspen	52	Sapling/Pol	e 5	27	Northe	ern Pin Oak	Medium	Variable	Sapling	plantation in the south end of the stand. It is approximately 1/4 to 1/2	
1	Northern Pin Oak	15	Sapling/Pol	e 5		Quak	king Aspen	Medium	Variable	Sapling	acre. Several locations that have yard waste dumped on state land.	
	Balsam Fir	3	Sapling/Pol	e 5		WI	nite Oak	Low	Variable	Sapling		
	Red Pine	10	Pole/Log	9							•	
1	Northern Pin Oak	10	Pole/Log	9								
	Jack Pine	10	Pole	5								
36	790 - Other Bare/	Sparsely V	egetated	Nons	stocked	123.3	0	Unspecified	4211 - Planted	Red Pine	Final harvested in early 2022 (#016-16) with island retention. Contract trenched May 2023 (C72-925) except for fuelbreak along Stickfort Road Old Notes: Marginal 2-aged strip plantation. The older strips are from approximately 1967, the younger strips are from approximately 1997.	
37	42121 - Planted Deci	Jack Pine, iduous	, Mixed		ng Well	6.4	24	Unspecified	N/A		Young JP plantation. JP is doing well. Oak is keeping pace, not a whol lot of browse in the stand. Lots of garbage and yard waste in teh stand from the neighboring subdivision.	
	Canopy Species	% Cover	Size Class	DB	BH Age						nom the neighboring subdivision.	
1	Northern Pin Oak	30	Sapling	2								
	Jack Pine	70	Sapling	2	24							
39	42111 - Planted Deci	Red Pine, iduous	Mixed	Sapling	) Medium	68.9	12	Immature	N/A		Stand harvested under tsale contract 72-003-06-01 by 2009. FTP submitted, C72-625. Leave Fuel Break along Lyle rd per Jim Fisher.	
	Canopy Species	% Cover	Size Class	DB	BH Age						Dense natural JP regen along with planted stock. There are some large top piles left throughout the stand from the harvest that were never	
1	Northern Pin Oak	30	Sapling	1	15						cleaned up. They make good rabbitat. Accepted natural regeneration i	
	Jack Pine	10	Sapling	1							the stand. No need for additional regen surveys. Old Comments:	
	Red Pine	60	Sapling	1	12						Planted JP/RP mix. About 80-20 JP-RP. JC update: trenched in 2011 (C72-625) and RP planted in 2012. Passed Year 3 regen survey to	
											planted RP with significant component of natural regen (oak, JP). Canopy updates based on the treatment reports & past inventory data not a site visit.	
40	42220 - Nat				nber Well	15.5	47	51-80	N/A		Jack pine stand mixed with some other species. Quality is fair. Son rolling terrain in the stand.	
	Canopy Species		Size Class		SH Age		nopy Specie		Avg. Height	Size		
	Northern Pin Oak	20	Pole	5			ern Pin Oak	Low	10 - 20 feet	Sapling		
	White Pine	5	Log	12		Pir	n Cherry	Low	10 - 20 feet	Sapling		
	Red Pine	5	Log	11								
	Jack Pine	70	Pole	6	47							
41	42121 - Planted Deci	Jack Pine, iduous	, Mixed	Poletim	nber Well	14.1	27	Unspecified	N/A		Planted JP in 1997. Some insect damage, about 10 20 % of trees are affected. Terminal leader is filled with white larvae, looks like WP Weet assails. Old Comment Strand in damage in most area. Charmond and approximately seed to the comment of the	
	Canopy Species	% Cover	Size Class	DB	BH Age						possibly. Old Comment. Stand is dense in most areas. Cherry and oa	
											is filling in where it is fairly open. Quality is fair.	



Stand	Level 4 Cover Type			Size Density		Acres	Stand Age	BA Range	Managed Site		General Comments  Sparsely stocked stand. JP is mostly pole sized. Quality is fair. Some			
42	42220 - Natural Jack Pine			Poletimber Medium		n 51.2	46	1-50						
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	large open areas throughout the stand. Cherry is filling in pretty readily.			
	Red Pine	10	Pole/Log	9		Northe	ern Pin Oak	Medium	Variable	Sapling				
	Jack Pine	90	Pole	6	46	Ja	ack Pine	Low	Variable	Sapling				
						Pir	Pin Cherry		Variable	Sapling				
43	790 - Other Bare/Sparsely Vegetated		egetated	Nonstocked		51.4	0	Unspecified	4211 - Planted	Red Pine	Stand was harvested early 2022 under contract 72-016-16 Williams Pine. Stand is planned for planted red pine. Do NOT plant within 5 of Stickfort. The unplanted area will be utilized as a fuel break. Sale whole tree skid, good scarification. Areas of thick Oak regen are expected. Stand age when harvested was 49 y.o. **For fuel break in see 'Trenching comments' in the next step treatments. **OLD NOTES:I suspect this was part of the plantation that is directly to the north, just may have filled in better than the other stands. JP is fair quality. Size varies thoughout stand. RP in the area is nice quality doing well.			
44	<u> </u>			Poletimber Medium			48	1-50	N/A		Sparse stand of sawlog sized Pin Oka, understory of JP, Rp poles alsosapling sized pin cherry and pin oak stump sprouts. Hold- Oak is			
	Canopy Species		Size Class		l Age	Sub-Canopy Species			Avg. Height	Size	worth the distruction to the the J1-J2 understory. Stands were exclu-			
	Jack Pine	50	Pole	5	48		ack Pine	Low	Variable	Sapling	from previous sale. Quality is decent.			
	Red Pine Northern Pin Oak	30	Pole Log	15		Northe	Northern Pin Oak		Variable	Sapling				
	toruronn in oak	00	209	10										
45	42121 - Planted Jack Pine, Mixed Deciduous			Sapling	g Well	35.1	12 I	Immature	N/A		Stand was harvested by 2009 under tsale contract 72-003-06-01. FTI submitted, C72-625. Good oak regen, some JP regen. Heavy to che			
	Canopy Species	% Cover	Size Class	DBH	l Age						Some larger Dia oak scattered through stand. Accepted natural regeneration, no need for additional regeneration surveys. Old			
1	Northern Pin Oak	30	Sapling/Pole	1	15						Comment: Leave fuel break along Lyle Rd per Jim Fisher. JC update:			
	Black Cherry	10	Sapling	1							trenched in 2011 (C72-625) and JP planted in 2012. Passed Year 3			
	Jack Pine	60	Sapling	1	12						regen survey to planted JP with significant component of natural regen (oak, JP). Canopy updates based on the treatment reports & past			
											inventory data, not a site visit.			
46	42121 - Planted Jack Pine, Mixed Deciduous		Mixed	Sapling	g Well	22.6	27 l	Unspecified	N/A		Planted JP in 1997. Flat terrain, quality is decent. Lots of yard waste and trash dumped in stand from neihborhood. Nice oak regen along			
	Canopy Species	% Cover	Size Class	DBH	l Age						south end of the stand.			
	Pin Cherry	10	Sapling	2										
1	Northern Pin Oak	5	Log	11										
1	Northern Pin Oak	10	Sapling	2										
	Jack Pine	75	Sapling	2	27									



Stand	d Level 4 Cover Type	Size Density	Acres	Stand Age E	BA Range	Managed S	ite	General Comments	
49	3102 - Grass	Nonstocked	2.3			Managed Opening		Wildlife opening. ORV activity all around and through the opening.	
			Sub-Ca	Sub-Canopy Species D		Avg. Height	Size	Some mixed pine in the center.	
			Já	ack Pine	Trace		Sapling		
			R	ted Pine	Trace		Log		
50	710 - Sand, Soil	Nonstocked	7.4	L	Jnspecified	No		This is a road and a maintained fire break. No trees are to be planted in this stand.	
51	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Medium	37.5	12	Immature	N/A		Stand harvested under tsale contract 72-003-06-01 by 2009. FTP submitted, C72-625. Dense natural JP regen along with planted stock.	
	Canopy Species % Cover Size Cla	ss DBH Age						There are some large top piles left throughout the stand from the harvest that were never cleaned up. They make good rabbitat. Accepted natural	
	Black Cherry 10 Saplin	g 1 15						regeneration in the stand. No need for additional regen surveys. JC	
	Jack Pine 60 Saplin	g 1 12						update: trenched in 2011 (C72-625) and JP planted in 2012. Passed	
	Northern Pin Oak 30 Saplin	g 1 15						Year 3 regen survey to planted JP with significant component of natural regen (oak, JP). Canopy updates based on the treatment reports & past inventory data, not a site visit.	
400	3102 - Grass	Nonstocked	0.9 Unspecified				Plugged Well Delta Oil Co, State Greenwood, D3-13.		
401	3102 - Grass	Nonstocked	0.9 Unspec		Jnspecified			Former well site, plugging complete. Riverside Energy Michigan LLC, State Greenwood B2-13	
402	3102 - Grass	Nonstocked	1.0	L	Jnspecified			Producing Gas well start hole. Riverside Energy Michigan LLC, State Greenwood D1-1.	
403	3104 - Degraded	Nonstocked	0.8	l	Jnspecified			Producing GAS well. Riverside Energy Michigan LLC, State Greenwood D4-1.	
404	3102 - Grass	Nonstocked	1.0	ι	Jnspecified			Producing Gas well Riverside Energy Michigan LLC, State Greenwood B4-1	
405	3102 - Grass	Nonstocked	1.0	1.0 Unspecified				Producing Gas well Breitburn Operating, State Elmer 4-6, 4-6HDN1, 4-6HDL1, 4-6HD1, 4-6HD SUMP,	
406	3102 - Grass	Nonstocked	1.0	Unspecified				Producing Gas well Breitburn Operating, State Elmer 3-7	
407	110 - Low Intensity Urban	Nonstocked	1.5	1.5 Unspecified			Producing Gas well Breitburn Operating, State Elmer 1-7, 1-7HDL, 1-7HDN		
408	3102 - Grass	Nonstocked	1.2	1.2 Unspecified			Producing Gas well Breitburn Operating, State Elmer D3-6, D3-6HD, D3-6HDL, D		

Grayling Mgt. Unit

# Report 7 - Stands



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age BA Range	Managed Site	General Comments	MICHIGAN .
409	3102 - Grass	Nonstocked	1.3	Unspecified		Directional Start hole, Producing gas Breitburn Operating, State Elmer 10-6	
410	3102 - Grass	Nonstocked	1.0	Unspecified		Producing Gas well Breitburn Operating, State Elmer 8-6	
411	3102 - Grass	Nonstocked	1.0	Unspecified		Producing Gas well Breitburn Operating, State Elmer 2-6	