

Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72006

Entry Year 2019

Acreage: 2,096

County Oscoda

Management Area: Kirtland's Warbler

Revision Date: 2017-09-06

Stand Examiner: Kevin Ehlert

Legal Description:

T27N R01E Sections 5, 6, 7 & 8. South Greenwood Township T28N R01E Sections 31 & 32. North Greenwood Township

Identified Planning Goals:

To manage habitat for the Kirtland's Warbler while also maintaining species diversity and addressing sustainability, forest health, productivity, wildlife requirements, aesthetics, best management practices and recreational opportunities throughout the compartment.

Soil and topography:

Topography in this compartment is flat to slightly rolling. Some steeper terrain exists in the southern edges of the compartment however this is limited to the banks leading down to the East Branch of Big Creek. In terms of land forms present, this compartment consists mainly of upland flats, stream terraces and drainage ways in the northeast and southwest portions of the compartment. The major soil complex present in this area is Grayling sand with small areas of Croswell-AuGres sands present on ridges within the swamps in the area. This association is found primarily on upland flats and low knolls which are dominated by Kirtland Warbler plantations in this area. This soil complex is characterized as being excessively drained with major management concerns including equipment limitation and seedling mortality. Windthrow is also a concern throughout this soil type complex. The bottomlands of this compartment are made up mainly of Tawas-Lupton Muck and Leafriver Muck associations. These soil complexes are characterized as being poorly drained and are usually associated with a water course or water body. Major management concerns in these areas include equipment limitation, windthrow and seedling mortality.

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

The majority of this compartment is contiguous state land. There is also approximately 350 acres of USFWS land at the western edge of this compartment. Recreation is quite popular in this area as there is a snowmobile trail that transects the compartment and then heads in a northerly direction through the center of section 31. This compartment is also a Kirtland Warbler management area and therefore experiences a fair amount of wildlife viewing throughout the year. Restrictions regulate activity within the particular stands designated as Kirtland Warbler habitat at different times of the year.

Unique Natural Features:

The East Branch of Big Creek lies in the southern portion of this compartment and runs from east to west. The creek is small as it travels through sections 5, 7 & 8 ranging in width from 3-12'. Massasauga Rattlesnake have been observed within section 5.

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

This compartment is part of the Kirtland Warbler Wildlife habitat Management Program. There is potential for dry prairie plants in grassy openings to include pine barren's species of Hill's Thistle, rough fescue, Alleghany plum, and pale agoseris. There also is potential for pine barren's associated species of dusted skipper, grizzled skipper, and red legged spittlebug in these openings. Prairie warbler, Secretive locust, along with Kirtland Warbler may be found in young jack pine. There is potential for Massasauga rattler, wood turtle, and Loon along riparian zones. Bald Eagle has been documented to the north.

Watershed and Fisheries Considerations:

This compartment contains a portion of East Branch Big Creek and Middle Branch Big Creek in the North Branch Au Sable River watershed. These tributaries are designated Natural Rivers. No treatments are scheduled near water, so Fisheries has no concerns at this time.

Wildlife Habitat Considerations:

Compartment is part of a designated Kirtland's Warbler Management Area. A variety of other wildlife species are common in the compartment.

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located in the area, but there appears to be good sand and gravel potential within the compartment. There are currently no active state mineral leases within the compartment but there has been oil and gas leasing in the recent past in sections 31 & 32. There is no metallic mineral potential in this part of the state.

Vehicle Access:

Access to this compartment is fair, depending on seasonal restrictions, mainly snow depth. The snowmobile trail is passable with four-wheel drive vehicles during the winter months and the remaining 2-tracks can be used throughout the rest of the year. Farrington Rd. is passable throughout the year however it provides limited access to trails heading in a southerly direction. The pipeline that runs generally N/S also provides good access.

Survey Needs:

None

Recreational Facilities and Opportunities:

The compartment contains designated Snowmobile Trail #4. The Snowmobile trail is used heavily throughout the winter months. Wildlife viewing and hunting are also pursued throughout this region. The Midland to Mackinac Hiking Trail and Shore to Shore Equine Trail is located ½ mile west of the compartment near Walsh Road.

Fire Protection:

Jack pine is the dominant species within this compartment and therefore fire activity is a concern.

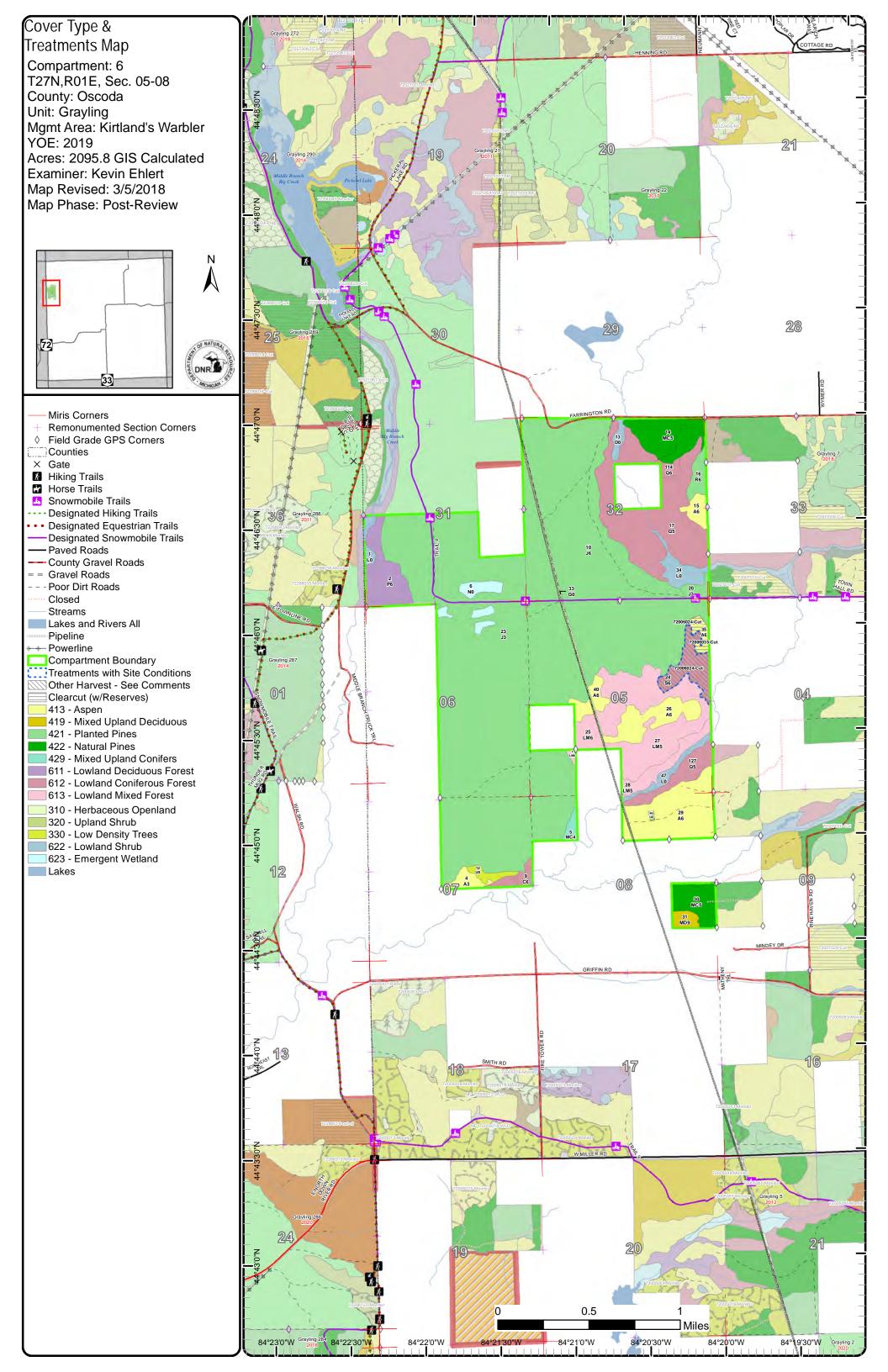
Additional Compartment Information:

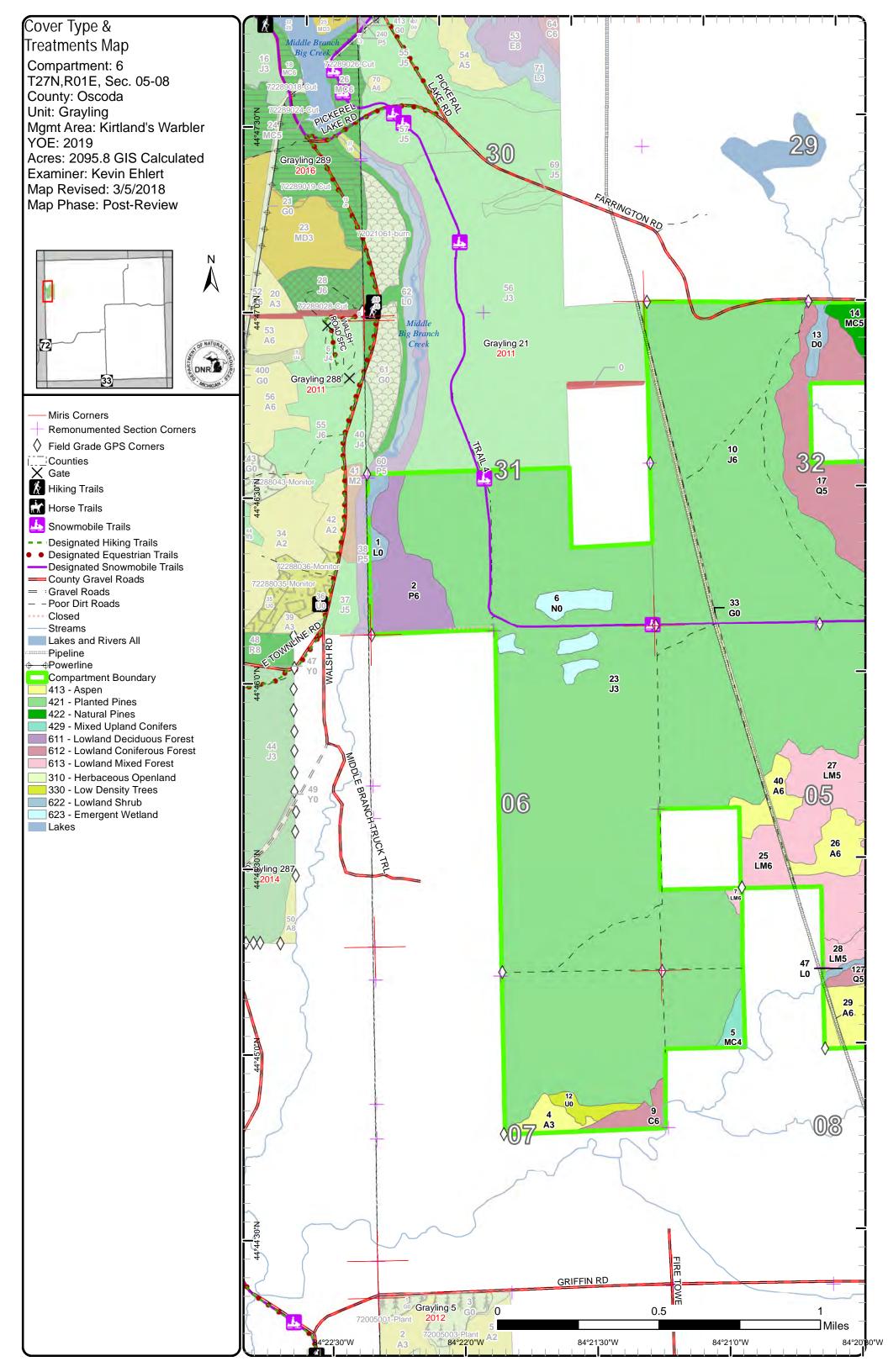
The following reports from the Inventory are attached:

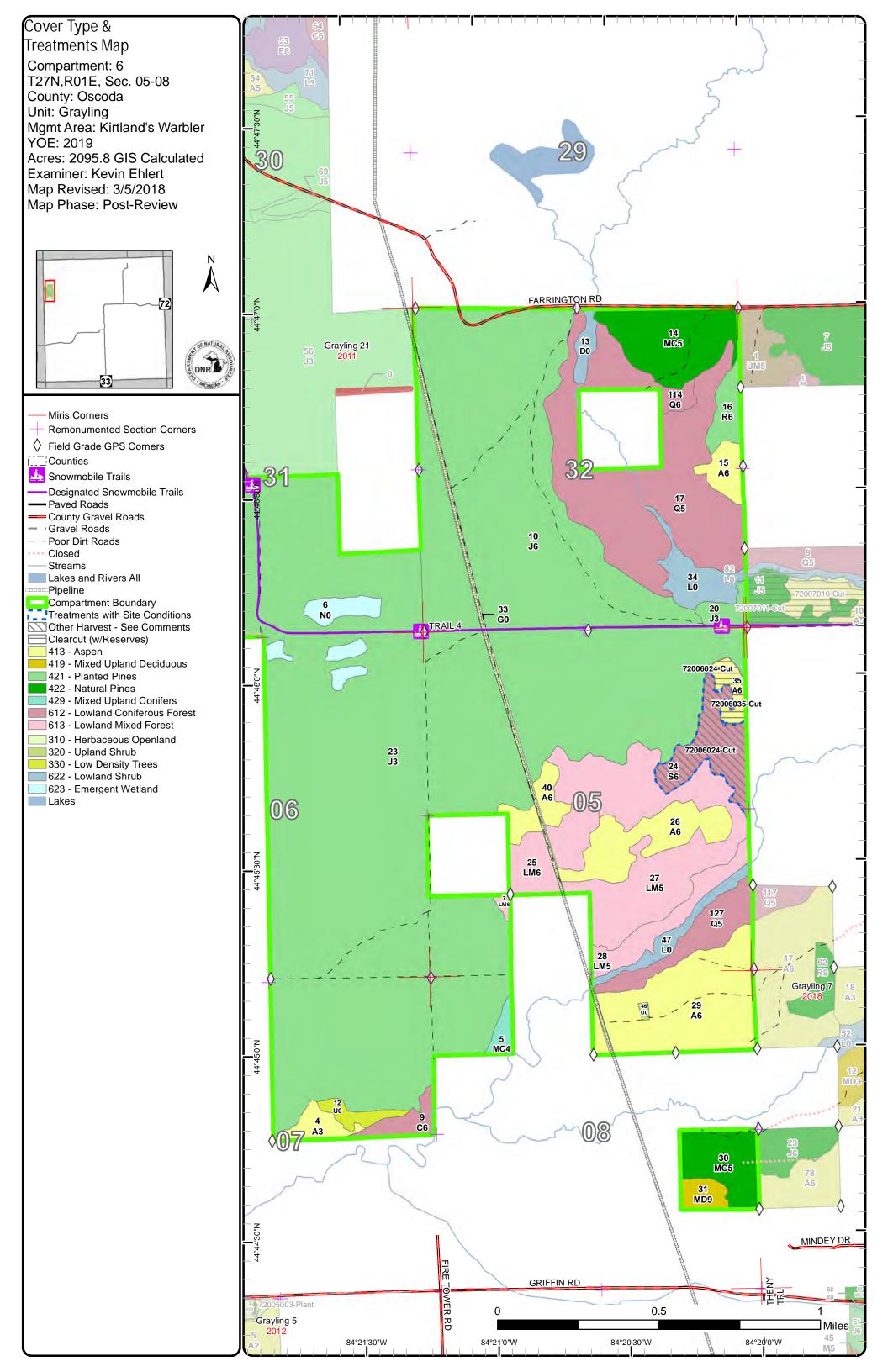
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

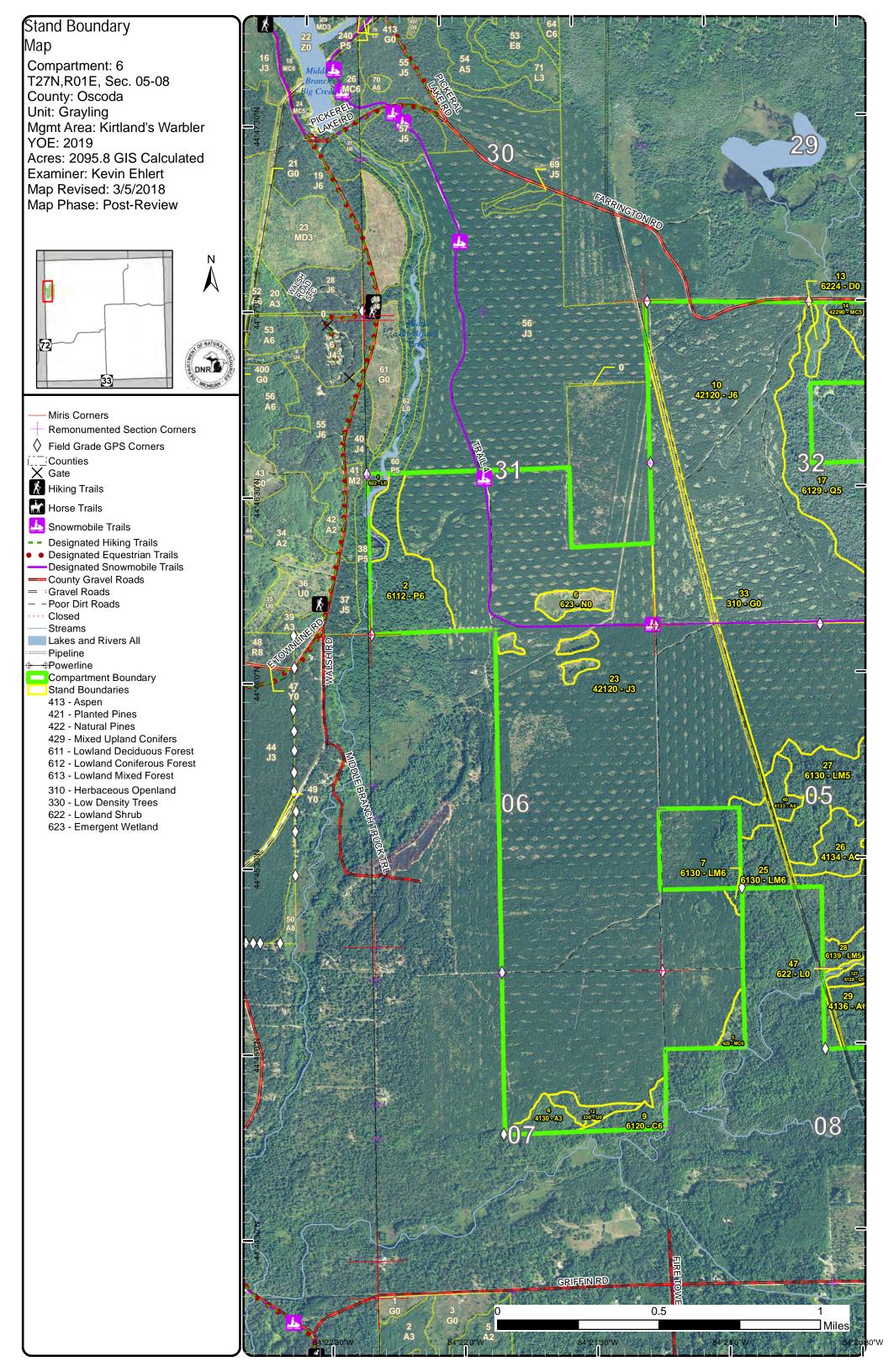
The following information is displayed, where pertinent, on the attached compartment maps:

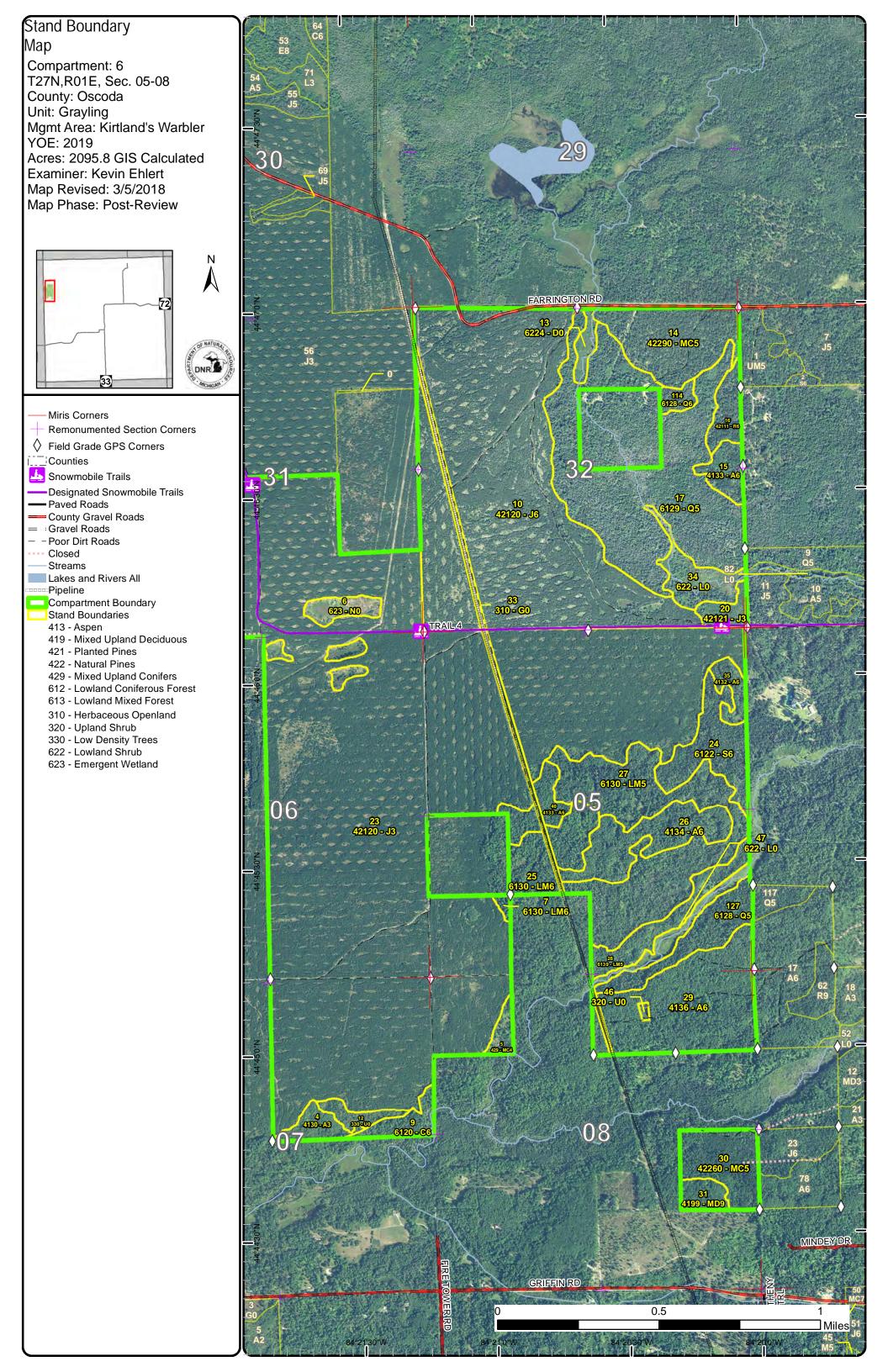
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

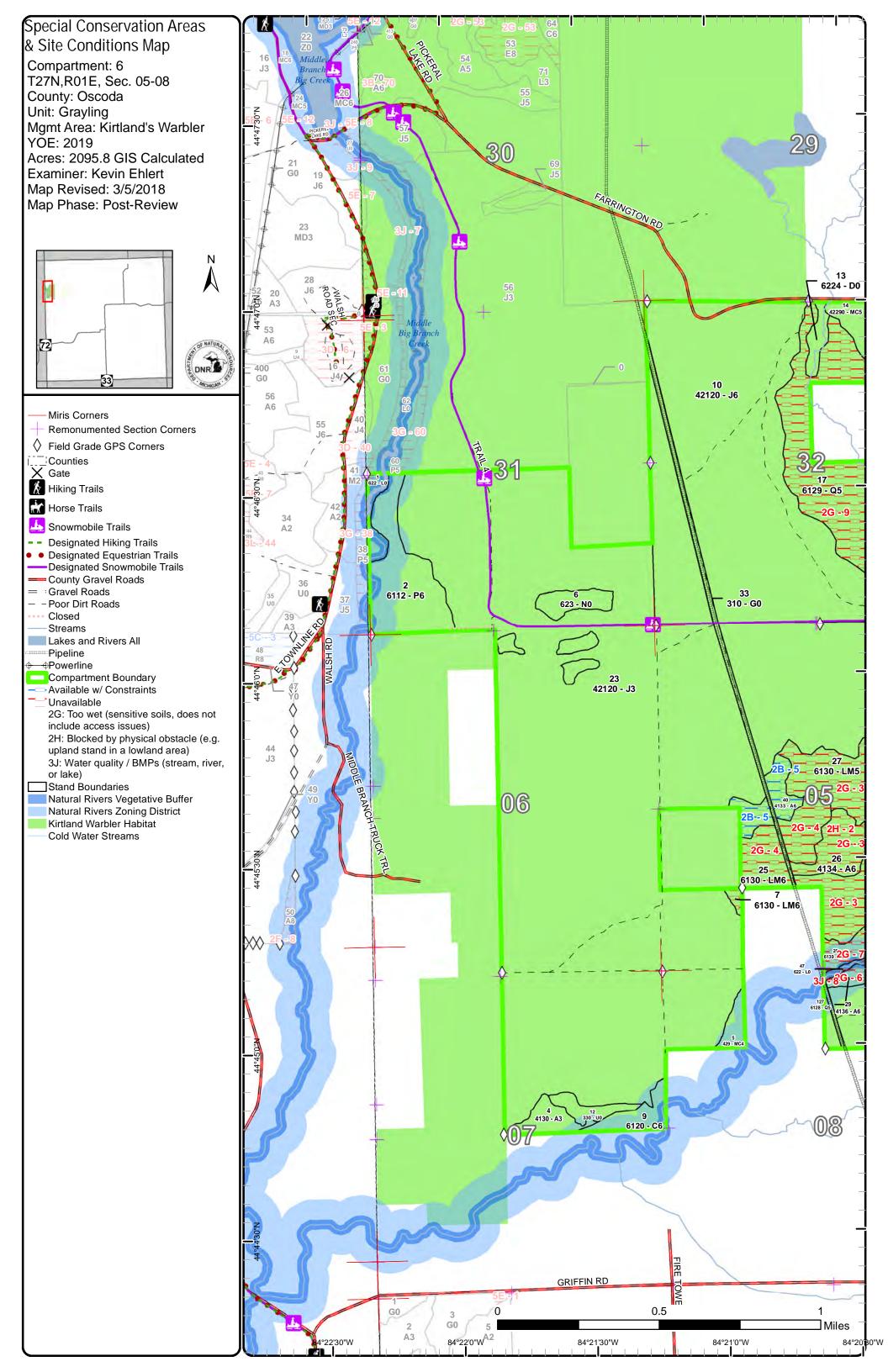


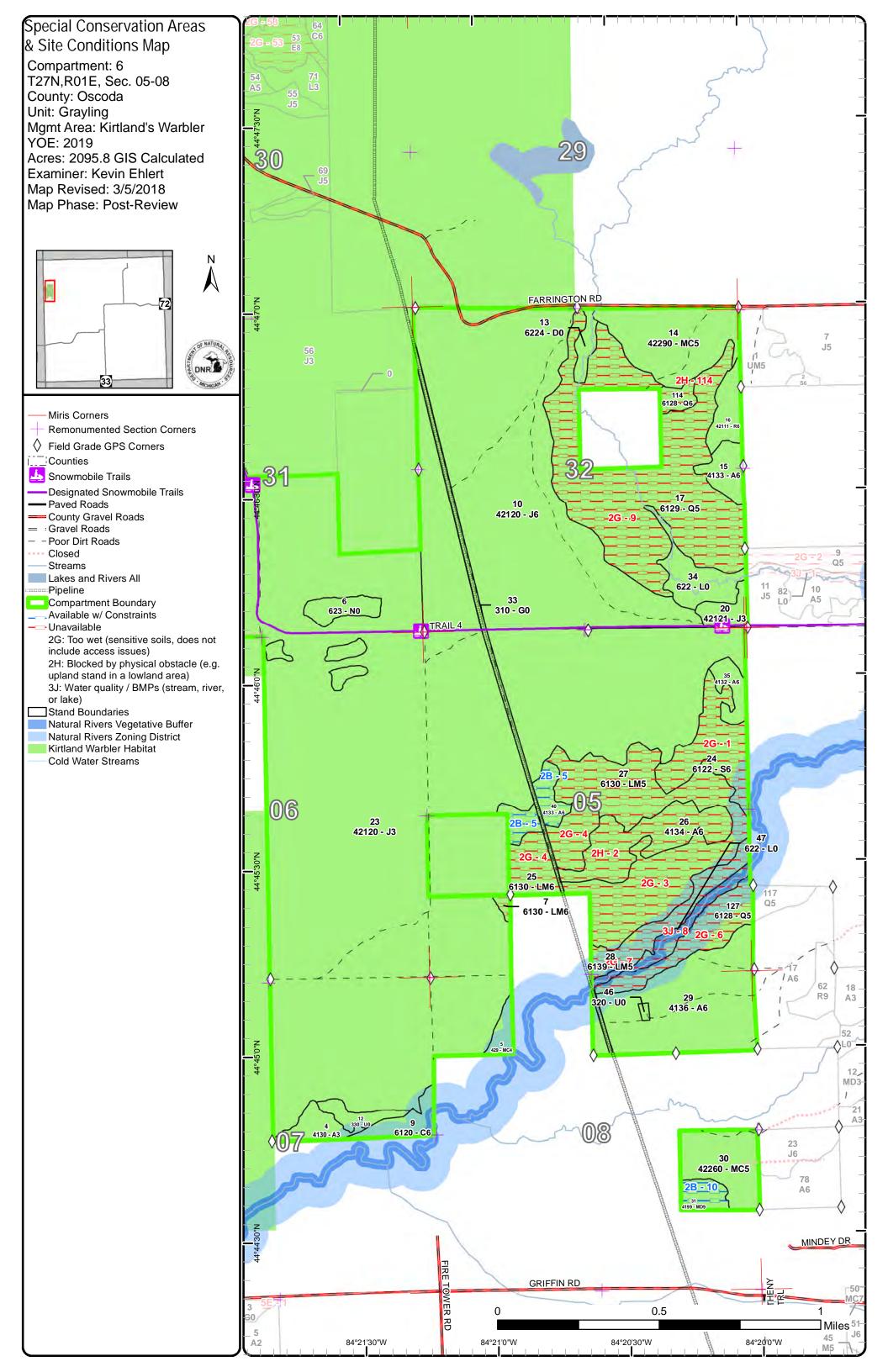












Compartment 6

Year of Entry 2019

Grayling Mgt. Unit
Kevin Ehlert: Examiner



Age Class

	No.	Jos /	3 / 2	,	25 / 50 / 50 / 50 / 50 / 50 / 50 / 50 /	3 / \$	180 GO	, , , , ,	\$ / K	,	8 80	\$ /g	80,20,20,20,20,20,20,20,20,20,20,20,20,20	,	,	S. L.	LAS /	St July	No. No. No.
Aspen	0	0	0	10	0	96	62	0	0	0	0	0	0	0	0	0	0	0	168
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11
Herbaceous Openland	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Jack Pine	0	0	9	967	321	0	0	0	0	0	0	0	0	0	0	0	0	0	1296
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Aspen/Balsam Poplar	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	44
Lowland Conifers	0	0	0	0	0	0	0	185	0	0	0	0	0	0	0	0	0	5	190
Lowland Mixed Forest	0	0	0	0	0	0	32	0	128	0	0	0	0	0	0	0	0	0	160
Lowland Shrub	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	33
Marsh	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
Natural Mixed Pines	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	80
Red Pine	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	12
Treed Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Upland Conifers	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Upland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	87	0	9	977	321	234	100	185	128	0	0	41	11	0	0	0	0	5	2095



Report 2 – Treatment Summary

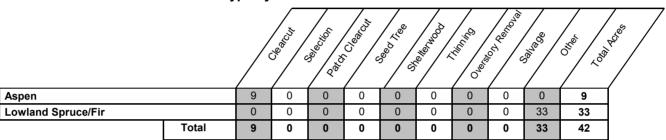
Grayling Mgt. Unit Year of Entry: 2019

Acres of Harvest

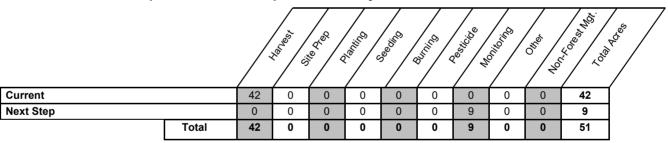
Compartment 6
Total Compartment Acres: 2,096

Commercial Harvest - 9
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 33

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Grayling Mgt. Unit

Report 3 -- Treatments

Compartment: 6 Year of Entry: 2019

а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Objective Name CoverType Density Age Range Type Structure **Status** d 72006024-Cut 32.6 6122 - Black Spruce Poletimber 51-80 Other - Specify 6122 - Black Even-Aged **Draft Field** 24 105 Harvest Spruce Boundary

Habitat Cut: Yes Site Condition: Too Wet

<u>Prescription</u> Hinge cut 20'+ tall full trees. Cut 3-4' off the ground. Leave portion of cambium layer attached to tree will remain propped on the stump after <u>Specs</u>: dropped. Conifer species (fir and spruce) will primarily be used. Mostly pole size trees will be used, but some saw sized tree may be used.

Next Step Treatments:

s

t

Acceptable Regen:

Other WLD will create horizontal cover for snowshoe hares within this stands by hinge cutting and dropping fir and spruce trees. WLD will focus

<u>Comment:</u> primarily along the edges and around canopy gaps within these stands.

Proposed Start Date: 10/01/2018

35 72006035-Cut 9.4 4132 - Aspen, Jack Poletimber 53 81-110 Harvest Clearcut 413 - Aspen Even-Aged Draft Field Boundary

Habitat Cut: No Site Condition:

<u>Prescription</u> Final Harvest all species. No retention due to small stand size. Push harvest boundary into adjacent stand 24 where access allows. Include spec 5.2.4.7 to push over boundary trees on harvest boundary within stand 24. Specify to select conifers (balsam fir and black spruce) as trees

to push over for habitat.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen and mixed deciduous stand with small component of mixed conifers meeting minimum required stocking levels.

Regen:

Other Due to small stand size, consider treating in 2018 with nearby stand 10 and 11 in compartment 72007. Can't start until 45 days after

Comment: Compartment Review.PVT line needed on East side.

Proposed Start Date: 10/01/2017

Total Treatment 42.0 Acreage Proposed:

Compartment: 6

Grayling Mgt. Unit

Kevin Ehlert : Examiner Year of Entry: 2019

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres	I	Domina	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		2B	2G	2H	3J
168	115	15	38	Aspen	15		38	
11	11	0	0	Cedar				
16	16	0	0	Herbaceous Openland				
1296	1296	0	0	Jack Pine				
7	7	0	0	Low-Density Trees				
45	45	0	0	Lowland Aspen/Balsam Poplar				
190	0	0	190	Lowland Conifers		185	5	
165	5	0	160	Lowland Mixed Forest		160		
38	26	0	12	Lowland Shrub				12
33	1	0	32	Lowland Spruce/Fir		32		
18	18	0	0	Marsh				
8	0	8	0	Mixed Upland Deciduous	8			
80	80	0	0	Natural Mixed Pines				
13	13	0	0	Red Pine				
6	6	0	0	Treed Bog				
6	6	0	0	Upland Conifers				
1	1	0	0	Upland Shrub				
2,101	1,645	23	433	Total Forested Acres	23	377	44	12
	78%	1%	21%	Relative Percent			-	

^{*}Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

1 Unavailable 2G: Too wet (sensitive 33 Unspecified Unspecified Unspecified Soils, does not include access issues)	d Unspecified Unspecified
Comments:	

Report 4 – Site Conditions

Grayling Mgt. Unit Kevin Ehlert : Examiner Compartment: 6
Year of Entry: 2019

Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	38	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
				way out from this stand.	Previous treatments near	this stand were put off
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	105	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	32	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Available	2B: Unknown if access through adjacent landowner(s) is possible	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Need permission to	use pipeline to haul if harveste	ed.				
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	27	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
	Comments: Only access would because it is unkno Unavailable Comments: Unavailable Comments: Available Comments: Need permission to	obstacle (e.g. upland stand in a lowland area) Comments: Only access would be through pipeline corridor wh because it is unknown if hauling will be allowed on Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Available 2B: Unknown if access through adjacent landowner(s) is possible Comments: Need permission to use pipeline to haul if harvester soils, does not include access issues)	obstacle (e.g. upland stand in a lowland area) Comments: Only access would be through pipeline corridor which has because it is unknown if hauling will be allowed on pipeline. Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Available 2B: Unknown if access through adjacent landowner(s) is possible Comments: Need permission to use pipeline to haul if harvested. Unavailable 2G: Too wet (sensitive soils, does not include access issues)	obstacle (e.g. upland stand in a lowland area) Comments: Only access would be through pipeline corridor which has a large flooded area on the because it is unknown if hauling will be allowed on pipeline. Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Available 2B: Unknown if access through adjacent landowner(s) is possible Comments: Need permission to use pipeline to haul if harvested. Unavailable 2G: Too wet (sensitive soils, does not include access issues)	Comments: Only access would be through pipeline corridor which has a large flooded area on the way out from this stand. I because it is unknown if hauling will be allowed on pipeline. Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2B: Unknown if access through adjacent landowner(s) is possible Comments: Unspecified	Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments: Line 2B: Unknown if access through adjacent landowner(s) is possible Comments: Vispecified Unspecified Soils, does not include access issues)

Report 4 – Site Conditions

Grayling Mgt. Unit
Kevin Ehlert: Examiner

Compartment: 6
Year of Entry: 2019

7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: East Branch Big Cr	reek					
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	158	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
10	Available	2B: Unknown if access through adjacent landowner(s) is possible	8	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
114	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	2I: Survey needed	Unspecified	Unspecified	Unspecified
C	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: 6
Year of Entry 2019



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
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
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

S t	Grayling	Mgt. Unit		Report 7	Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6112 - Lowland Aspen	Poletimber Well	44.5	44	81-110	Fair quality quaking aspen stand, sloping topography towards river to the west. Much of the stand exists on the lowland near the river with lots of wildlife activity. Some open areas exist throughout stand with some scattered red pine, jack pine and fir present. The Middle branch of Big Creek is adjacent to the stand. This creek is a designated "Natural River" these rivers have been given HCVA designation.
4	4130 - Aspen	Sapling Well	10.1	21	Immature	Immature aspen stand. Rolling terrain forms a couple small kettles, slopes to lower ground at South end going down towards river. Aspen density varies throughout.
5	429 - Mixed Upland Conifers	Poletimber Poor	5.9	51	1-50	Low density stand. Contains a lot of open areas with scattered log/pole size limby red pine. Some Xlog red and white pine mixed in on downhill slope to creek Some pockets of small aspen and cherry in open areas. South and East edge of stand begin to slope down to creek picking up more of the lowland conifer species. East Branch Big Creek runs through S.E. corner. Very wet near creek. Planted JP to North and West of stand.
7	6130 - Fir, Aspen, Maple	Poletimber Well	1.8	58	51-80	Mixed lowland stand. Stand in a divers mixture of conifers and deciduous lowland species with super canopy red and white pine. Most of the stand is very wet and inaccessible. Tag alder present in some low spots within stand. Try to expand harvest from stand 40 in where ground is dry enough. OPIC - FMD: Stand is a mixture with areas of A3-A6. Current stand was originally made up of several stands however after observing these areas during field work, some of these areas fall into different stands. Area is quite wet with many different species indicating high water tables throughout the year. Edges of stand, mainly in the northwest may be entered when stand 40 is harvested. Excessively wet areas will be avoided. SCATTERED BIG R W PINE MANY BLOW DOWNS, VERY WET
9	6120 - Lowland Cedar	Poletimber Well	10.9	112	81-110	Dense cedar stand with other swamp conifers mixed throughout. Lot's of wildlife activity, fair amount of browse. Lot's of tip-up trees. Very little cedar regeneration present. Occasional oak are present on hummocks throughout stand. Lot's of DWD and a descent amount of hare activity within stand. Some areas of standing water and extremely high water table. Some springs draining towards creek. Overall, nice cedar stand. East Branch Big Creek runs through SE corner of stand.
10	42120 - Planted Jack Pine	Poletimber Well	320.5	39	51-80	Barely into pole class. Many stems are under 5". Contains some scattered log size RP. Scattered oak clumps, poor quality. Part of KW block. Planted with diamond pattern. Diamond openings contain scattered sapling/shrub pin cherry.
14	42290 - Natural Mixed Pine	Poletimber Medium	49.6	47	51-80	Mixed stand of jack pine and red pine. Stand was part of a salvage cut (36-76) in 1977 which all merchantable Jack Pine and N. Pin Oak > 10"D.B.H. were cut. There are scattered pockets of saw size red pine and larger jack pine that would have been sub merchantable during the previous cut. Areas of leatherleaf indicating high water table and drainages transecting stand in numerous locations. Southern end of stand contains some spruce/fir as it transitions into lowland conifer type. Average BA of 75sqft/acre.

S	Grayling	Mgt. Unit		Report 7	Forested	Stands Compartment: 6 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	4133 - Aspen, Mixed Pine	Poletimber Well	11.4	46	51-80	Aspen stand with a few small patches of planted red pine. Stand transitions to lowland conifer to the west and south. Sweetfern on ground.
16	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	12.5	47	81-110	Planted red pine stand. Plantation seems somewhat patchy with lots of areas of quaking aspen/oak and jack pine mixed in. Plantation stocking is very inconsistent throughout with some small isolated pockets with BA's in the 160-180 range. Stand transitions to adjacent lowland stand to the west where there is more of a balsam fir/black spruce sub canopy along the edges.
17	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	158.1	64	51-80	Mixture of Tamarack and spruce with fir, red pine, white pine and some swamp hardwoods scattered throughout. Some small areas of larger jack pine with swampy/boggy understory consisting of sphagnum moss and leatherleaf. Low, wet ground. Inaccessible for harvest.
20	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	8.6	16	Immature	J3 stand with M3 (cherry) and A3 throughout. Quite a mixed stand overall with planted (seeded)JP doing well, 10-15 ft in height. Aspen and cherry range from 10-20' in height. Overall, plantation and jack pine are doing well. Stand was cut in 2000(72-053-99), furrow seeded in 10/02 under C72-435 (should have been W72-435).
23	42120 - Planted Jack Pine	Sapling Well	966.7	22	Immature	J3 stand, 10-15' in height on average. Contains a few scattered oak and red pine that were left during previous harvest Stand is growing well overall and is fully stocked, experiencing minimal mortality. Planted for KW in June 1996, FTP # W72-371.
24	6122 - Black Spruce	Poletimber Well	33.1	105	51-80	Mixture of swamp conifers. Lots of wildlife, a great deal of DWD. Some hummocks throughout stand supporting more upland species such as red pine and a few oak, however stand is quite wet in the understory with many indicators showing that water remains throughout stand during the entire course of the year. Some super canopy red and white pine scattered near edges of stand.
25	6130 - Fir, Aspen, Maple	Poletimber Well	29.9	58	51-80	Mixed lowland stand. Stand in a divers mixture of conifers and deciduous lowland species with super canopy red and white pine. Most of the stand is very wet and inaccessible. Tag alder present in some low spots within stand. Try to expand harvest from stand 40 in where ground is dry enough. OPIC - FMD: Stand is a mixture with areas of A3-A6. Current stand was originally made up of several stands however after observing these areas during field work, some of these areas fall into different stands. Area is quite wet with many different species indicating high water tables throughout the year. Edges of stand, mainly in the northwest may be entered when stand 40 is harvested. Excessively wet areas will be avoided. SCATTERED BIG R W PINE MANY BLOW DOWNS, VERY WET
26	4134 - Aspen, Spruce/Fir	Poletimber Well	38.3	51	81-110	Pole size aspen stand. Most of the aspen appears to be in good health. Some does have cankers on trunks. Variable stocking throughout stand with some denser areas and some more open pockets. Several low drainages containing more of the lowland conifer and red maple mix run through the stand. Access would have to be off of the pipeline on the west end of the stand. This will be very difficult due to low ground in pipeline and in the west end of the stand.

s t	Grayling	Mgt. Unit		Report 7	– Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	6130 - Fir, Aspen, Maple	Poletimber Medium	105.4	75	51-80	Very wet low ground makes stand inoperable. Stand is a mixture, as is much of this southeast area of compartment 6. Stand contains lowland conifer, red maple and aspen. Lower areas within the stand have open water, cattails or tag alder.
28	6139 - Mixed Lowland Forest	Poletimber Medium	23.0	77	51-80	Stand is very wet with springs coming out of the hillside. Stand is a mixture of scattered aspen clones, red maple, and lowland conifer.
29	4136 - Aspen, Mixed Conifer	Poletimber Well	84.7	46	111-140	Aspen stand with mixed conifer component. Contains a component of super canopy RP and WP through center of stand. Also contains balsam fir in Sub-mid-story. Aspen is good quality, could hold 10ys or cut now.
30	42260 - Natural Pine, Mixed Deciduous	Poletimber Medium	29.9	47	81-110	Mostly pole size jack pine, fairly limby. Very similar to stand 23 in adjacent compartment, they were cut and seeded together. Previous inventory said adjacent landowner denied access.
31	4199 - Other Mixed Upland Deciduous	Sawtimber Well	8.4	103	81-110	Mix of good and lower quality oak with maple and scattered pines. Some log size aspen and some pole size aspen which regenerated in areas that were part of the 1970 cut. Difficult to access area. Would have to cross private land. Previous inventory showed that access was denied. ADJACENT AREA CUT IN 1970. Looks like the oak will hold, possibly treat with adjacent Stand 30 is treated.
35	4132 - Aspen, Jack Pine	Poletimber Well	8.9	53	81-110	Fair quality aspen stand. Scattered log/pole red and jack pine. Also, a few super canopy red pine. Stand begins to thin at edges with denser understory as it transitions to adjacent lowland conifer stand.
40	4133 - Aspen, Mixed Pine	Poletimber Well	14.6	52	81-110	Mixed stand of aspen, white pine and red maple. Mature jack pine mixed in with white pine. Some black spruce appears more in the transition to adjacent lowland stands. Low spots within stand contain seasonal water on surface. Highest white pine component is in the NE corner of the stand. Understory contains Contains super canopy red and white pine.
114	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	5.4	87	111-140	Stand is part of the transition between lowland stand to S and MC stand to N. Water table near surface in most of the stand. Dense understory of Balsam Fir and Black spruce. Noticed defoliation of Balsam and some spruce.
127	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	26.7	63	51-80	Lots of red maple and aspen with scattered islands of large conifers and balsam fir in understory. Difficult to access because of wet soils and private property. A lot of wildlife travels through stand to access creak in lowland to the North.

Compartment: 6
Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
1	622 - Lowland Shrub	6.7	No	The Middle branch of Big Creek is located within the stand. Beaver activity is present in the creek. This creek is a designated "Natural River" these rivers have been given HCVA designation. Tag alder, salix, spiraea, over marsh grass.
6	623 - Emergent Wetland	18.2	No	Non forested low ground pockets within large KW block. These areas contain scattered sapling size pin oak, pin cherry, and jack pine. They appear to be seasonally flooded in the lowest areas.
12	330 - Low-Density Trees	7.2	No	Open area, lots of pin cherry.
13	6224 - Treed Bog	6.2	No	Creek/opening near Farrington Rd. Thick with alder along with some spruce, fir in transition zone to adjacent stands.
33	310 - Herbaceous Openland	16.2	No	Pipline running the length of this compartment from north to south. Some knapweed throughout the length of stand. 2-track runs through stand and can provide access to all stands in the south of compartment. PIPELINE. ROAD RUNS THROUGH EASEMENT FROM STAND 25 NORTH. Low ground with flowing springs from stand 40 South to private property would make access between stand 40 and PVT property very difficult. Pipeline rd is drivable again after it crosses back onto state land South of East Branch Big Creek adjacent to stand 29.
34	622 - Lowland Shrub	19.6	No	lowland stand, open with planted jack pine to the south and west. Stream runs through stand and has tag alder along it. Contains a few scattered Black Spruce and balsam, but mostly tag alder.
46	320 - Upland Shrub	0.9	No	vacant well site filling in with grass/shrubs
47	622 - Lowland Shrub	12.0	No	Lowland shrub, swamp grasses along East Branch Big Creek.