

Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72258 Entry Year 2021 Acreage: 1,329

County Crawford

Management Area: Camp Grayling

Revision Date: 2019-02-14

Stand Examiner: Scott McClarren

Legal Description:

T27N, R02W, Section 27, 34 and 35 and T26N, R02W, Section 2. Grayling Township.

Identified Planning Goals:

To provide an area that allows for National Guard training while maintaining forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment.

Soil and topography:

The soil types within the compartment consist of Grayling Sands and Graycalm/Grayling Sands with some small pockets of Graycalm Sands and Croswell-Augres Sands. The areas near Connors Flat Road and Barker Creek contain a mixture of Tawas-Lupton Muck. The topography within the compartment consists of gently rolling terrain with some valley and ridge tops. The south end of the compartment is level and gradually slopes to low wet areas near Barker Creek.

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

: The compartment is comprised mostly of state ownership. Lands in section 27, the E1/2 of section 34, and in section 35 are leased to the Michigan National Guard, Department of Military Affairs under L-1479 long term for the purpose of military training. The agreement provides for use by the military during their encampment, with no permanent buildings or improvements to be erected. Military needs take precedence over resource management needs on long-term lease lands. The DNR will coordinate all prescribed activities with the National Guard to ensure they are compatible with military training needs. This compartment is used heavily by the military except for lands located in section 35 and 2. There is a large block (200 acres) of private ownership in section 34 which is used for residential homes. The small blocks of state ownership within the compartment are surrounded by private ownership.

Unique Natural Features:

Evidence of the Stephan Bridge Fire still exists, which burned throughout most of the compartment in 1990, is natural and unique in itself. Rough Fescue, Hill's Thistle and Alleghany plum, rare and endangered or threatened grasses and plants have been found growing within several stands in this compartment. The Kirtland's Warbler, has also been found within stands in this compartment.

Archeological, Historical, and Cultural Features:

None known at this time.

Special Management Designations or Considerations:

The residents along Connor's Flat Road have expressed concern over visual management along the road in the past. This concern needs to be considered when performing management prescriptions. The military and their needs for training in sections 27 and 34 is to be considered in the management of this compartment.

Watershed and Fisheries Considerations:

A small portion of Barker Creek flows through an isolated forty of state land and is a tributary to the AuSable River, a designated natural river.

Wildlife Habitat Considerations:

Maintain existing and preferred types for ruffed grouse, white-tailed deer, wild turkey, bear, squirrel and rabbits. Swamps in section 2 are near Connors Flat Marsh and the AuSable River and serve as a deer yard.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Marshall Sandstone. The Marshall was previously used as a building stone. A gravel pit is located one mile to the north 31 and potential is good on the uplands. Currently, there are no oil and gas leases in this compartment. Due to military, all lands in Section 27, 34 and 35 are classified as non-leaseable lands, with the exception of the SENW, NWSW and the SWSW of section 34. They are

classified as development for oil and gas leasing purposes. Land in T26N, R03W Section 2 acre classified as development with the exception of the NENE. That 40 acre parcel is classified as non-development due to wet conditions.

Vehicle Access:

The compartment is easily accessible from the county roads of North Down River Road, Wakeley Bridge Road, Connors Flat Road and Ketcham Truck Trail. There are several state two tracks in which branch off these roads. During military training, Wakeley Bridge Road, Ketcham Truck Trail and several two tracks that branch off these roads are closed to the public for safety. There are multiple landowners who access their property using state trail roads in Section 34. Currently, we have no legal access to the forty acres contained in section 34. Any newly created roads due to management treatments to stands within this compartment are to be closed upon completion of the treatments.

Survey Needs:

Some of the property corners have not been located in Sec. 02.

Recreational Facilities and Opportunities:

There are no designated recreational facilities or trails within the compartment. However, there is plenty of opportunity for dispersed recreational activities such as hunting, hiking, berry picking, bird watching and other wildlife viewing within this compartment.

Fire Protection:

The compartment contains lots of small dense jack pine, grasses, and dead standing snags that are very susceptible to fire. The road system is adequate to allow fire equipment to access fire prone types. A near by water source is available where Barker Creek flow under Wakeley Bridge Road. The fire protection in the compartment is the responsibility of the Michigan DNR and the Grayling Township Volunteer Fire Department. Stand 15, along North Down River Road, was cut last entry and serves as a fuelbreak.

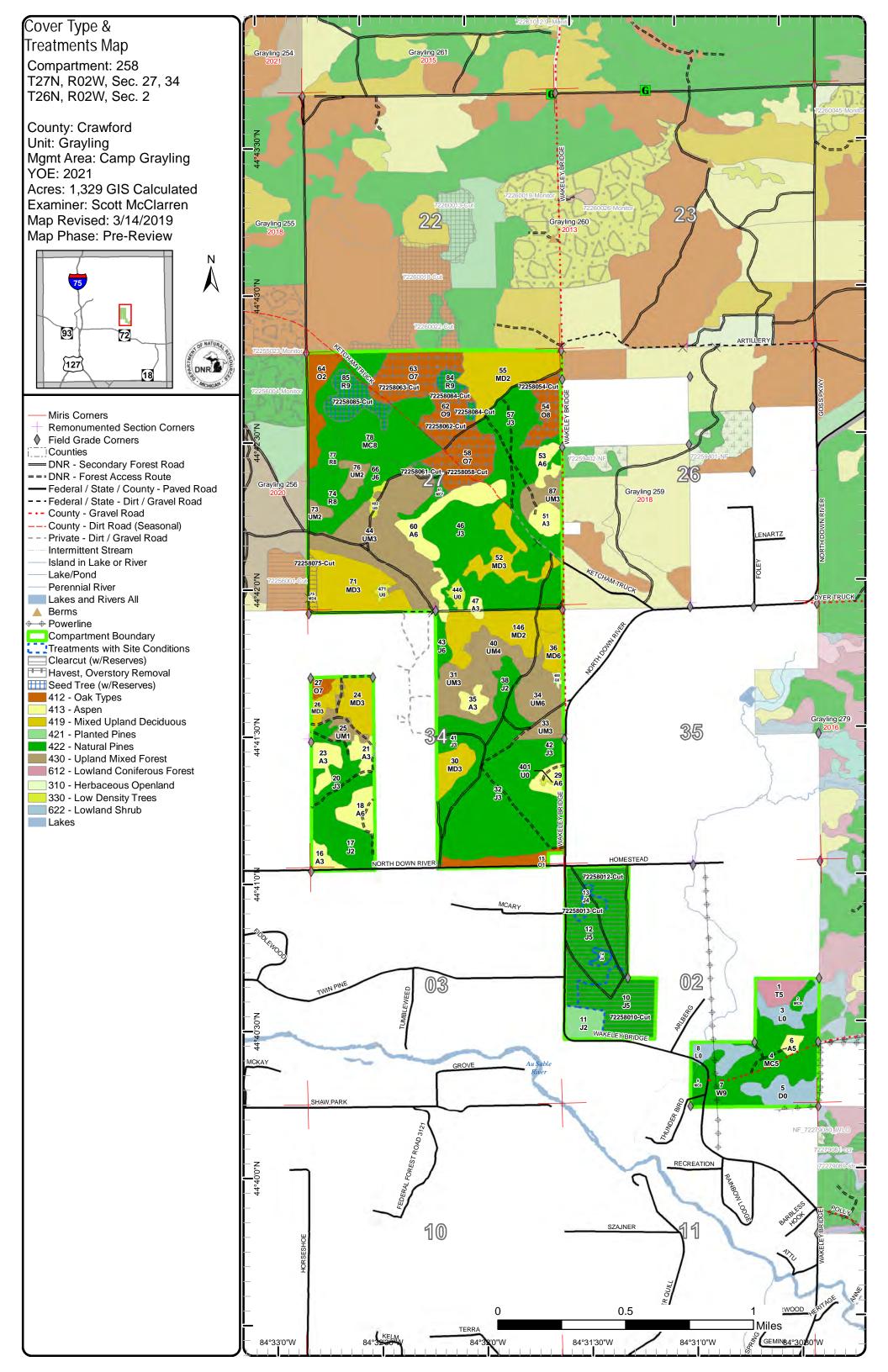
Additional Compartment Information:

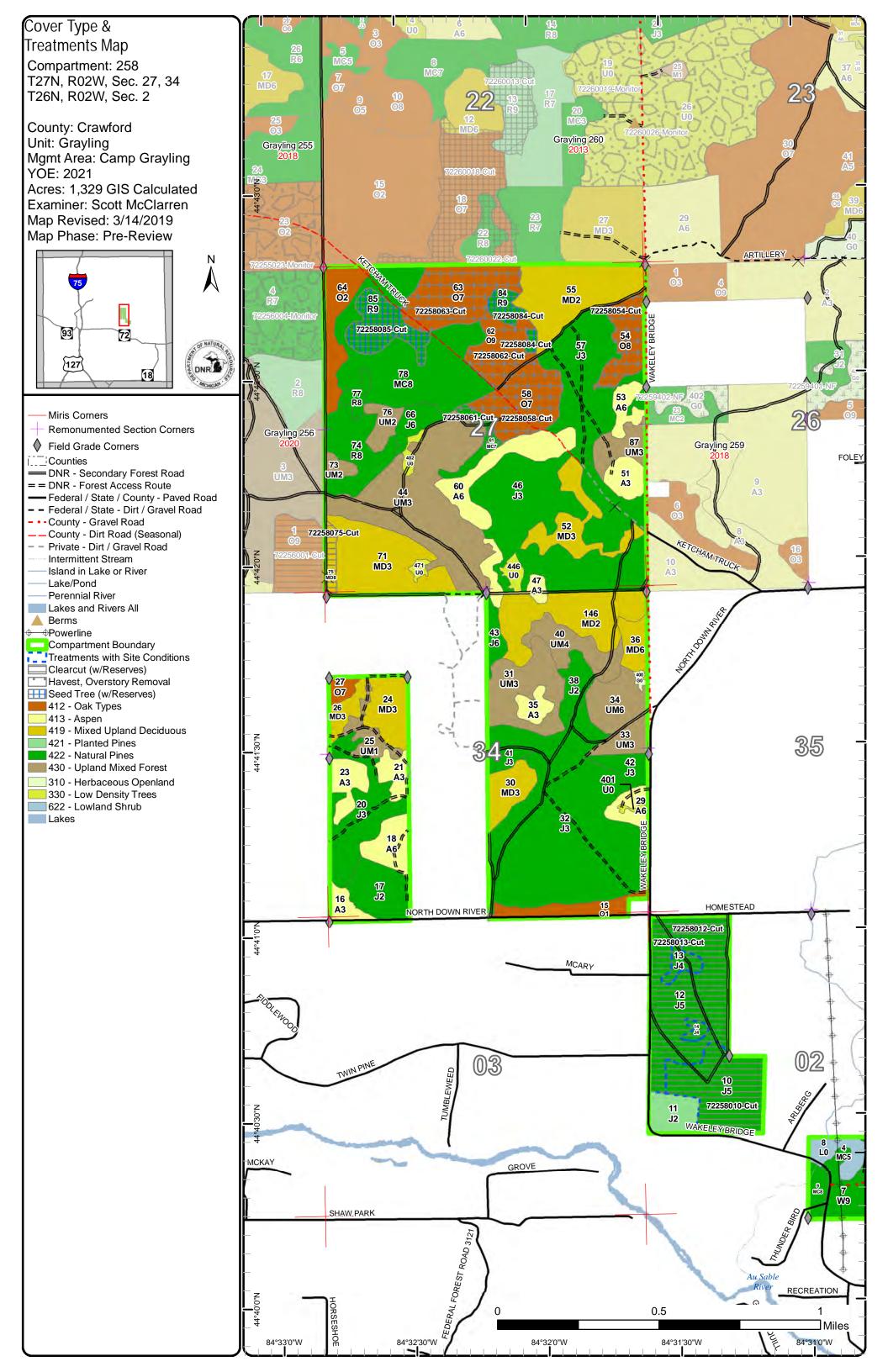
The following reports from the Inventory are attached:

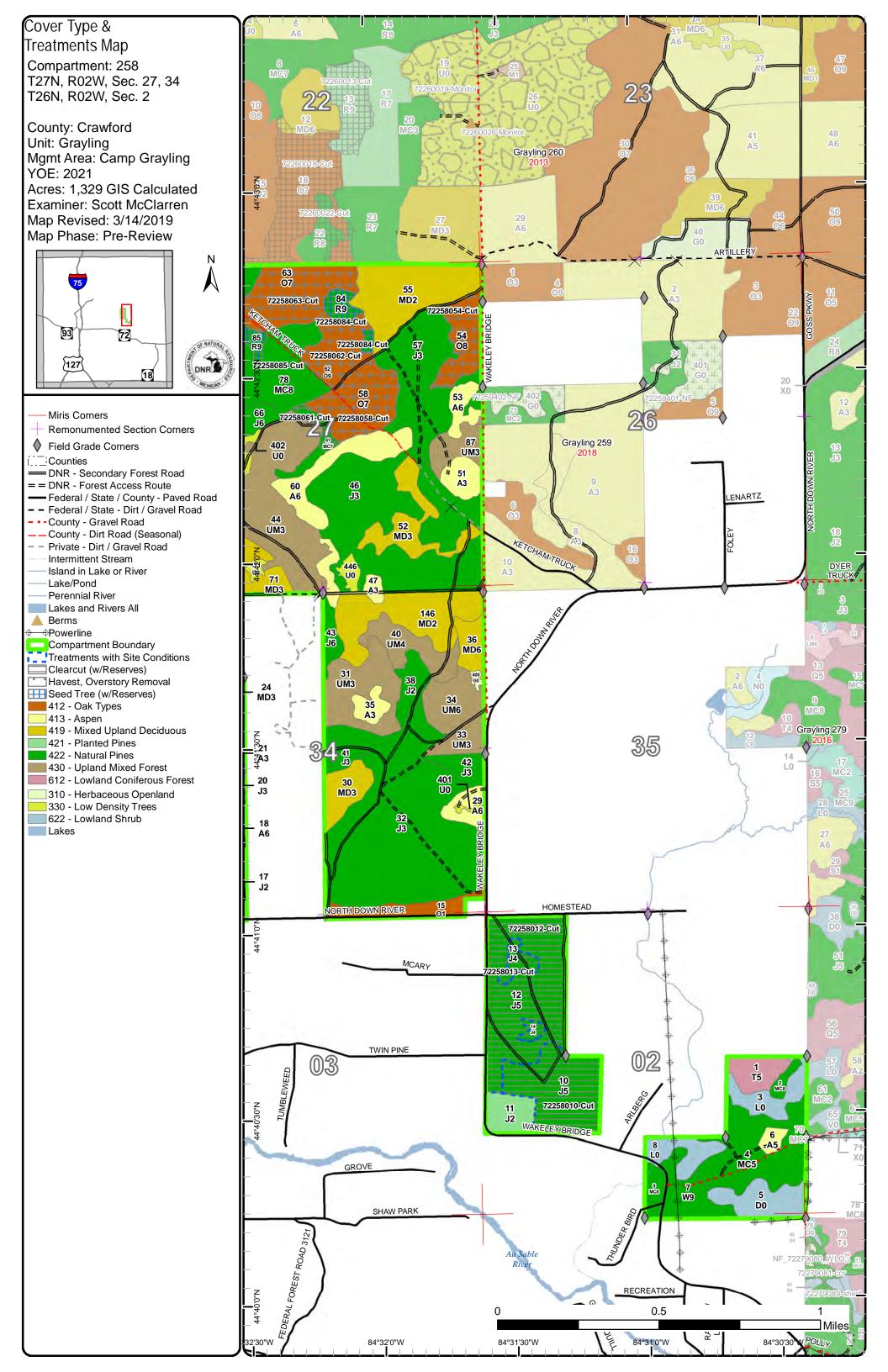
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

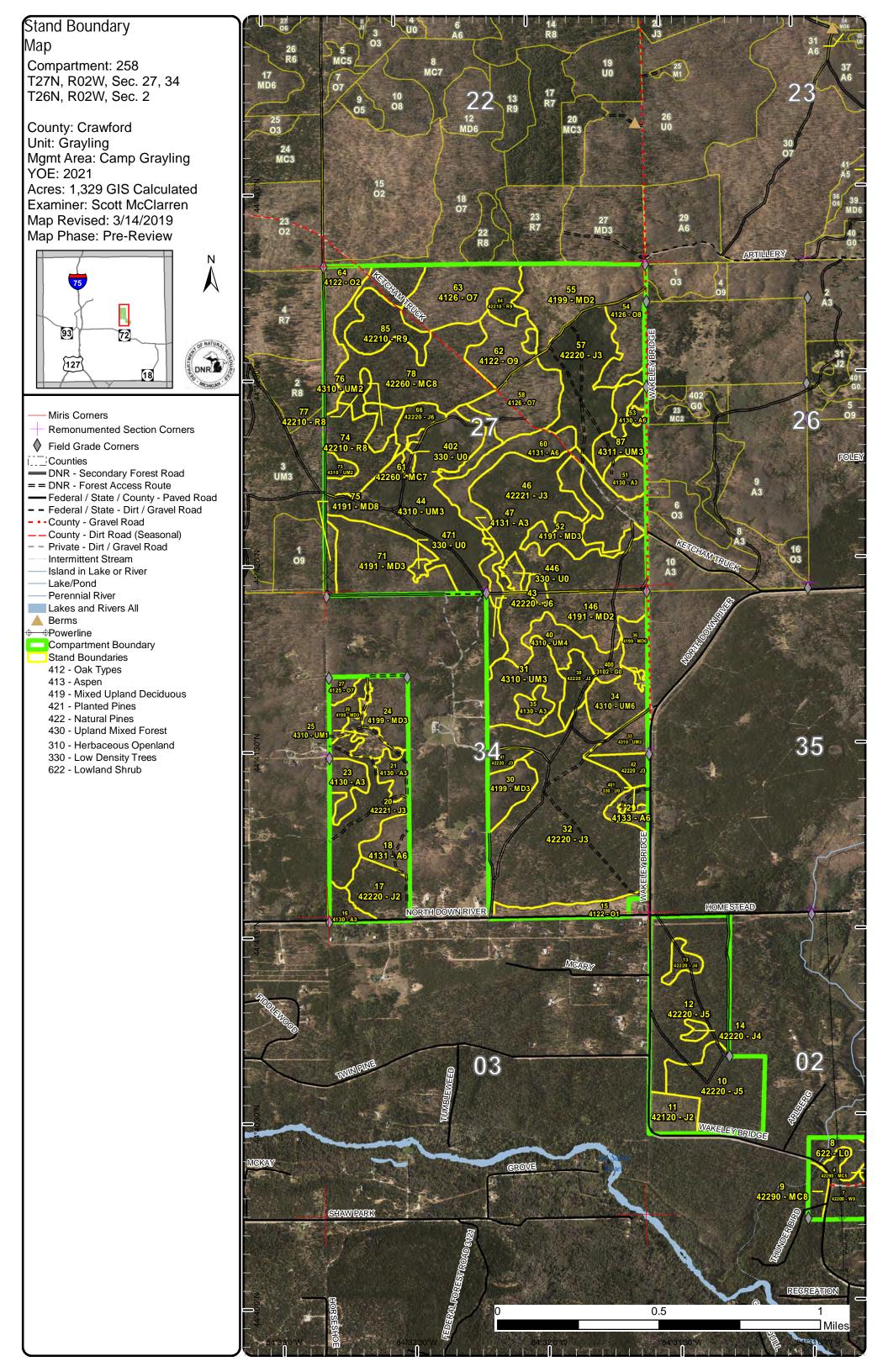
The following information is displayed, where pertinent, on the attached compartment maps:

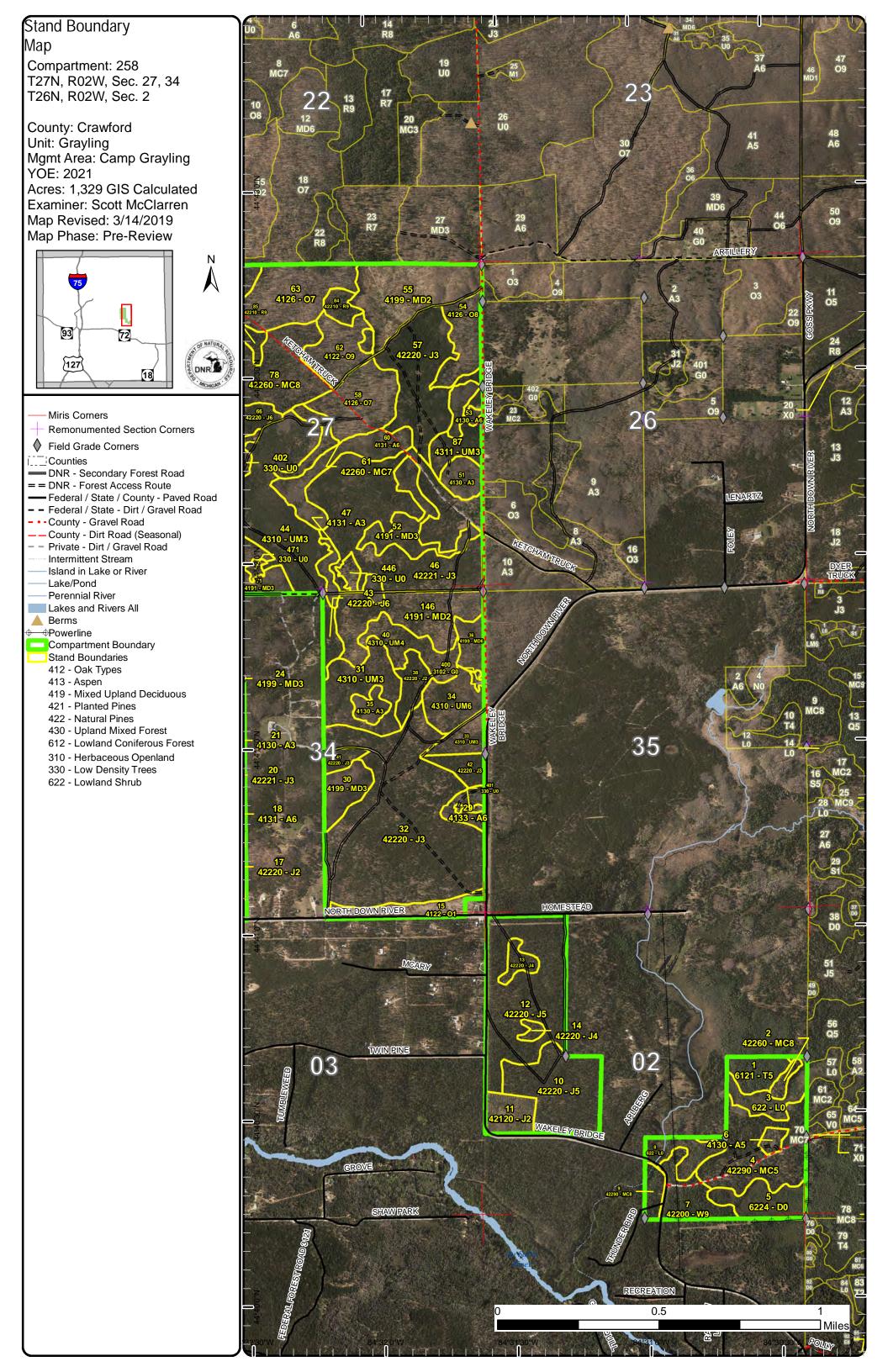
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

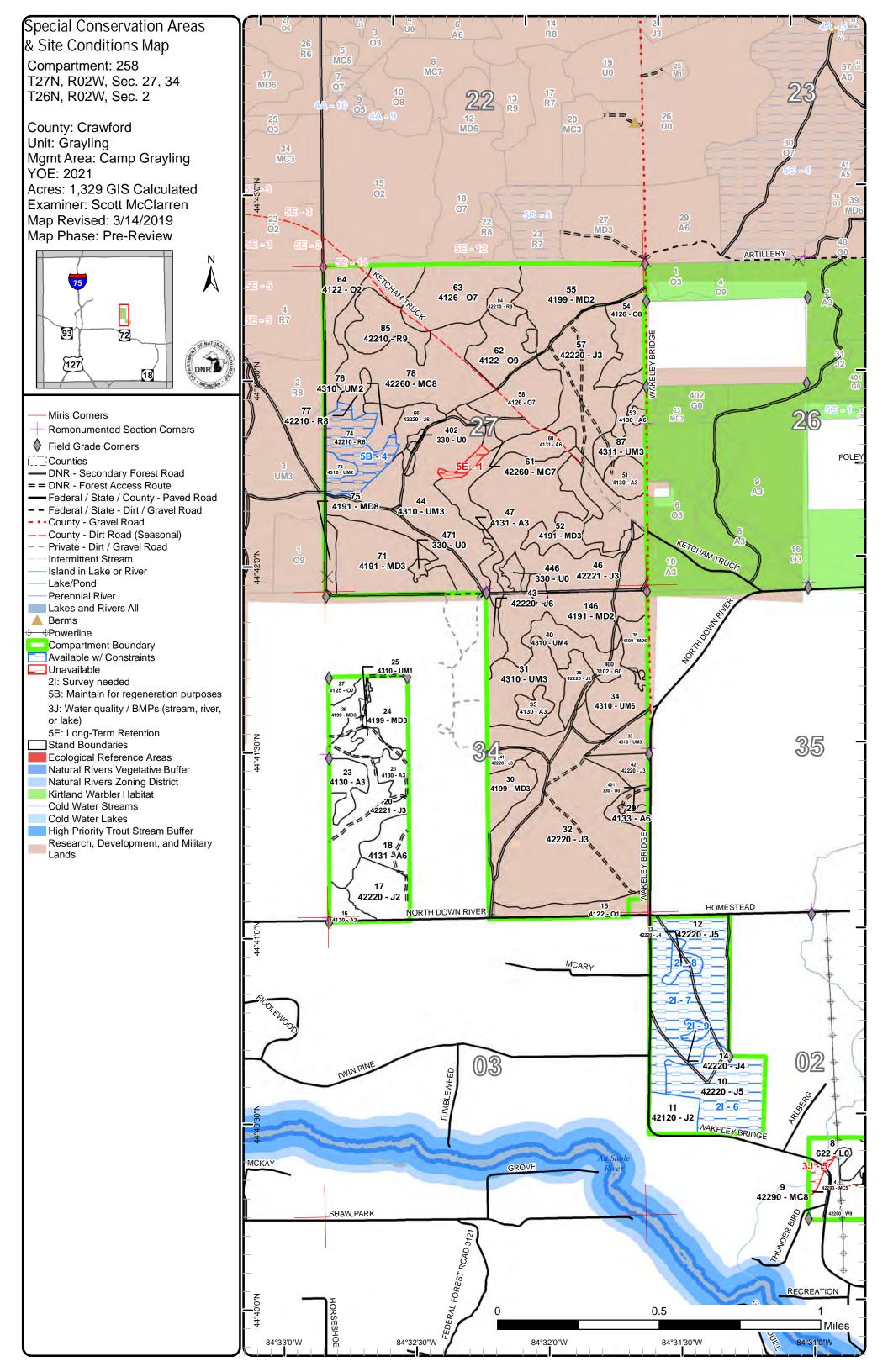


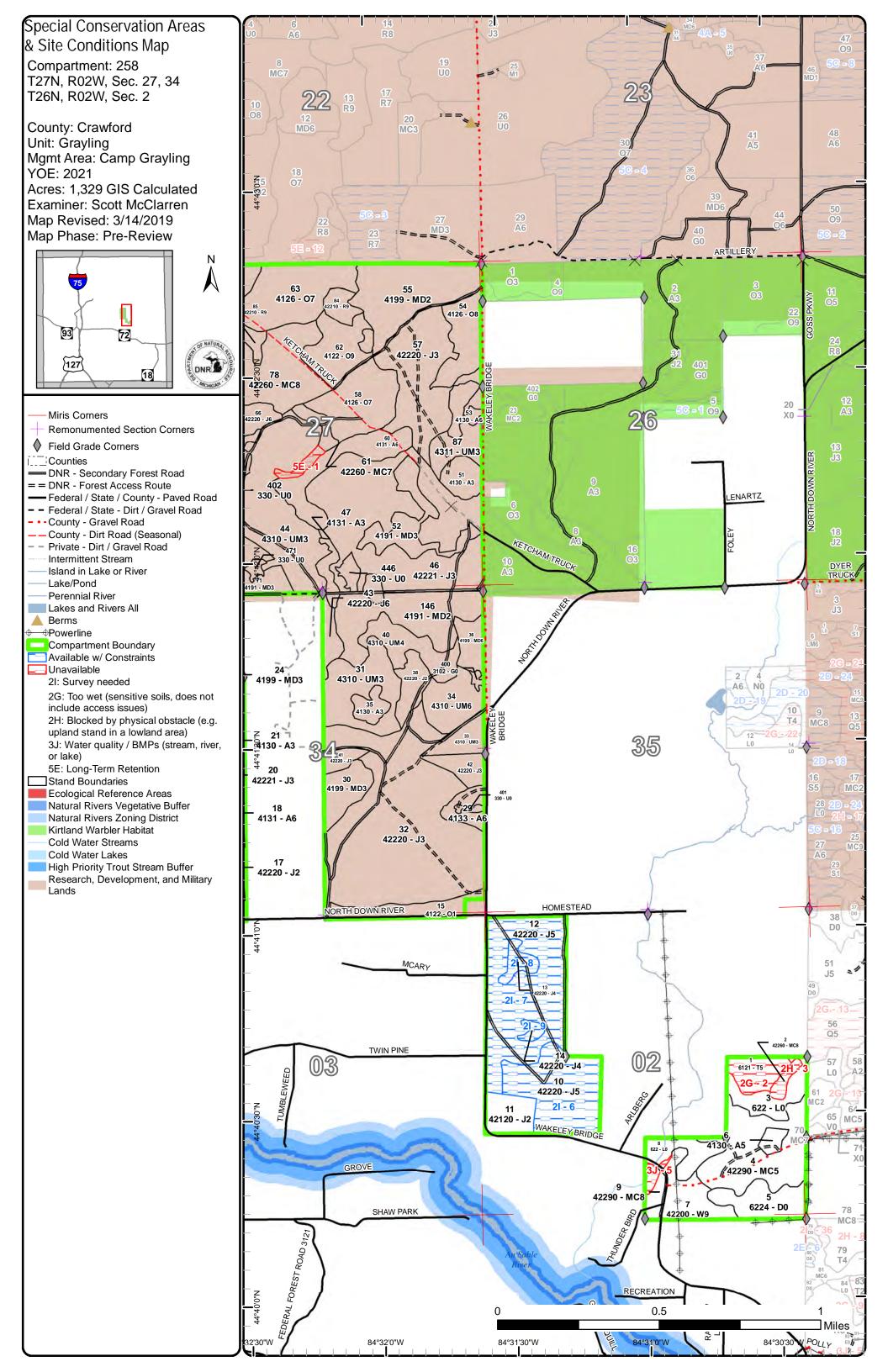












Grayling Mgt. Unit

Compartment 258 Year of Entry 2021

Scott McClarren : Examiner



Age Class

	No.	A STATE OF THE PROPERTY OF THE			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	§ / \$	8. 20°	, % / %		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	80,00	\$ /%	70.	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	THE A	g* Jue	Se S
Aspen	0	0	6	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Jack Pine	0	0	12	351	8	0	46	65	0	0	0	0	0	0	0	0	0	0	482
Low-Density Trees	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Shrub	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Mixed Upland Deciduous	0	0	40	142	0	0	0	0	0	0	0	5	0	0	0	0	0	0	187
Natural Mixed Pines	0	0	0	0	41	0	3	6	67	0	7	0	0	0	0	0	0	0	124
Oak	0	0	32	0	0	0	0	0	0	0	0	97	4	0	0	0	0	0	133
Red Pine	0	0	0	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	54
Tamarack	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	11
Treed Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Upland Mixed Forest	0	0	4	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176
White Pine	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
Total	49	0	94	755	49	17	60	71	67	0	62	102	4	0	0	0	0	0	1329



Report 2 – Treatment Summary

Grayling Mgt. Unit Year of Entry: 2021

Acres of Harvest

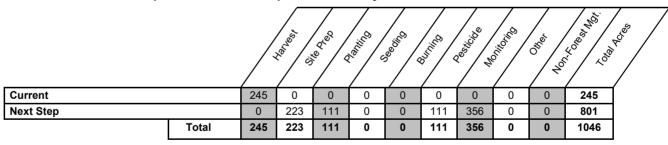
Compartment 258
Total Compartment Acres: 1,329

Commercial Harvest - 134 Harvests with Site Condition - 111 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

	•	. ,										
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Jack Pine		111	0	0	0	0	0	0	0	0	111	ĺ
Mixed Upland Deciduous		5	0	0	0	0	0	0	0	0	5	
Natural Mixed Pines		0	0	0	0	0	0	5	0	0	5	
Oak		0	0	0	0	0	0	98	0	0	98	
Red Pine		0	0	0	27	0	0	0	0	0	27	
	Total	116	0	0	27	0	0	102	0	0	245	

Proposed and Next Step Treatments by Method



Compartment: 258 Year of Entry: 2021

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
10	72258010-Cut	39.2	42220 - Natural Jack Pine	Poletimber Medium	54	51-80	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No Site Condition: Survey Needed

Prescription Clearcut with retention. Consider focusing island retention around some of the areas with lower site index and stunted pines. Retain legacy pines. Specs:

Leave oaks greater than 10" for mast (only a couple seen). Add low stump and chipping specs.

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr)

Acceptable Fully stocked red pine

Regen:

S

Other Did not locate property corners.

Comment:

Proposed Start Date: 10/1 /2020

12 72258012-Cut 42220 - Natural Clearcut with 64.8 Poletimber 65 81-110 Harvest 4211 - Planted Even-Aged Proposal Jack Pine Medium Retention Red Pine

Habitat Cut: No Site Condition: Survey Needed

Prescription Clearcut with retention. Follow standard retention guidelines. Retain legacy pines. Leave oaks greater than 10" for mast (only a couple seen).

Add low stump and chipping specs. Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr)

Acceptable Fully stocked red pine

Regen:

Other NE property corner not located.

Comment:

Proposed Start Date: 10/1 /2020

72258013-Cut 42220 - Natural Poletimber 1-50 4211 - Planted 5.1 Harvest Clearcut Even-Aged Proposal Jack Pine Poor Red Pine

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

Prescription Clearcut without retention due to small size. Add low stump and chipping specs.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr)

Acceptable Fully stocked red pine

Regen:

Low density trees, may be good landing location. Other

Comment

Proposed Start Date: 10/1 /2020

4211 - Planted 72258014-Cut 22 42220 - Natural Poletimber 1-50 Harvest Clearcut Even-Aged Proposal Jack Pine Poor Red Pine

Habitat Cut: No Site Condition: Survey Needed

Prescription Clearcut without retention due to small size. Add low stump and chipping specs.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

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

Acceptable Fully stocked red pine

Regen: Other

Low density trees and centrally located, may be a good landing location.

Comment:

10/1 /2020 **Proposed Start Date:**

Other 4 2 2 Comment:

Proposed Start Date: 10/1 /2020

62 72258062-Cut 4122 - Oak, Pine 19.1 Sawtimber 108 51-80 Harvest Overstory 412 - Oak Types Even-Aged Proposal Well Removal

Habitat Cut: No Site Condition:

Prescription Overstory removal. Follow standard retention guidelines. In addition, leave all red and white pine greater than 22" for structural diversity (consider leave tree marking since a lot of the red pine is in the 18-20" d-class). Leave white oak greater than 20 inches for mast. Add military specs, oak Specs:

wilt specs, and protect advanced regen. Monitoring, Natural Regen (Re-Inventory)

Next Step **Treatments:**

Acceptable Any combination of oak, aspen, maple, or pine.

Regen:

Other 1 Comment

Proposed Start Date: 10/1 /2020 Other Comment:

Proposed Start Date:

10/1 /2020

72258075-Cut

4191 - Mixed 5.1

Upland Deciduous with Conifer

103 51-80 Sawtimber Medium

Harvest

Clearcut

4319 - Mixed **Upland Forest** Even-Aged

Proposal

Habitat Cut: No Site Condition:

Prescription Clearcut without retention due to size. Harvest all stems greater than 2" DBH. Protect legacy trees and white pine regen. Harvest with stand 1 of Specs:

compartment 256.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of oak, maple, aspen, or pine.

Regen:

Other Comment

Proposed Start Date: 10/1 /2019

72258084-Cut 42210 - Natural Sawtimber 99 171-Harvest Seed Tree 4319 - Mixed Even-Aged Proposal Red Pine 200 Well

Upland Forest

Habitat Cut: No Site Condition:

Prescription Seed tree harvest, mark to leave 20-30 BA of vigorous red pine to encourage natural regen in the future. Leave all legacy trees. Add military Specs:

specs, oak wilt specs. Protect any release red and white pine regen in understory.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red pine is desired, but difficult to regenerate naturally. Stand will likely convert to oak or oak pine mix. Any combination of oak, pine, maple, or

Regen: aspen is acceptable.

Other

Comment:

Proposed Start Date: 10/1 /2020

85 72258085-Cut 42210 - Natural Seed Tree 4319 - Mixed 192 Sawtimber 111-Harvest Even-Aged Proposal

> Red Pine Well 140 **Upland Forest**

Habitat Cut: No Site Condition:

Prescription Seed tree harvest, mark to leave 20-30 BA of vigorous red pine to encourage natural regen in the future. Leave all legacy trees. Add military

specs, oak wilt specs. Protect and release red and white pine regen in understory. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Red pine is desired, but difficult to regenerate naturally. Stand will likely convert to oak or oak pine mix. Any combination of oak, pine, maple, or <u>Acceptable</u>

aspen is acceptable.

Other Comment:

Regen:

Proposed Start Date: 10/1 /2020

Total Treatment Acreage Proposed:

244.9

Compartment: 258

Grayling Mgt. Unit

Scott McClarren : Examiner Year of Entry: 2021

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	s		
Acres	Available	With Condition	Not Available		21	5B	5C	2G	2H	3J	5E
96	96	0	0	Aspen							0
1	1	0	0	Herbaceous Openland							
482	370	111	0	Jack Pine	111						
8	8	0	0	Low-Density Trees							
24	24	0	0	Lowland Shrub							
186	186	0	0	Mixed Upland Deciduous			0				
124	116	0	8	Natural Mixed Pines					3	2	3
133	133	0	0	Oak			0				
54	31	23	0	Red Pine		23					
11	0	0	11	Tamarack				11			
16	16	0	0	Treed Bog							
177	177	0	0	Upland Mixed Forest							
17	16	0	0	White Pine						0	
1,329	1,175	135	19	Total Forested Acres	111	23	0	11	3	3	3
	88%	10%	1%	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.

	Other Site Condition	Other Site Condition	Acres	Dominant Site Condition	Site Dominant Site No. Cond Availability
Unspecified Unspecified Unspecified	Unspecified	Unspecified	3	5E: Long-Term Retention	l Unavailable
			8.	retention for stands 61 and 5	Comments: Proposed long-term
Unspecified Unspecified Unspecified	Unspecified	Unspecified	11	2G: Too wet (sensitive soils, does not include access issues)	2 Unavailable
					Comments:

Report 4 - Site Conditions

Compartment: 258
Year of Entry: 2021

Grayling Mgt. Unit

Scott McClarren: Examiner

3 Unavailable 2H: Blocked by physical Unspecified Unspecified Unspecified Unspecified 3 obstacle (e.g. upland stand in a lowland area) Comments: Unspecified Unspecified Unspecified Unspecified 4 **Available** 5B: Maintain for 24 regeneration purposes Comments: 5 Unavailable 3J: Water quality / BMPs 3 Unspecified Unspecified Unspecified Unspecified (stream, river, or lake) Comments: Unspecified Unspecified Unspecified Unspecified 6 **Available** 2I: Survey needed 39 Comments: East and south property corners not located. Unspecified 2I: Survey needed Unspecified Unspecified Unspecified 7 **Available** 65 **Comments:** NE property corner not located. 8 Unspecified Unspecified Unspecified Unspecified **Available** 2I: Survey needed 5 Comments: 9 **Available** 2I: Survey needed 2 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				

Grayling Mgt. Unit Compartment: 258
Year of Entry 2021



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.

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 oxygen conditions 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 by are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condistocked 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	Research and Military Areas	These areas provide facilities and lands specifically dedicated for include the 5,847 acre Forest Fire Experiment Station, the 12,000 Area, the Beaver Islands Archipelago Wildlife Research Area (the High and Hog Islands, all state owned land on Beaver, South Fow Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Resources, and over 144,000 acres of Military Lands.	0 acre Houghton Lake Wildlife Research at includes most of Garden Island, all of x and North Fox Islands), the Cusino
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	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources a PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two ex Plover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (ra threatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitutions.	Il Features Inventory (MNFI) within the toccurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are processes and values. The public may

S t	Grayling Mgt. Unit			Report 7	– Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6121 - Tamarack	Poletimber Medium	10.6	56	81-110	Tamarak stand with dense alder through understory. Hummaky ground. Cattails also seen.Old comment- (OPIC - FMD: 2009 Lowland Swamp Conifer stand located north of Connors Flat Road and is leased by the military. The stand consists of lowland conifers (10 - 30 BA of Spruse and Balsam Fir).)
2	42260 - Natural Pine, Mixed Deciduous	Sawtimber Medium	3.0	56	51-80	Mixed upland pine with some hardwoods on a small ridge surrounded by lowlands. More red pine in the north with ba 110-140. A few older red pine in the 20" d-class. South half of stand more open hardwoods. Old comments- (OPIC - FMD: 2009: LOWLAND JACK PINE STAND FOUND NORTH OF CONNORS FLAT ROAD. ACCESSIBLITY FOR HARVESTING IS A PROBLEM.)
4	42290 - Natural Mixed Pine	Poletimber Medium	40.8	35	51-80	Harvested in 1991 part of Jack Pine Bog Blk timber sale (015-91). Stand is very diverse and feels like it could be split into 5 or 10 smaller stands. Hummocky ground in places with uplands in others. Small open boggy area found towards the north side of stand. Wet drainages and tag alder patches scattered through stand as well. Stand goes back and forth between lowland conifer and upland jack pine/white pine depending on where you are in stand. Pockets of 4-5" aspen in the north. Stand borders a tag alder swamp to the north with spruce/tamarack/fir along the edge. A treed bog makes up the south boundary. Reproduction was protected during harvest in 1991, so there are some white pine, fir, and spruce that were released from the timber harvest that are 40-50 years old and there are aspen and jack pine that are 28 years old (I split the difference and called stand 35 years old). Looks like a buffer may have been left along the southern bog. Parts of stand are open (0-25% canopy cover). No subcanopy to speak of.Old Comment- (OPIC - FMD: 1999:
6	4130 - Aspen	Poletimber Medium	3.2	28	51-80	Harvested in 1991 part of Jack Pine Bog Blk timber sale (015-91). East side of stand is low alder with some spruce/fir/pine. Jack pine through the middle of stand.Old Comment- (OPIC -FMD: 2009 Small pocket of Aspen along Connors Flat Road.)
7	42200 - Natural White Pine	Sawtimber Well	16.7	46	81-110	Stand was harvested in 1991. Stand consists of the white pine understory that was released with the harvest. Stand looks like it just got into log size. Crown ratio looks good, trees still have room to grow. White pine still has a lot of lower limbs. White pine QMD is atually 9. Part of the northern portion falls within Barker Creek RMZ. A few spruce and tamarack along the edge of the alder swamp in the north. Utility cooridor splits stand. Stand is adjacent to a treed bog in the southeast.Old Comments-(OPIC - FMD: 2009: SMALL STAND OF Natural WHITE PINE. STAND ALSO BORDERS CONNORS FLAT ROAD AND WAKELEY BRIDGE ROAD.)

General
Comments:
an age, Oi had it as 107 years old Stand or more. Red pine and white pine greater 140 yo. Smaller white pine 10-12" and red et of youger white pine poles 6-8" in north white and red pine in stand. Large snags in fir and white pine saplings are especially Creek. Only erosion risk would be within itents). Most of the oak and jack pine are imments- (OPIC - FMD: 1999: STAND EY BRIGE ROAD ON EAST SIDE AND CONTHE WEST SIDE. WHITE PINE SADISEASE OR INSECT PROBLEM. ENT AND EROSION IS A CONCERN IF EN STAND IS HARVESTED.)
ate removal of jack pine containing three 4. Jack pine containing two or less sticks s found in stand. Very similar to stand 12, eas. Some parts of stand are smaller pulp ume. Small pockets of immature jack and lorth east corner of stand is red and white South half of stand has less red pine.
IC - FMD: 1999: SOMEWHAT SPARSE N THE PROCESS OF REGENERATING ERED OLDER TREES. NEW SITE INDEX E OF THESE OLDER TREES. OLD SITE Y A BETTER INDICATOR OF THE SITE TAND. OLD SITE INDEX WAS 52 AND A STAND AS OF 1974. IANGES WERE MADE IN THIS STAND AS (J3): J3 O1 J4 R4. Good vigorous well oak regeneration in this stand has resulted 982. No further treatment needs to occur Idlife Division and FMFM Division concur s. Refer to a copy of the notes in the tille. Mark Montei, 07/10/2001).)
thy (mostly 10-15' tall). Should fill into 75- re next yoe. Very tight spacing in some - (OPIC - FMD: 2009: Immature Jack and in summer of 2004. Small pocket of A3 corner. Stand borders Wakely Bridge MEND FINAL HARVEST AND REPLANT included comments. Part of timber sale #72-see Jack Pine. Cut by Chris Muma during as stand will need to be replanted to jack anting season during the fall of 2003. mm was trenched and planted to Jack Pine in the ce to FTP C72-477 in 7/2004.)
cult to establish after last harvest. Jp pulp p saw wewe upwards of 75 years old. Red buted pretty evenly through stand (usually but a little heavier on the west side. Some 0 years old, with scattered ones getting 18-b canopy. Pocket of white pine mixed with the in south east corner of stand. Cutting eval of jack pine containing three sticks or ne containing two or less sticks were left. If pine are growing pretty good on site.

EAST AND WAKELEY BRIDGE ROAD TO THE WEST.)

s t	Graylin	Grayling Mgt. Unit			– Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	42220 - Natural Jack Pine	Poletimber Poor	5.1	54	1-50	Stand is similar to 14. Open with grass and blueberry. Cutting records indicate removal of jack pine containing three sticks or more in 1984. Jack pine containing two or less sticks were left. Old Comment- (OPIC - FMD: 1999: SEMI OPEN AREA OF JACK PINE SURROUND BY J6.)
14	42220 - Natural Jack Pine	Poletimber Poor	2.2	54	1-50	Stand is very similar to 13,but with a small component of white pine. Grassy understory with blueberries. Cutting records indicate removal of jack pine containing three sticks or more in 1984. Jack pine containing two or less sticks were left. Old Comment- (OPIC - FMD: 1999: SEMI-OPEN JACK PINE SURROUNDED BY J6.)
15	4122 - Oak, Pine	Sapling Poor	12.8	16	1-50	Scattered pole and saw sized oaks left from harvest. Oak and jack pine saplings are patchy in areas. Could call it 2 aged, but the mature timber does not take up enough canopy position to have its own age class. Old Comments- (OPIC - FMD: (2009: STAND FOUND BORDERING NORTH DOWN RIVER ROAD AND IS A NORROW STRIP ON THE NORTH SIDE OF THE ROAD. USE AS A FIRE BREAK, DO NOT REPLANT. FINAL HARVESTED LAST ENTRY YEAR BUT ALL THE OAK WAS LEFT. USE KW SEASONAL RESTRICTIONS. Old comment.) Part of timber sale 72-051-01-01 School House Jack Pine. Cut by Chris Muma during the fall of 2003. The oak was not cut in this stand. Residual oak is probably less than 10 square feet of basal area. Per the compartment review this area will not be planted back. The area will regenerate naturally as it is considered a hazardous fuel break. mm 10/13/2003. The area just west of the small private property (the old red school house) has a lot of junk on it. The location and description of the junk has been forwarded to Ada Takacs, Adopt-a-Forest, to be scheduled to be cleaned up. 11/02/2004 mm)
16	4130 - Aspen	Sapling Well	6.1	16	1-50	Some larger pole sized aspen in southeast. Fir and white pine through understory. Old comments- (OPIC - FMD: 2009: Small immature Aspen stand with scattered Red and White Pine in the overstory. Stand was final harvested in the fall of 2003 with the exception of Red and White Pine. Left for visual management. Stand is regenerating to Aspen naturally. South side of stand borders North Down River Road and the west side borders Killeen Road (Private 911 Road) and private property. Private road is being maintained seasonally across state land. (1999: STAND FOUND ALONG NORTH DOWN RIVER ROAD AND PRIVATE PROPERTY ON THE WEST SIDE OF STAND. RECOMMEND FINAL HARVEST, REMOVING ALL SPECIES EXCEPT RED PINE. LEAVE RED PINE FOR VISUAL MANAGEMENT. STAND HAS FIRE SCARS FROM STEPHAN BRIDGE FIRE IN 1990. Old comment.) The stand was part of timber sale # 72-051-01-01, School House Jack Pine. This was cut by Chris Muma during the fall of 2003. This stand will regenerate naturally to aspen. Mm 10/13/2003)
17	42220 - Natural Jack Pine	Sapling Medium	18.3	29	Immature	More open jack pine on the west side of stand. Some jack pine getting pole size, but still immature overall.Old comment-(OPIC - FMD: 2009: STAND IS REGENERATING NATURALLY AFTER STEPHAN BRIDGE FIRE IN 1990.)

s t	Graylin	g Mgt. Unit		Report 7	Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4131 - Aspen, Oak	Poletimber Well	12.1	29	1-50	Oak dominates the west transition between aspen interior and jack pine in stand 20. Good mix of aspen and oak through stand. Large crowned oaks not killed by Stephan Fire providing mast and are super-canopy. Oak dominates in patches.Old comments- (OPIC - FMD: 2009: STAND REGENERATING NATURALLY AFTER STEPHAN BRIDGE FIRE. STAND CONSISTS OF OAK, JACK PINE AND ASPEN SEEDLINGS AND IS FULLY STOCKED. STAND ALSO HAS LOTS OF STANDING DEAD RED PINE AND OAK SNAGS.)
20	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Well	30.7	29	Immature	Jack pine with pockets of aspen. Oak scattered through most of stand. JP getting pole sized in some of the less dense areas. Heavier oak \ aspen in north finger. A few super-canopy red pine found from parent stand.Old comments- (OPIC - FMD: 2009: STEPHAN BRIDGE FIRE 1990 - SALVAGED IN 1991 STAND CONSISTS OF JACK PINE, ASPEN AND OAK. Used old site index.)
21	4130 - Aspen	Sapling Well	7.0	29	Immature	Low quality quaking aspen through most of stand except for a pocket of healthier big-tooth aspen in north west corner.Old comments- (OPIC - FMD: 1999: STAND INVOLVED IN THE STEPHAN BRIDGE FIRE OF 1990. NATURALLY REGENERATING TO AN ASPEN STAND. Tree not big enough-USED OLD SITE INDEX.)
23	4130 - Aspen	Sapling Well	9.7	29	Immature	Some aspen is just getting into pole size, but most is around 4" now. should be A6 next yoe. Jack pine uns up the north east corner.Old comments- (OPIC - FMD: 2009: STAND PART OF THE STEPHAN BRIDGE FIRE. STAND NATURALLY REGENERATING TO mixed hardwoods. Red Maple, Aspen and some Oak. Stand 22 of previos inventoy is now part of this stand. Used old site index.)
24	4199 - Other Mixed Upland Deciduous	Sapling Well	16.4	28	Immature	Patchy species composition. Center of stand is sapling size and maple dominated with oak. West side is oak saplings. Jack pine in the drainage towards the north east corner. South side of stand contains aspen pole timber.old comment- (OPIC - FMD: 2009: SALVAGE CUT IN 1991-STEPHAN BRIDGE FIRE Used old site index.)
25	4310 - Pine, Oak Mix	Sapling Poor	8.5	29	Immature	Stand has filled into a forested stand. Quite a few trees getting pole size, but overall still immature. Pockets of jack pine and oak scattered through the open areas. Old Comments- ((OPIC - FMD: 2009: STAND WAS PART OF THE STEPHAN BRIDGE FIRE - GRASSY OPEN AREAS BIRDHOUSES SCATTERED THROUGHOUT THE AREA.))
26	4199 - Other Mixed Upland Deciduous	Sapling Well	6.7	29	Immature	Salvage cut after Stephan Bridge fire. Maple are mostly stump sprouted and most oaks look like the seeded naturally. Small component of white pine and heavily browsed white oak in subcanopy. Aspen mixed in, but mostly along edges of stand. A couple legacy white pine found.Old comment- (OPIC - FMD: 1999: STAND PART OF STEPHAN BRIDGE FIRE. USED OLD SITE INDEX. Trees not big enough for si)

S t	Grayling	Grayling Mgt. Unit			– Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4125 - Black, N. Pin Oak	Sawtimber Poor	4.1	117	1-50	Second age clas initiated after Stephan Bridge Fire. Stand is converting to maple for the most part. Heavy white pine in the understory on the south side of stand. White and hybrid oak scattered through stand but a little heavier on the north side. Most of the oak is starting to get some die-back in the crowns and epicormic branching. Large fire scars on all the tree boles.Old comment- (OPIC - FMD: 2009: STAND WAS PART OF THE STEPHAN BRIGE FIRE. SCATTERED MATURE OAK WITH AN HEAVY UNDERSTORY OF OAK, ASPEN AND RED MAPLE UNDERSTORY. STAND CONTINUES INTO PRIVATE PROPERTY AND IS VISABLE FROM A COUPLE OF HOUSES.)
29	4133 - Aspen, Mixed Pine	Poletimber Well	7.1	29	1-50	Aspen stand contains scattered wolfy 20"+ white pines that have seeded a solid understory of white pine beneath the aspen pole class . Some scattered 8-12" jack pine, red pine, and aspen throughout as well. Old comments- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. FOUND ON AN OLD BORROW PIT SITE. STAND HAS AN OVERSTORY OF PINE AND ASPEN. UNDERSTORY IS THE MANAGEMENT OBJECTIVE WHICH CONSISTS OF AN A3. ALSO STAND PLAYS A ROLE IN VISUAL MANAGEMENT.)
30	4199 - Other Mixed Upland Deciduous	Sapling Well	12.5	29	Immature	Oak/aspen with super-canopy red/white pine. Ridge with a pretty steep east facing slope (still operable). Stand was typed as A3, but it looks to be heavier on the oak side now.Old comments-(OPIC - FMD: 2009: STAND WAS PART OF STEPHAN BRIDGE FIRE IN 1990. LAND IS LEASED BY THE MILITARY. USED OLD SITE INDEX,)
31	4310 - Pine, Oak Mix	Sapling Well	27.6	29	Immature	Stand has patchy planted red pine through north half and appears to have been planted around 1991 after Stephan Bridge Fire however, I was unable to find any planting record for this area. Oak and jack pine competition as well as snow on the ground during inventory made it difficult to locate furrows to see actual planted area. A few of the red pine patches contain obvious rows with 6"-7" red pine and BA around 100. Other parts of stand are jack pine/oak mixtures and don't appear to have been planted. Small pocket of red maple in the northern finger.Old Comment- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. USED OLD SITE INDEX MILITARY LEASED LANDS.)
32	42220 - Natural Jack Pine	Sapling Well	132.6	29	Immature	Vortex strip in south east part of stand has some larger jack pine and a few saw size oaks. Used to be its own stand, but I merged it with stand 32 due to its small size. South side of stand as well as a patch towards the north are more open than the rest of stand and have canopy closure around 25-50%. More pole size trees in the openings. Most parts of stand are 100% canopy closure.Old comments- (OPIC - FMD: 2009: STAND SALVAGE IN 1991 AFTER THE STEPAN BRIDGE FIRE OF 1990. NATURALLY REGENERATED JACK PINE WITH SOME ASPEN AND OAK POCKETS THROUGHOUT THE STAND.)
33	4310 - Pine, Oak Mix	Sapling Well	9.1	29	Immature	Looks like red pine was planted in north part of stand, but was out competed by oak. There are some scattered red pine that made it into dominant canopy position, but most are over-topped and 0-5' tall. Some jack pine and oak getting into pole size class.Old comments- (OPIC - FMD: 2009: STAND WAS PART OF THE STEPHAN BRIDGE FIRE IN 1990. MILITARY LEASED LAND.)

s t	Grayling Mgt. Unit			Report 7	Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	4310 - Pine, Oak Mix	Poletimber Well	16.6	28	51-80	East 1/3 of stand is dominated by oak and planted red pine is lost or extremely suppressed. The west and south sides of stand have a mixture of competing red pine and oak. The middle of the stand has some good rows of red pine with diameters ranging from 5-8" and BA around 100.Old comments- (OPIC - FMD: 2009: STAND WAS PART OF THE STEPHAN BRIDGE FIRE IN 1990. PLANT TO RED PINE IN 1991. Oak/ Jack pine saplings over topping the Red pine in areas. Especially along Wakley Bridge Rd.)
35	4130 - Aspen	Sapling Well	5.5	29	Immature	Nice A3 stand, should be A6 next entry. Has a couple pockets of oak/jack pine mixed in with stand. Old Comment- (OPIC - FMD: 1999: STAND WAS SALVAGED IN 1991 AFTER THE STEPHAN BRIDGE FIRE IN 1990. MILITARY LEASED LANDS.)
36	4199 - Other Mixed Upland Deciduous	Poletimber Well	8.4	29	1-50	Patchy species composition through stand. Aspen is mostly pole sized. Pockets of dense immature red maple and oak. Basal area varies depending whether your standing in an aspen pocket or in immature oak or maple. Old Comments- (OPIC - FMD: 2009: STAND SALVAGE IN 1991- STAND WAS PART OF THE STEPHAN BRIDGE FIRE. Stand borders Wakley Bridge Rd. Immature Aspen mixed with Oak, Jack pine and some Red pine)
38	42220 - Natural Jack Pine	Sapling Medium	9.5	29	Immature	J3 in most parts of stand, but has decent size opening in the middle. Road that goes through stand is inpassable by vehicle.Old Comment- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. MILITARY LEASED LAND.)
40	4310 - Pine, Oak Mix	Poletimber Poor	16.9	29	1-50	East and west sides of stand are very open and barren-like. Sweet fern is high coverage through the openings and prarie willow are numerous. Shrubby defected red pine, oak, cherry and jack pine in the openings. Middle of stand is similar to stand 146.
						Old comments- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. USED OLD SITE INDEX MILITARY LEASED LANDS.)
41	42220 - Natural Jack Pine	Sapling Well	4.5	28	Immature	Smsll J3 stand on a north facing slope with a couple of steep pitches. Old comments- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. USED OLD SITE INDEX. MILITARY LEASED LAND.)
42	42220 - Natural Jack Pine	Sapling Well	7.6	29	Immature	Stand is close to having enough 5" jack pine to call it pole size (still a lot of 3-4" trees). Very similar to other jack pine stands in compartment.Old Comments- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE IN 1990. USED OLD SITE INDEX. MILITARY LEASED LANDS.)
43	42220 - Natural Jack Pine	Poletimber Well	6.2	29	1-50	Looks like natural jack pine in most places, but there are some areas where it almost appears planted. West side against private. Small opening with limby jack pine towards middle of stand where it's more open. Old Comment- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. USED OLD SITE INDEX. MILITARY LEASED LANDS.)

S t	Grayling	g Mgt. Unit		Report 7	– Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4310 - Pine, Oak Mix	Sapling Well	76.4	29	Immature	Stand is starting to get pole sized in areas, but overall is still immature. Small 1-3 acre aspen stands harvested same time as 44 that did not meet minimum mapping standards were merged into stand 44. Stand 69 merged with 44 due to similar jack pine cover type. Ketchum truck trail fire burned through part of the west lobe of stand 44 in 2-4" jp and oak in July of 2018. Red pine that survived Stephan Bridge Fire in 1990 act as supercanopy trees scattered through stand. Stand varies in covertype depending where you are. Pockets of aspen are present in stand and oak dominates over jack pine in certain areas. Heavy maple and oak under the "heel" of stand 60.Old Comment- (OPIC - FMD: 2009: STAND WAS PART OF THE STEPHAN BRIDGE FIRE. USED OLD SITE INDEX. MILITARY LEASED LANDS)
46	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Well	94.8	29	Immature	Jack pine through most of stand with patches of oak dominated and aspen dominated pockets. Merged stand 50 with 46 due to similar species composition. Split 146 from 46 because 146 is oak dominated. Some sparser open grown jack pine in the southwest corner of stand has a barrens like appearance or possibly a frost pocket. Old Comment- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE.)
47	4131 - Aspen, Oak	Sapling Well	7.9	29	Immature	Quaking aspen and oak mix in south and east part of stand. Pole size big-tooth aspen north west side. Scattered log and x-log size red pine in and around edges in north west.Old comments- ((OPIC - FMD: 2009: Smalll immature Aspen pocket. Stand was part of the Stephan Bridge Fire in 1990. Stand is also under military lease. Used old site index.)
51	4130 - Aspen	Sapling Well	8.4	29	Immature	Aspen with an oak component mixed in. A few log size oaks that survived fire found scattered through stand providing mast.Old comment- (OPIC - FMD: 1999: PART OF STEPHAN FIRE. USED OLD SITE INDEX. MILITARY LEASED LAND)
52	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	19.8	29	Immature	Combined some of the smaller aspen stands that didn't meet minimum mapping standards and are connected by oak/jack pine covertype into 1 stand. Most of stand follows shallow ridges. A few x-log size pine and oak found scattered through stand. North finger has larger aspen in the 6" d-class.Old comments- (OPIC - FMD: 2009: Same as last entry year, but added stand 52 to it. Immature Aspen stand mixed with Red maple Oak and Jack pine.1999: PART OF STEPHAN FIRE USED OLD SITE INDEX MILTARY LEASED LAND)
53	4130 - Aspen	Poletimber Well	7.0	29	51-80	Dense pole sized aspen just getting pole sized in the north, with small pockets of jack pine. Most of the jack pine fingers through stand have been removed and merged with stand 57. Very little sub-canopy interior of stand with medium to high density oak and jack pine around the edges and in the south. Aspen is smaller in the south.OPIC - FMD: 2009: Same as last entry year, but added stand 52 to it. Immature Aspen stand mixed with Red maple Oak and Jack pine.1999: PART OF STEPHAN FIRE USED OLD SITE INDEX MILTARY LEASED LAND

s t	Grayling	g Mgt. Unit		Report 7	Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4126 - White, Black, N. Pin Oak	Sawtimber Medium	17.3	101	51-80	Stand looks like an oak shelterwood and has excellent oak regen throughout most of it. Small pocket of dense immature jack pine on the south side of stand seperates 53 from 54. Second cohort of oak likely germinated soon after firewood sale in 02 and has recruited out of browse height now. Xlog size oak and pine scattered through stand. Jack pine and aspen and smaller oaks are around 80-90 years old in this stand.
						Old comment- (OPIC - FMD: 2009: STAND WAS PART OF STEPHAN FIRE. DEAD OAK FIREWOOD SALE (037-98-02) EAST SIDE OF STAND.)
55	4199 - Other Mixed Upland Deciduous	Sapling Medium	39.7	17	Immature	Aspen dominates canopy for about 8 acres in the east and west sides of the stand with 100% canopy closure. The middle of the stand is more open and dominated by oak with pockets of jack pine. Part of timber sale (Ketcham Truck Trail Jack Pine, #72-061-01). A few scattered pole size white pine and oak in stand.Old Comments- (OPIC - FMD: (1999: FINAL HARVEST AND MANAGE FOR ASPEN. Old comments.) Cut in Fall 2002. Natural regenertion to oak and aspen: O2A1.
57	42220 - Natural Jack Pine	Sapling Well	46.8	28	Immature	Mostly dense immature jack pine with pockets of aspen and scattered oaks. Little to no sub-canopy under dense jack pine. Oak is a larger component in southwest. North/south roads that splits stand is over-grown and impassable. Stringer of mature jack pine with oak along north boundary of stand (south side of 2-track).
						Old comment- (OPIC - FMD: 2009: STAND AREA WAS PART OF STEPHAN FIRE IN 1990.)
58	4126 - White, Black, N. Pin Oak	Sawtimber Poor	27.3	108	1-50	Stand responded really well to cut in 2002. Great oak regen through entire stand (most above browse height). Scattered red pine mostly in 18" d-class and a few legacy trees scattered as well.
						Old comments- (OPIC - FMD: 2009: PART OF STEPHAN FIRE. TREES SCARRED. RECOMMEND 40% CROWN CLOSURE CUT REMOVING THE ASPEN RED MAPLE AND POORER QUALITY OAKS. Timber sale # 059-01-01 (Ketchum Truck Trail Oak) cut in February 2002. Sale had a residual of 34 square feet of oak sawlogs. Stand is now O7O3. 03/06/2002 mm)
60	4131 - Aspen, Oak	Poletimber Well	22.2	29	1-50	Dense immature quaking aspen in the south with pockets of jack pine/oak mixed in. Rest of the stand jumps from oak/jack pine to big-tooth aspen in different places. Big-tooth aspen is pole sized, the rest of the stand is still immature for the most part. Red maple is pretty thick towards the heele of stand.Old comment- (OPIC - FMD: 2009: PART OF STEPHAN FIRE MILITARY LEASED LAND USED OLD SITE INDEX)
61	42260 - Natural Pine, Mixed Deciduous	Sawtimber Poor	7.4	91	51-80	Really good oak regen in sub canopy. Young cohort in sub canopy likely developed after the Stephan Fire. A small pocket of red pine found in sub-canopy. Most red pine is 18"+. Small pocket of pole size aspen in south finger.
						Old comment- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN FIRE)

S t	Grayling	ı Mgt. Unit		Report 7	– Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	4122 - Oak, Pine	Sawtimber Well	19.1	108	51-80	Stand is a mix of oak and red pine with scattered aspen. Legacy pines present. Good white pine regen around the 28" white pine. White oak in understory through most of stand. Maple in understory is getting pole sized. Most aspen regen as stated in old comments has died. Terminated prescribed burn treatment for stand since there is sufficient regen.
						Old comments- (OPIC - FMD: 2009: Recommend a 40% Crown clousure (shelterwood seed) . Lots of Oak regeneration in the understory1999: LOTS OF OAK ASPEN REGENERATION OF 15 FEET. 4-22-10 updated acreage to 19; the shapefile was somehow linked to stand 57's acreage data (63 acres) JC2011: Variance was approved on 28 March 2011 to change from harvest to no harvest with a spring or fall burn.TB)
63	4126 - White, Black, N. Pin Oak	Sawtimber Poor	33.8	108	51-80	Thick maple regen 2-4" and 20-30 feet tall through middle of stand. White oak is present in good numbers in the east and south. Jackpots of down dead wood from declining oak and over mature aspen in the middle where maple is taking over. Stand contains legacy trees.Old comments- (OPIC - FMD: 1999: RECOMMEND A SELECTION CUT REMOVING ASPEN AND RED MAPLE. MILITARY LEASED LAND 20009: Final harvest with retention patches2011: Variance was approved on 28 March 2011 to change from harvest to no harvest with a spring or fall burn.TB)
64	4122 - Oak, Pine	Sapling Medium	18.9	17	Immature	Part of timber sale (Ketcham Truck Trail Jack Pine, #72-061-01). North side of stand is pretty open.Old Comments- (OPIC - FMD: (1999:FINAL HARVEST AND CHIP TOPS AND SLASH. MILITARY LEASED LANDS. Old comments.) Cut in Fall 2002. Natural regeneration: O2A1. 11/19/2002 mm)
66	42220 - Natural Jack Pine	Poletimber Well	7.7	32	51-80	Jack pine with an oak component. Looks like healthy J6. Old comment- (OPIC - FMD: 1999: MILITARY LEASED LAND)
71	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	40.2	29	Immature	Heavier aspen towards the west, jp/oak in middle, and oak/jp in east. Opening with some jack pine in valley towards the east.Old comments- (OPIC - FMD: 2009: PART OF THE STEPHAN BRIDGE FIRE. USED OLD SITE INDEX. MILITARY LEASED LAND. Oak on ridges and Jack pine in valley, mixed with Oak)
73	4310 - Pine, Oak Mix	Sapling Medium	3.7	10	1-50	More open towards the east side of stand, but has some 1-2' tall jack pine coming up. A few scattered red pine seedlings found also. Oak has taken over as dominant canopy species with parent red pine saw trees scattered through the stand. Some pole sized jack pine and oak along the west and part of the south boundary. Stand has sort of a seed tree appearance and was prescribe burned fall 2009 (#72-558). Oak is mostly out of browse height now.

Old comment- (OPIC - FMD: 1999: PART OF THE STEPHAN BRIDGE FIRE OF 1990. MILITARY LEASED LAND)

s t	Grayling	Mgt. Unit		Report 7	– Forested	Stands Compartment: 258 Year of Entry: 2021
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
74	42210 - Natural Red Pine	Sawtimber Medium	23.5	99	51-80	KETCHAM TRUCK TRAIL FIRE (Incident #2018200021) burned through the south east cornter of stand in July of 2018. No mortality observed this year from the Ketchum Truck Trail fire. Regen was burned up in fire and no new regen was observed in understory of the recently burned area during inventory. Good oak regen through the parts of stand that were prescribe burned in 2009. Jack pine and red pine are low density throughout entire stand, but denser in pockets. Jack pine poles mixed in with sparce red pine saw trees in the north west similar to stand 77. Red pine BA is much higher towards the south side of stand (~100 sqft/ac). The two fingers on the north east side of stand look like they were excluded from the prescribed burn and have full oak and low red pine in the sub-canopy.
						Old Comments- (OPIC - FMD: MILITARY LEASED LANDS. REGENERATE NATURALLY. Selection cut in 2006 under timber sale contract #720290401 Mitten Red Pine. FTP written for prescribed underburn #72-558. Burned in Fall of 2009.)
75	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	5.1	103	51-80	Narrow stand that looks similar to covertype of stand 1 in adjacent compartment 256. Legacy white pines present in stand. Dense maple in the understory with pockets of aspen in some of the more open parts of the stand. White pine regen is med-high in pockets, but low overall.
						Old comment- (OPIC - FMD: 1999: PART OF STEPHAN FIRE. MILITARY LEASED LAND)
76	4310 - Pine, Oak Mix	Sapling Medium	7.0	29	1-50	Used to be R7, but young oak and jack pine dominate the canopy now after stephan fire in 1990.OPIC - FMD: 1999: PART OF THE STEPHAN FIRE OR ANOTHER FIRE. MILITARY LEASED LAND. PRESCRIBE BURN WITH STAND 74 to to remove grasses and duff to entice natural regeneration.
77	42210 - Natural Red Pine	Sawtimber Medium	4.4	99	81-110	Some of the red pine greater than 20" DBH are 125+ years old. High oak density through most of stand sub-canopy.
78	42260 - Natural Pine, Mixed Deciduous	Sawtimber Medium	67.0	77	51-80	Legacy pines present in stand. Oak is present in understory through most of stand and has recruited into pole class in some of the more open areas. Jack pine starting to see some mortality. Only aspen observed was next to Ketchum Truck Trail.Old comments- (OPIC - FMD: 1999: LARGE STAND ON MILITARY LEASED LAND. HOLD FOR 10 YEARS. POCKETS OF ASPEN AND RED PINE THROUGHOUT STAND AND OAK SCATTERED THROUGHOUT THE STAND.)
84	42210 - Natural Red Pine	Sawtimber Well	7.3	99	171-200	Natural red pine with x-log size seed trees with plate-like bark. The trees greater than 22" are 130+ years old. Majority of red pine is around 100. Oak is present in sub-canopy as well as some suppressed red pine and red maple. Stand will convert to hardwoods without any management.
						OPIC - FMD: 1999: PART OF THE STEPHAN FIRE OR ANOTHER FIRE. MILITARY LEASED LAND. PRESCRIBE BURN WITH STAND 74 to to remove grasses and duff to entice natural regeneration.

S t a n d	Grayling Mgt. Unit			Report 7	- Forested	Stands Compartment: 258 Year of Entry: 2021
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
85	42210 - Natural Red Pine	Sawtimber Well	19.2	99	111-140	Natural red pine with numerous legacy trees. Oak in the subcanopy is medium to low density.Old comments- (OPIC - FMD: 1999: PART OF THE STEPHAN FIRE OR ANOTHER FIRE. MILITARY LEASED LAND. PRESCRIBE BURN WITH STAND 74 to to remove grasses and duff to entice natural regeneration.)
87	4311 - Pine, Aspen Mix	Sapling Well	10.7	29	Immature	More aspen and oak on the west side of stand. Similar to stands 51 and 53, but with more jack pine.Old comment- (OPIC - FMD: 2009: Same as last entry year, but added stand 52 to it. Immature Aspen stand mixed with Red maple Oak and Jack pine.1999: PART OF STEPHAN FIRE USED OLD SITE INDEX MILTARY LEASED LAND)
146	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	37.5	29	Immature	Split from stand 46 because it's more oak dominated than jack. Nice pocket of aspen in on the east side of stand and other small aspen pockets scattered. Some white pine and red pine on the west and south west part of stand. The middle of the stand is similar to stand 46.
						Old comment- (OPIC - FMD: 1999: STAND WAS PART OF THE STEPHAN BRIDGE FIRE.)

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Stand	Cover Type	Acres	Managed Site	General Comments:
3	622 - Lowland Shrub	12.4	No	Changed from bog to low shrub. Old comments- (OPIC - FMD: 2009: BOG/MUSKEG. CONSISTS OF TAG ALDER AND SHRUBBRY. EDGES SURROUNDED BY A STRIP OF SPRUCE/BALSAM FIR.)
5	6224 - Treed Bog	16.4	No	Leatherleaf an hummaks through most of bog. A couple islands of jack pine/white pine. Spruce, tamarack, and fir saps/poles scattered at low densities through stand.Old comments- (OPIC - FMD: 2009: BOG/MUSKEG. EDGE SURROUNDED BY A STRIP OF SPRUCE AND BALSAM FIR.)
8	622 - Lowland Shrub	11.3	No	Barker creek and associated wetland. Doesn't look like a bog, more of a tag alder swamp (Lowland shrub). Some aspen, fir, tamarack, and white pine along the edges and scattered throughout. Old comment- (OPIC - FMD: 2009: BOG/MUSKEG.)
400	3102 - Grass	1.0	No	See old commentsOld comment-(OPIC - FMD: Old barrow pit. Grass with some patches of X(gravel))
401	330 - Low-Density Trees	1.0	No	Old borrow pit. May convert to forested stand next entry. White pine, aspen, cherry, and jack pine and filling in nicely in and around pit.Old comment- (OPIC - FMD: Ol Stand Year Origin was)
402	330 - Low-Density Trees	2.5	No	Opening with scattered jack pine, oak, and cherry.Old comment- (OPIC - FMD: 1999: PART OF THE STEPHAN BRIDGE FIRE. MILITARY LEASED LAND)
446	330 - Low-Density Trees	3.2	No	Opening split from stand 46 has open grown jack pine and a barrens like appearance or possibly a frost pocket. Part of Stephan Bridge Fire in 1990.
471	330 - Low-Density Trees	1.6	No	Opening with some jack pine and oak in a valley split from stand 71, possibly a frost pocket. Part of Stephan Bridge Fire in 1990.