

GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 227 ENTRY YEAR: 2012

GIS Compartment Acreage: 1513 County: Crawford

Revision Date: 5/28/2010

Stand Examiner: Lucas Merrick

Legal Description: Beaver Creek Township, T25N 03W, Sections: 19, 20, 21, 29, 30, 31, 32, 33, 34, 35,

and 36

Management Goals: To maintain forest health, productivity, sustainability, and diversity throughout the compartment while providing for multiple use and visual management.

Soils and Topography: Flat to gently rolling terrain. Soils vary with areas of Grayling sands, Graycalm Sand and areas of Tawas.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State ownership is fractionalized, parcels are scattered over 11 square mile sections. Private parcels vary from large tracts to small parcels and from seasonal to year round residences. Some parcels of state-owned land are only accessible by crossing private ownership. Note, the old Beaver Creek Township Transfer station was located in section 20. This former transfer site is dominated by open gravel and covered with knapweed and is in need of some type of restoration (see stand 15).

Unique, Natural Features: The state threatened rough fescue (Festuca scabrella), prairie or pale agoseris (Agosersis gluaca), Hill's thistle (Cirsiunm hillii), and Alleghany plum (Prunus alleghaniensis var. davisii) are species of special concern with potential to appear in the compartment. These plant species are most often found in grassy openings and open areas of jack pine. There is potential for several animals of concern in this compartment: goshawk, Massasauga rattle snake, secretive locust, dusted skipper, grizzled skipper, and the red-legged spittle bug. Currently there are no known Ecological Reference Areas in this compartment.

Archeological, Historical, and Cultural Features: The North Higgins Lake CCC Camp and multiple home stead foundations are located in the compartment. A wetland mitigation pond is found section 34 (see the MDOT report located in the compartment file for more details).

Special Management Designations or Considerations: Beaver Creek is a designated "Natural River". Streams with this designation are considered High Conservation Value Areas (HCVA).

Watershed and Fisheries Considerations: Beaver Creek flows through sections 29, 30, 34, 35, and 36.

Wildlife Habitat Considerations: This compartment contains multiple maintained wildlife openings. Expand aspen types as much as possible.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial and ice-contact outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Michigan formation, mined for gypsum in other locations in the State. The nearest

gravel pit is one and one half miles to the south, and gravel potential is thought to be good in the upland areas. There are some oil and gas leases in the Compartment.

Vehicle Access: All state parcels are accessible from county roads except for the acreage in section 20 west of I-75 and land located in sections 29 and 30.

Survey Needs: None at this time.

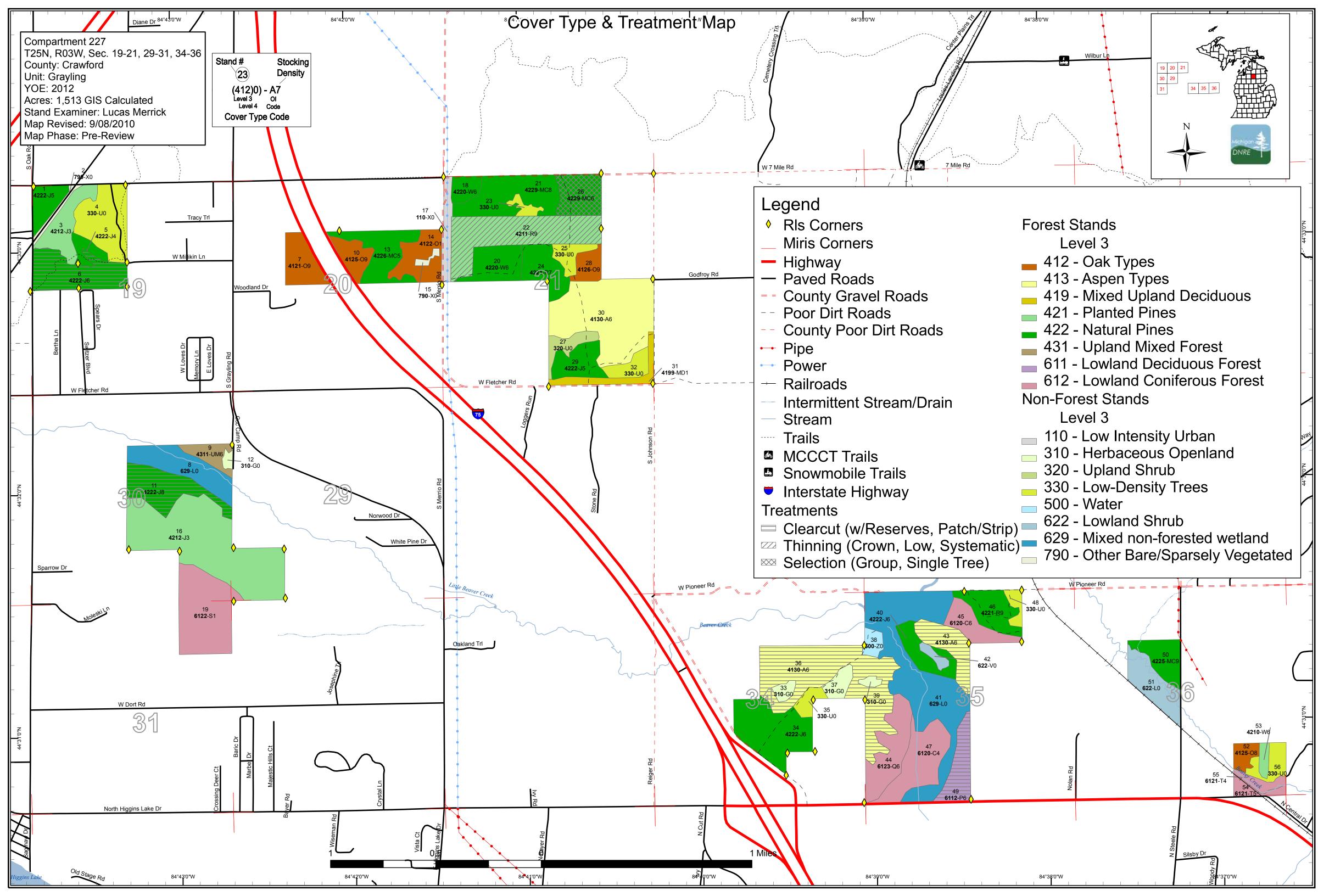
Recreational Facilities and Opportunities: A portion of The Beaver Creek MCCCT Trail is located in section 19. Hunting, fishing, and dispersed recreation occur throughout the area.

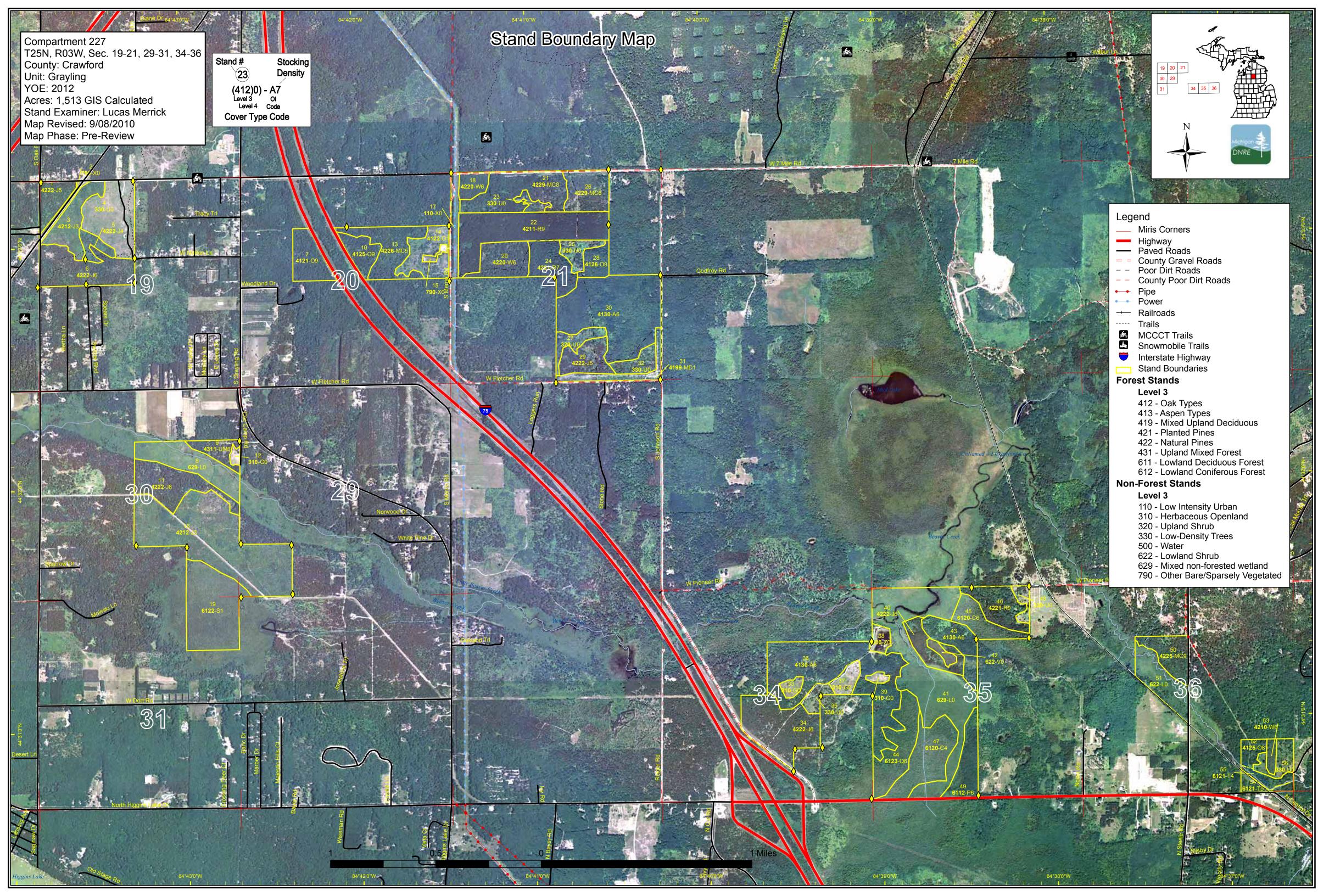
Fire Protection: Sufficient access exists for fire protection. Potential for wildfires are high in this compartment with the large amount of private interface. The Roscommon Field Office provides initial response for fire protection in this area.

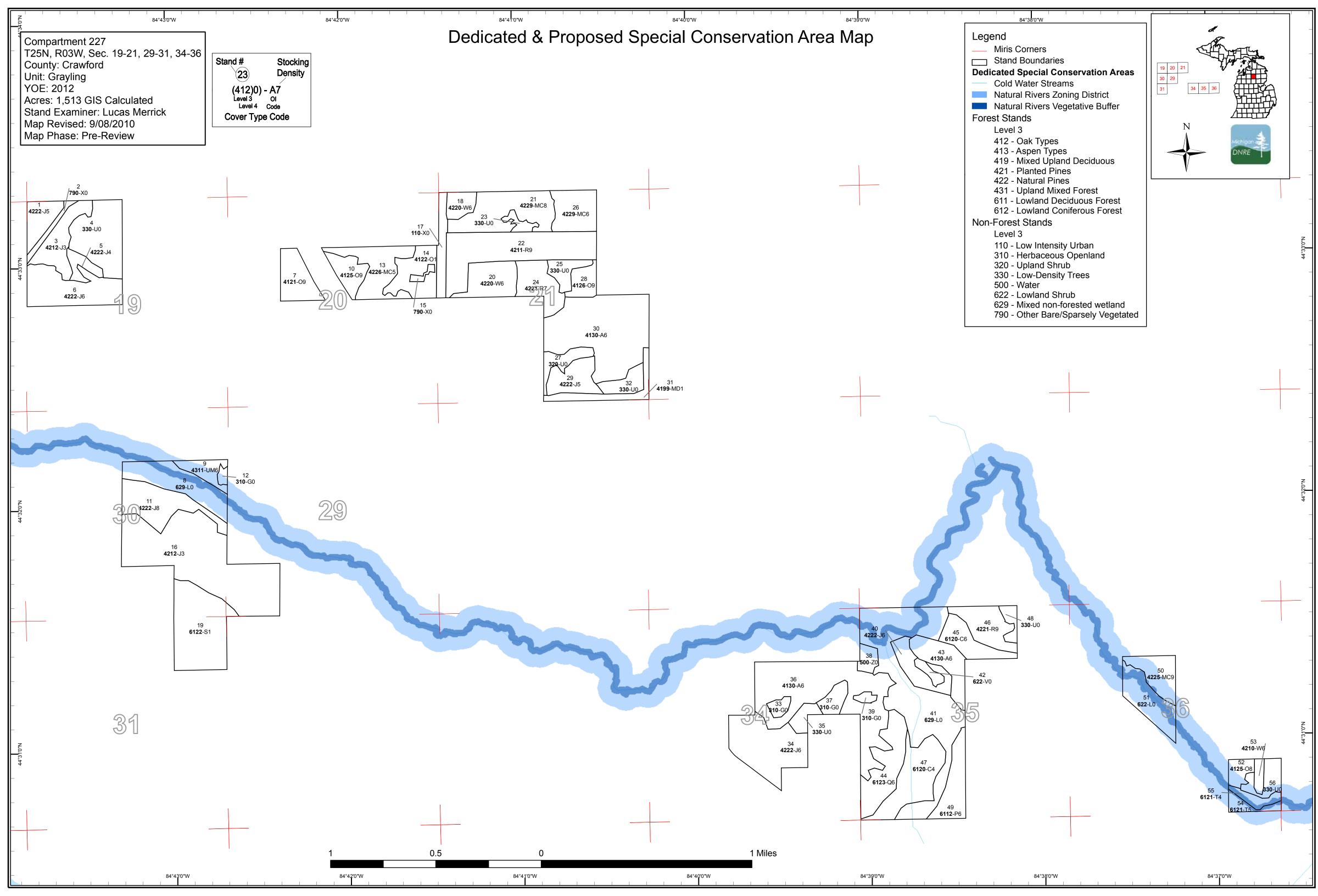
Additional Compartment Information:

LOTS Compartment Acreage: 1,504+/- acres

- > The following reports are available:
 - **♦** Cover Type by Age Class
 - **♦** Proposed Treatment Summaries
 - **♦** Dedicated Conservation Area Details
 - **♦** Listing of Forested Stands
 - **♦** Listing of Non-Forested Stands
 - **♦** Proposed Treatments No Limiting Factors
 - **♦** Proposed Treatments With Limiting Factors
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - ♦ Base feature information, stand numbers, cover types, recreation trails and facilities
 - **♦** Proposed treatments
 - **♦** Proposed road access system
 - **♦** Special Conservation areas







Data updated before 2:00 PM

Compartment 227 Year of Entry 2012



Age Class

							Age (
	Note Note Note Note Note Note Note Note	A SE	, o, /	02.0	, c. , ,		D. C.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	8.6.	,p. ¹ ,°	\$ \ &	85.35	00.70	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	0 X X X X X X X X X X X X X X X X X X X	KS / LO	; /
Aspen	0	0	0	0	96	25	100	0	0	0	0	0	0	0	0	221	
Bare/Sparsely Vegetated	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Bog	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Cedar	0	0	0	0	0	0	0	0	0	0	42	20	0	0	0	62	
Herbaceous Openland	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
Jack Pine	0	0	153	0	21	9	72	0	0	97	0	0	0	0	0	352	
Low-Density Trees	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	24	
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	37	
Lowland Shrub	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180	
Lowland Spruce/Fir	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	63	
Mixed Upland Deciduous	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14	
Natural Mixed Pines	0	0	0	0	0	26	0	80	0	21	0	0	0	0	0	127	
Oak	0	26	0	0	0	0	0	0	8	38	12	0	0	0	0	84	
Red Pine	0	0	0	0	0	0	0	73	0	25	26	0	0	0	0	123	
Tamarack	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	14	
Upland Mixed Forest	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12	
Upland Shrub	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
White Pine	0	0	0	0	36	5	0	0	0	0	0	0	0	0	0	41	
Total	340	26	167	0	153	64	172	252	16	180	123	20	0	0	0	1513	



Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Grayling Mgt. Unit Year of Entry 2012

Compartment 227
Total Compartment Acres: 1513

Acres by Treatment Type

Commercial Harvest - 329 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Pesticide - 0

Cover Type by Harvest Method

		/ (15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 10 00 00 00 00 00 00 00 00 00 00 00 0	100 100 100 100 100 100 100 100 100 100	No N	Old Old		Se de la companya de			
Aspen		125	0	0	0	0	0	125				
Jack Pine		81	0	0	0	0	0	81				
Lowland Aspen/E	Balsam Poplar	24	0	0	0	0	0	24				
Natural Mixed Pir	nes	0	26	0	0	0	0	26				
Red Pine		0	0	0	0	73	0	73				
	Total	230	26	0	0	73	0	329				

Compartment: 227 Grayling Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2012 s Data updated before 2:00 PM t **Treatment** Acres Stage1 Size Stand **Treatment Treatment Cover Type Approval** n CoverType Density Method Objective Name Status Type d Age 6 72227006-Cut 44.2 42220 - Natural High Density Pole 85 Harvest Clearcut with Planted Mixed Pine Cmpt. Review Reserves Jack Pine Proposal Prescription Final Harvest with Reserves. Buffer the ORV Trail and manage for visual along Oak Rd. Leave red pine and white pine (mostly found in pockets) plus mark a few healthy oak to leave these trees will provide a natural seed source. Protect natural pine regen under 4" inches, trench Specs: and plant around natural regeneration and residual. Other Comments: <u>Next</u> Steps: Medium Density 72227011-Cut 36.8 42220 - Natural 85 Harvest Clearcut with Natural Jack Pine, Cmpt. Review 11 Jack Pine Loa Reserves Mixed Deciduous Proposal Prescription Leave around 5% of stand as retention islands. Mark a handful of oak or red pine to leave throughout the sale area. Specs: Access to state property has been granted by pvt land owners. See comp file. <u>Other</u> Comments: <u>Next</u> Steps: 72227022-Cut 72.6 42110 - Planted Crown Thinning Planted Red Pine Cmpt. Review 22 High Density Log 63 Harvest Red Pine Proposal Prescription Remove appox 1/3 of BA. Target suppressed and poor formed trees. Remove pockets of timber where bark beetle is present. Specs: This thinning will be the 2nd entry. Trees will be marked individually for removal. Other_ Comments: <u>Next</u> Steps: Natural Mixed Pine Cmpt. Review

42290 - Natural 72227026-Cut High Density Pole 26 25.8 Harvest **Group Selection** Mixed Pine

Prescription Remove scotch pine, jack pine, and aspen (do we want to cut the European popple?). Leave red pine, white pine, oak less than 6" diameter. Harvest all other species 2" and up.

Specs:

Other Foundation found along road in a harvest from Last YOE.

Comments:

A poor stocked stand of natural mixed pine is acceptable. If natural regen fails, plant to mixed pine

Next Steps:

36

72227036-Cut 99.9 4130 - Aspen High Density Pole Harvest Clearcut Aspen Cmpt. Review Proposal

<u>Prescription</u> Final harvest -no reserves/retention. Remove all conifer, including the pockets of jack pine found along the eastern edge of stand. Cut all trees 2" and up. Including the few acres of cherry brush created from grazing. Southern portion of stand transistions into a wet area with red maple Specs: and ash present. Include as much of this area as possible.

This stand was created from a fire around 1960.

Comments:

Next Steps:

Other

Proposal

Grayling Mgt. Unit Data updated before 2:00 PM Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 227 Year of Entry 2012

t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
49	72227049-Cut	24.3	6112 - Lowland Aspen	High Density Pole	68	Harvest	Clearcut	Aspen, Mixed Conifer	Cmpt. Review Proposal

Prescription Final harvest - No reserves/retention. Harvest all trees 2" and up. Specs:

<u>Other</u>

s

Old logging road runs through stand, it begins in the SE corner (possibly on pvt) . Wildlife would like to see this harvested commercially if

Comments: possible. Management objective is a moderate to fully stocked aspen stand.

<u>Next</u> Steps:

Total Treatment

303.7 Acreage Proposed:

s t	Grayling Mgt. Unit Data updated before 2:00 PM					ents Prescribeng Factor	Compartment: 227 Year of Entry 2012	Michigan DNRE	
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
43	72227043-Cut	25.1	4130 - Aspen	High Density Pole	45	Harvest	Clearcut	Aspen	Cmpt. Review Proposal

<u>Prescription</u> Final Harvest - No reserves/retention. Remove all trees 2" and up including all conifer. <u>Specs:</u>

<u>Other</u>

Management objective is a moderate to fully stocked stand with the majority of stems being aspen.

Comment:

Next Steps:

<u>Limiting Factor and No</u>
<u>Treatment Reason</u>

2F: Too wet
Access from

<u>Treatment Reason</u> Access from the north is currently being explored

Total Treatment

Acreage Proposed: 25.1

Data updated before 2:00 PM

Out of YOE -- Treatments **Prescribed with No Limiting Factor**

Year of Entry: 2012

Treatment	Acres	Stage1	Size	Stand	Treatment	Treatment	Cover Type	Approval
Name		CoverType	Density	Age	Type	Method	Objective	Status

<u>Prescription</u> Specs:

<u>Other</u> Comments:

<u>Next</u> Steps:

Total Treatment

Acreage Proposed:

0

S t	Grayling	Mgt. Unit			orested Stated before		Compartment: 227 Year of Entry: 2012	higan \$
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	WE 1
1	42220 - Natural Jack Pine	Medium Density Pole	16.1	89		However, there are dec There are good amou below the browse line The size and location	ining, there are several dead pocke ent sapling recruits throughout the s unts of oak in the 10-20' class. The looks as through it will be staying the on might make this a good stand to course. Areas w/ beech regeneration	stand. oak nere. let
3	42120 - Planted Jack Pine	High Density Sapling	25.5	16		present with scattered in the north. There is a	ed and seeded in 94. Primarily jack cherry and oak. The majority of asp clone of super canopy aspen. Lool left along the road during past treat	en is ks like
5	42220 - Natural Jack Pine	Low Density Pole	8.7	40		down (previous inve	nd. Open with a decent amount of be ntory also notes blow down). There clones with scattered cherry and oak	e is
6	42220 - Natural Jack Pine	High Density Pole	44.2	85		some aspen. ORV trail	age & quality). Pockets of red pine runs through the stand. Areas whe looks good. 15-20'. Old rr grade.	
7	4121 - Oak, Aspen	High Density Log	22.8	84			otes hybrid saw logs and aspen clonere is a conifer component in the sout portion.	
9	4311 - Pine, Aspen Mix	High Density Pole	11.9	60	51-80		, spruce, and fir also present. Old to the common of the stand.	rail
10	4125 - Black, N. Pin Oak	High Density Log	14.9	84	51-80	in underneath. Go	hite pine and red maple are starting ood amounts of down woody debris. opography in stand.	
11	42220 - Natural Jack Pine	Medium Density Log	36.8	85		Pushed a couple deer pine present. White pin	nture. Oak and aspen are poor qual through the stand. A couple sticks on the in the understory. Some advance cruiting into the sub canopy.	of red
13	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	33.1	65	51-80	stand starts in a valley quality). The nw seem BA in pockets. Lots of an overstory removal to	ne removed along eastern portions? 7. Topo throughout. Variable (age, s to have the biggest and best quali areas w/ poor quality. Records incook place in 93' oak and white pine left, all aspen jp cut.	size, ity wp licate
14	4122 - Oak, Pine	Low Density Sapling	25.8	8			left from harvest is as tall as 30'. T to jack in the future. Browse is evic	

42121 - Planted Jack

Pine, Mixed Deciduous

42200 - Natural White

Pine

16

18

High Density

Sapling

High Density

Pole

127.0

10.1

16

34

81-110

The stand was trenched and seeded in 94. Majority of the timber

is around 10'. A couple aspen clones. Open areas can also be found. A couple stems of red and white pine also present.

Thick white pine and aspen approximately 30-40' tall. White oak and red maple mixed in as well. The pine is in pretty good

condition.

5 - Forested Stands Compartment: 227 Grayling Mgt. Unit S Year of Entry: 2012 Data updated before 2:00 PM



t				Data upda	ted before 2	2:00 PM Year of Entry: 2012
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	6122 - Black Spruce	Low Density Sapling	63.3	69		Stand swapped from Non-Forested to Forested. Certainly not a L-type. Canopy cover is right at the 50% range. Canopy height is anywhere from 10-35'. Scattered tamarack. Areas of open water. The stand has an open feeling to it, navigation is fairly easy as long as wet feet is not an issue.
20	42200 - Natural White Pine	High Density Pole	25.8	30	51-80	scattered sawlog size seed trees among regen 15-30' tall. An oak here and there. Deer activity.
21	42290 - Natural Mixed Pine	Medium Density Log	47.2	65	81-110	Jack pine and scotch pine removed from a thin planted strip along 7-mile road(mid90's). A variable mixed pine stand. Areas of wolfy white and red pine with pole and sapling classes. The big trees in the north have open grown qualities. A few areas have a nice thick white pine understory. A couple nice oak salings and a sawlog here and there. Heavier to red pine in the middle. A southern portion of stand has a pocket of decent quality red pine. This portion of the stand was thinned last YOE. The western edge has nice quality sawlog wp, the understory in this portion is either a carpet of white pine or dog hair red maple.
22	42110 - Planted Red Pine	High Density Log	72.6	63	171-200	Some white pine and mixed hdwds present. Third row thinned 92-93. Stand is lower quality. Some areas all pulp wood. Areas of porcupine damage.
24	42210 - Natural Red Pine	Low Density Log	24.6	87	1-50	Looks like a seed-tree? No conifer in the understory, almost entirely red maple stump sprouts w/ browse. There is some oak found along western edge.
26	42290 - Natural Mixed Pine	High Density Pole	25.8	40	51-80	There was a strip of jack pine and scotch pine along 7-mile Rd. The strip was the seed source for the scotch pine in this stand. Turns into an oak type along the eastern edge. European popple (white popple) also present in the stand. 2 age classes present.
28	4126 - White, Black, N. Pin Oak	High Density Log	11.8	92	51-80	New stand added. Sawlog size oak and red pine. Browse on all oak under 5'. White pine and red pine are starting to seed in. The stand contains several nice looking den and snag trees.
29	42220 - Natural Jack Pine	Medium Density Pole	21.1	35	81-110	Pockets of jack pine with scattered red pine, mixed in with pockets of upland brush. Heavy browse. Poor quality site. Some white pine present in the stand.
30	4130 - Aspen	High Density Pole	95.7	39	81-110	Some oak and birch mixed throughout. Looks like the conifer was left when this stand was harvested. The aspen and red maple on the eastern edge is stunted under sawlog size pine (heavier to red maple in the east more oak present too).
31	4199 - Other Mixed Upland Deciduous	Low Density Sapling	14.3	12		Mixed regeneration with pockets of almost pole size advanced regen protected during harvest.
34	42220 - Natural Jack Pine	High Density Pole	53.6	51	81-110	Fire origin jack pine with scattered sawlog size red pine. Old plow lines are still visible as well as fire scars still visible on some of the relic pine. A small amount of aspen present. Very little for understory shrubs, primarily hawthorn and cherry. Most of jack pine is 30-40' tall.

S t	Grayli	ing Mgt. Unit		5 – Fo Data upda	oomparamona 221	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	4130 - Aspen	High Density Pole	99.9	51	81-110	Much of the open and upland-brush areas found were old pastures or farm fields. This entire sec ownership was burned over around 1960. The old the stand had previously been dominated by jac



n d	Cover Type	Density	Acres	Age	Range	Comments:
36	4130 - Aspen	High Density Pole	99.9	51	81-110	Much of the open and upland-brush areas found in this stand were old pastures or farm fields. This entire section of State ownership was burned over around 1960. The old photos show the stand had previously been dominated by jack pine with clones of aspen throughout. The maintained openings encompassed by this stand were open areas on the 52's. The size and quality is variable. The oak and jack pine are found in the NW portions (red pine, white pine, and fir also present). There are a few pockets of oak and mixed pine another 2 acre area of pulp sized black cherry in the SE (old fenced in pasture). The understory is variable also. Areas of oak (areas of 10'+) and maple, some just cherry brush, other areas have mixed confier.
40	42220 - Natural Jack Pine	High Density Pole	18.7	50	1-50	Pole size jack pine, with a trace of white pine. Thick bracken ground cover.
43	4130 - Aspen	High Density Pole	25.1	45	81-110	A ridge of aspen with scattered conifer. Red pine present in the stand.
44	6123 - Lowland Fir	High Density Pole	36.7	91	81-110	Birch and aspen also present. The stand is made up of clumps of cedar or mixed hdwd with younger fir covering the entire stand. The ash and birch are declining rapidly. Open water. Areas with more water often create shrub dominated pockets (alder), these pockets are present throughout.
45	6120 - Lowland Cedar	High Density Pole	20.4	109		A wet stand, areas of open water. Most of the miscellaneous hdwds are in decline. Pockets of alder.
46	42210 - Natural Red Pine	High Density Log	25.6	90	141-170	Traces of hemlock throughout the stand. A few wet areas. This is a very nice looking stand, some 10 stick trees. Quality is variable in wet areas and on the eastern edge. The fir understory is variable but a lot of it is 20-30' tall. The trail roads are used by locals for walking and snowmobiles. This stand had been prescribed for a final harvest in 2004. Due to diversity and uniqueness of stand this harvest was abandoned. This stand is to be maintained for diversity. New roads are not to be created within the stand.
47	6120 - Lowland Cedar	Low Density Pole	41.9	90		Dead and dying cedar and white pine. Understory is most likely similar to the stand adjacent to the north.
49	6112 - Lowland Aspen	High Density Pole	24.3	68	51-80	Wet. There is an old logging road from the 60's that can still be walked. Some areas of sparse aspen. The aspen overtops an understory sea of fir ranging from 6-30' tall. Other mixed swamp conifer & hdwd present in the stand.
50	42250 - Pine, Oak	High Density Log	20.8	82	81-110	The stand slopes down towards the drainage. On top it is oak, jack pine, red pine. The lower you go the thicker the fir understory. The west side starts to get wet- this is where the white pine and red maple start to dominate. NE corner has had a fire event.
52	4125 - Black, N. Pin Oak	Medium Density Log	8.4	76	51-80	The aspen and fir foun in south and west of pipeline. Excellent amount of dead/down/woody/debris.

S t	Graylin	g Mgt. Unit			orested Sta ated before 2	Nichican
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	42100 - Planted White Pine	High Density Pole	4.6	49	141-170	Majority of white pine is poor in form. Some cherry and oak clumps present.
54	6121 - Tamarack	Medium Density Pole	7.1	90	51-80	Higher and drier closer to the road. Black ash, red maple, and jack pine also present.
55	6121 - Tamarack	Low Density Pole	7.2	76	1-50	Elm, oak, cedar, and red maple also present. Most of timber is along the edges. There is an old drive in southern portion of stand where a bridge or culvert must have been pulled.

6 - Nonforested Stands Data updated before 2:00 PM



Compartment: 227 Year of Entry: 2012

Stand	Cover Type	Acres	Gen Cmts:
2	790 - Other Bare/Sparsely Vegetate	5.1	
4	3302 - Low Density Conifer Trees	44.3	Planted jack pine with scattered cherry, oak, aspen and shrubs. The jack averages 4' in height, it is on the edge of being considered a forested stand. The stand looks like it is regenerating fine.
8	629 - Mixed non-forested wetland	37.3	Browse on willow shrubs. Pockets of cattails. A stream flows through the stand. Recent deer activities. Pockets of standing dead timber.
12	3102 - Grass	2.4	Snow depth limited ground cover calls. Open with an island of aspen and a lone jack pine or two.
15	790 - Other Bare/Sparsely Vegetate	2.3	knappweed, sedge, blackberry, and grasses evident through the snow. Aspen clones are growing out of the berms. Former transfer station, sit needs to be restored.
17	11 - Low Intensity Urban	13.4	Road and power line ROW.
23	3303 - Mixed Low Density Trees	4.9	This stand is starting to fill in. Soon it will be a white pine stand.
25	3303 - Mixed Low Density Trees	10.8	Starting to fill in with recruits from adjacent stands. Timber is in clumps, brush is present throughout.
27	3204 - Mast Producing Shrub	11.1	Stand swapped from Forested to Non-Forested. Cherry and other brush with a minor conifer component.
32	3302 - Low Density Conifer Trees	11.4	Stand swapped from Forested to Non-Forested. Cherry brush with scattered conifer. Blackberry and sweet fern throughout. Red pine and oak in stand also.
33	3102 - Grass	4.7	Knappweed present. 2 sawlog size red pine in stand. Pushed 2 deer during data collection. Maintained by wildlife.
35	3303 - Mixed Low Density Trees	7.6	This stand is starting to fill in with scattered cherry brush and jack pine. Red pine present also.
37	3102 - Grass	9.1	Knappweed present. Clumps of shrubs. Maintained by wildlife
38	50 - Water	6.9	Areas of beach included within the stand boundary (reason for ground cover call of grass). Grass, sedge, sweetfern, and some cattails present. This is a wetland mitigation pond built by M-DOT in 1995 (I-75BL). Originally was a man made field? Photos from the 50's and 60's show several structures on the northern edge of the stand. Foundations are still present. This parcel was aquired through a Government exchange in 49'.
39	3102 - Grass	2.7	Another small maintained opening.

Grayling Mgt. Unit

3303 - Mixed Low Density Trees

56

6 - Nonforested Stands Data updated before 2:00 PM

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Slowly filling in with conifer and cherry. A few large oaks present.

Stand	Cover Type	Acres	Gen Cmts:
41	629 - Mixed non-forested wetland	115.2	Tag alder swamp with willow and cattails. Wet.
42	6225 - Bog	4.5	Blueberry bog. With scattered conifer.
48	3303 - Mixed Low Density Trees	6.0	Grassy opening filling in with conifer.
51	6229 - Mixed lowland shrub	27.6	

12.5

Grayling Mgt. Unit Compartment: 227

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7 - 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.

Data updated before 2:00 PM

Stand	SCA Type	SCA Name	Acres	Comments

Compartment: 227 Year of Entry 2012



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservatio Area	п Туре	Data updated before 2:00 PM 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 conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.			
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.			