

# GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 293 ENTRY YEAR: 2014

GIS Compartment Acreage: 4694 County: Crawford

**Revision Date:** August 28, 2012

**Stand Examiners:** Patrick Potter & Thomas Barnes (section 17, 18, and 19)

**Legal Description:** T25N R01W Sections 06, 07, 18

T25N R02W Sections 13, 14, 22, 23, 27

T26N R01W Sections 17, 18, 19, 20, 29, 31, 32

South Branch Township

**Management Goals:** To maintain riparian & forest health, productivity, sustainability, species diversification, and structural diversity throughout the Mason Tract Special Management Area while meeting guidelines outlined in the management plan.

**Soils and Topography:** Upland soils are predominantly Graycalm-Grayling sands and Klacking-Graycalm complexes on shallowly rolling to steep terrain. The lower ground surrounding wetlands and stream corridors have poorly-drained complexes such as AuSable Bowstring muck and Wakeley-Allendale. The lowest ground is characterized by saturated organic soils in the Tawas-Lupton mucks series.

Ownership Patterns, Development, and Land Use in and Around the Compartment: There is a mix of state, federal and private land interface along the compartment boundary, as well private inholdings. Most private parcels are located on the edge and have legal ingress/egress except for several small tracts located in the NWNE Section 32 T26N R01W. Adjacent land use includes a mix of year-round and seasonal residences. Several parcels along the AuSable River were acquired from Consumers Power Company.

**Unique, Natural Features:** The Mason Tract is a designated Natural Area, with a dedicated management plan. The South Branch of the AuSable and Thayer Creek are part of a designated Natural River system. There is the potential for rare wetland plants and reptiles to occur along the riparian corridors. There is also the potential for unique dry prairie plants and insects to occur in upland grassy openings and pine barrens.

**Archeological, Historical, and Cultural:** There is a deep history of human use along the AuSable River corridor, as well as turn-of-the century homesteading on the uplands.

**Special Management Designations or Considerations:** The AuSable River is a High Conservation Value Area (HCVA). In addition, the Mason Tract is a designated Natural Area with management being guided by its own plan.

**Watershed and Fisheries Considerations:** The South Branch of the AuSable is a quality trout stream and designated natural river. Theyer Creek and several smaller drainages within the compartment empty into the AuSable.

**Wildlife Habitat Considerations:** The compartment's wide range of cover types – ranging from mixed pine, aspen and oak, to conifer swamp, lowland brush and super-canopy stature pine -- provide habitat for a variety of game and non-game wildlife species.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift are the Michigan Formation and the Marshall Sandstone. These formations are or have been quarried for gypsum and building stone elsewhere in the State. Gravel pits are located around the tract and potential appears to be good on the upland areas. This area has been sparsely drilled. A few oil and gas leases are located in this large compartment. The nearest production is Hickeys Creek Field, located one mile to the southeast, producing oil from the Richfield and gas from the Prairie du Chien.

Vehicle Access: The compartment is well covered by county roads; The Mason Tract is accessed off county maintained roads of M-72 and South Branch Road. From December 1 through April 1, all motorized vehicles, including snowmobiles, shall be prohibited except on county administered roads, with management access being exempt. At other times, motorized vehicles shall be confined to the established road system. Currently multiple state and USFS trail roads provide access throughout the retreat. A road access plan has been proposed, identifying roads that are to remain open for motorized access for April through November. The remainder of the roads and trails may be used for management access purposes, but shall remain blocked once management activities cease. Blocking may consist of construction of a berm along with seeding of the road in an attempt to stabilize and obliterate it. Maintaining closure on these trail roads will require constant monitoring. Truck and ORV traffic have repeatedly breached closures in the past.

Two recorded easements exist within the Mason Tract. One is to allow private access along a trail road located between sections 30 and 31 of T26N R1W. The other is an easement recorded along Oxbow Trail that allows for public access across private land to reach former consumer's power land located in sections 17 and 18 of T26N R1W.

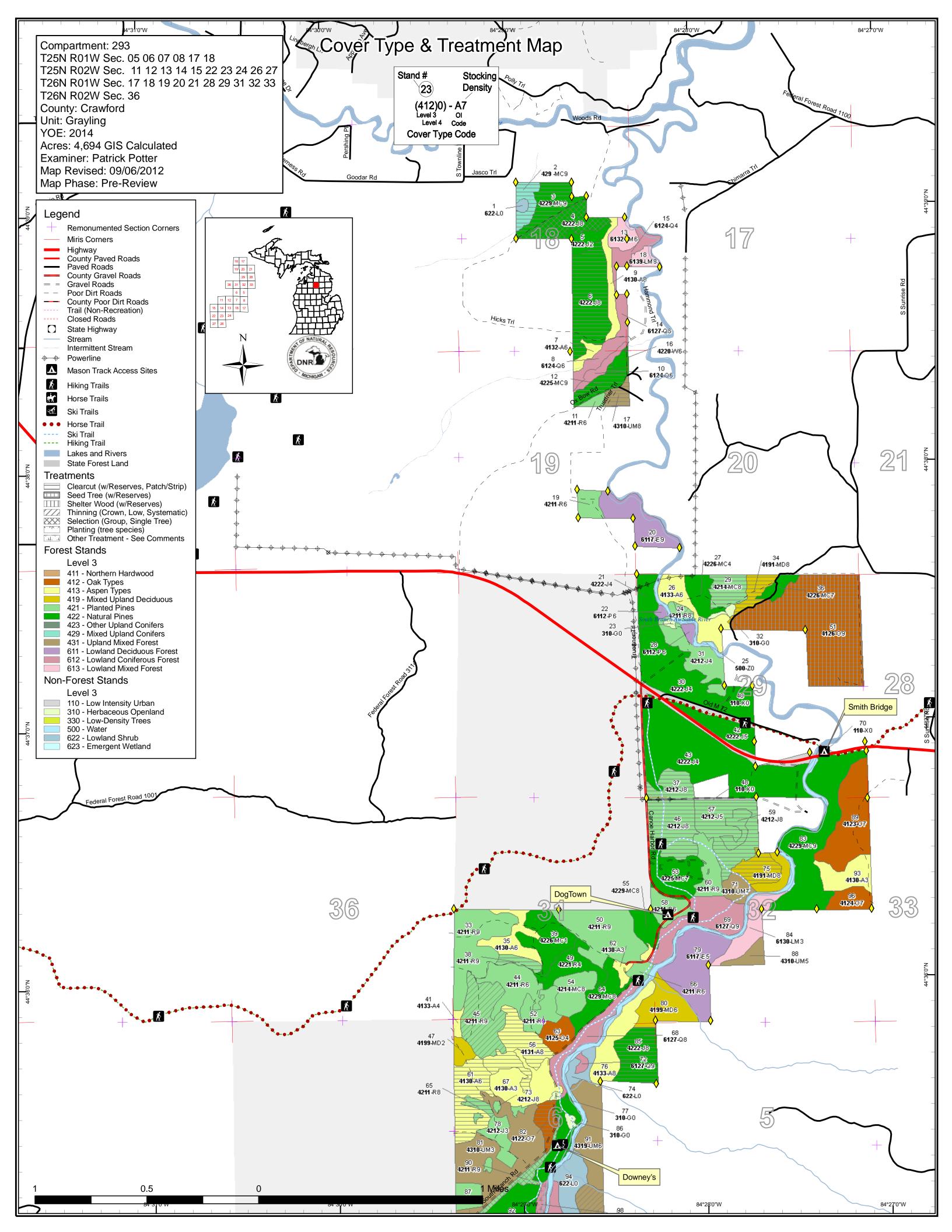
Multiple water access points exist within the Mason Retreat. The management plan outlines the location of each of these sites in detail. An additional site is being contemplated for the former consumer's power company property located in section 17. If any additional sites are developed, the plan needs to be updated accordingly.

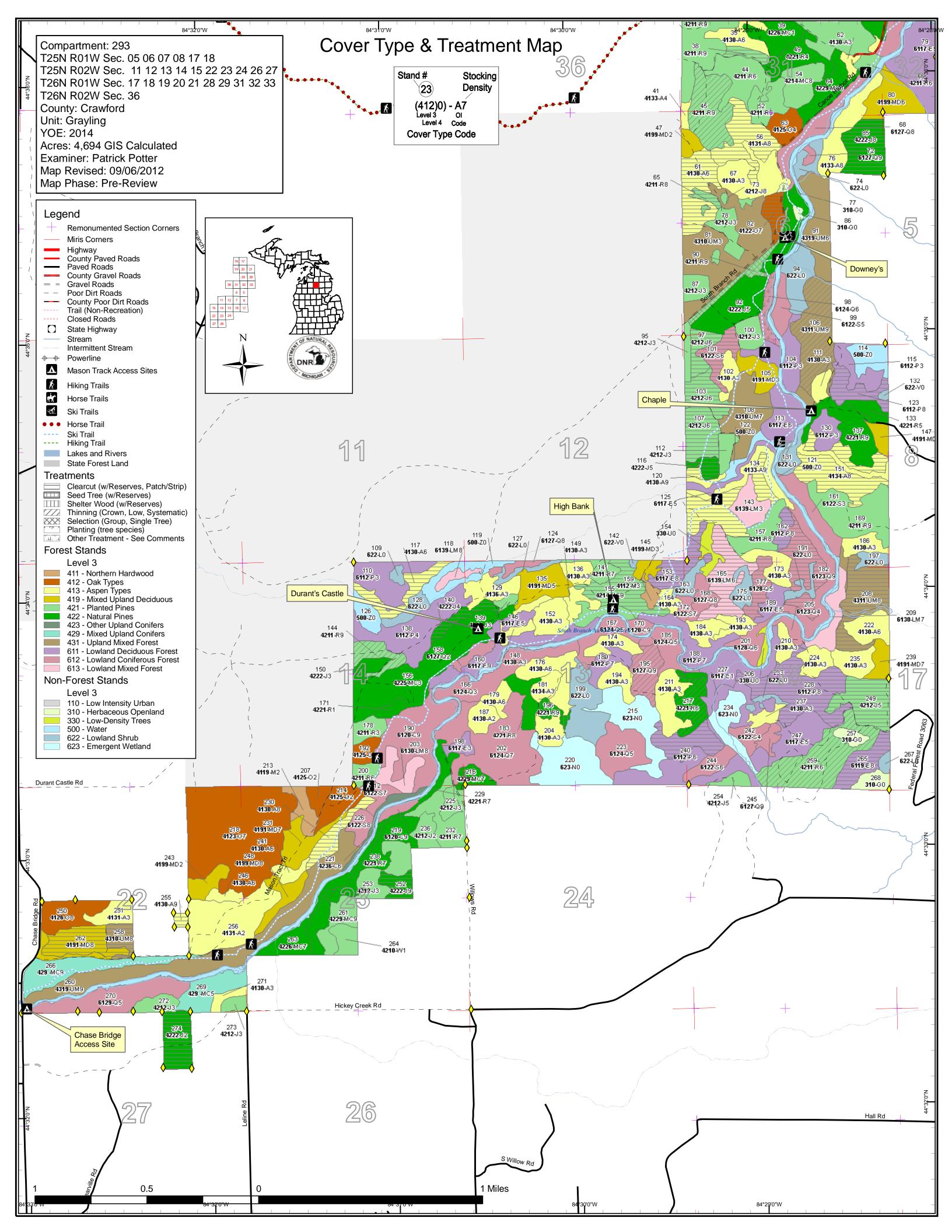
**Survey Needs:** Additional work is needed to define the boundary between USFS and State land located in section 29.

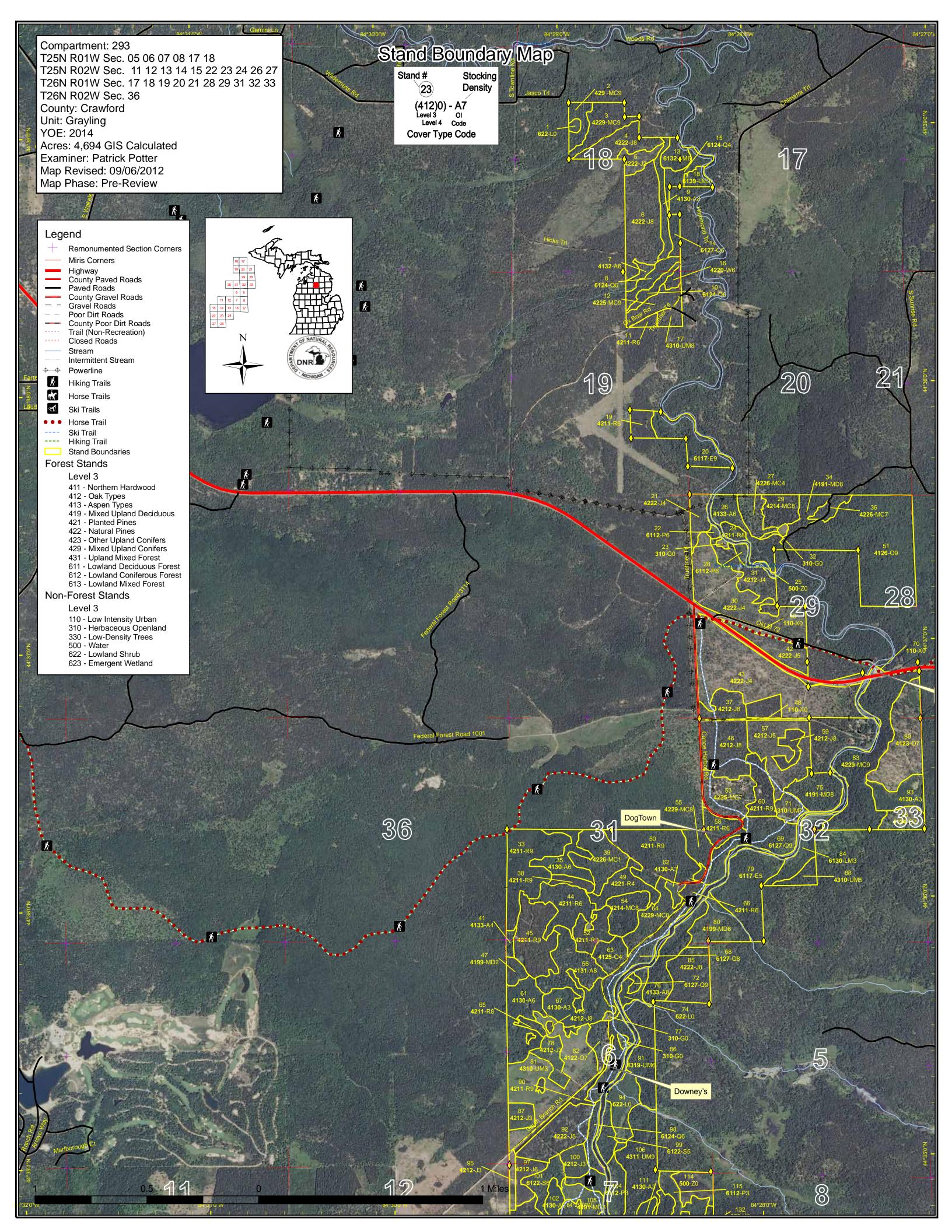
Recreational Facilities and Opportunities: The AuSable River experiences heavy seasonal use, primarily related to fishing and canoeing/kayaking. Hunting is the main form of dispersed use. The Mason Tract is home to Canoe Harbor State Forest Campground, Smith Bridge BAS, Chase Bridge BAS, the Mason Tract Pathway, and a portion of the Shore-to-Shore Riding and Hiking Trail. Camping is prohibited within the compartment except in Canoe Harbor State Forest Campground. A restriction was placed by Mr. Mason's trustee on the Mason Gift lands for 25 years, prohibiting camping. This restriction was extended by the MDNR for an indefinite period. Canoe Harbor Campground is located on a parcel initially owned by the federal government, and hence is not part of the original Mason gift. The Mason Tract Pathway is open to hiking and cross-country skiing. A Director's Order prohibits bicycle use on the pathway. The Mason Tract offers multiple opportunities for dispersed recreation such as fishing, canoeing, tubing, hiking, and picnicking. Canoes and riverboats use access sites located at Smith Bridge, Canoe Harbor, Durante Castle, the Chapel, and Chase Bridge heavily. In addition, numerous foot access points, such as Downeys and Highbanks, provide access to the river for anglers and river recreationists.

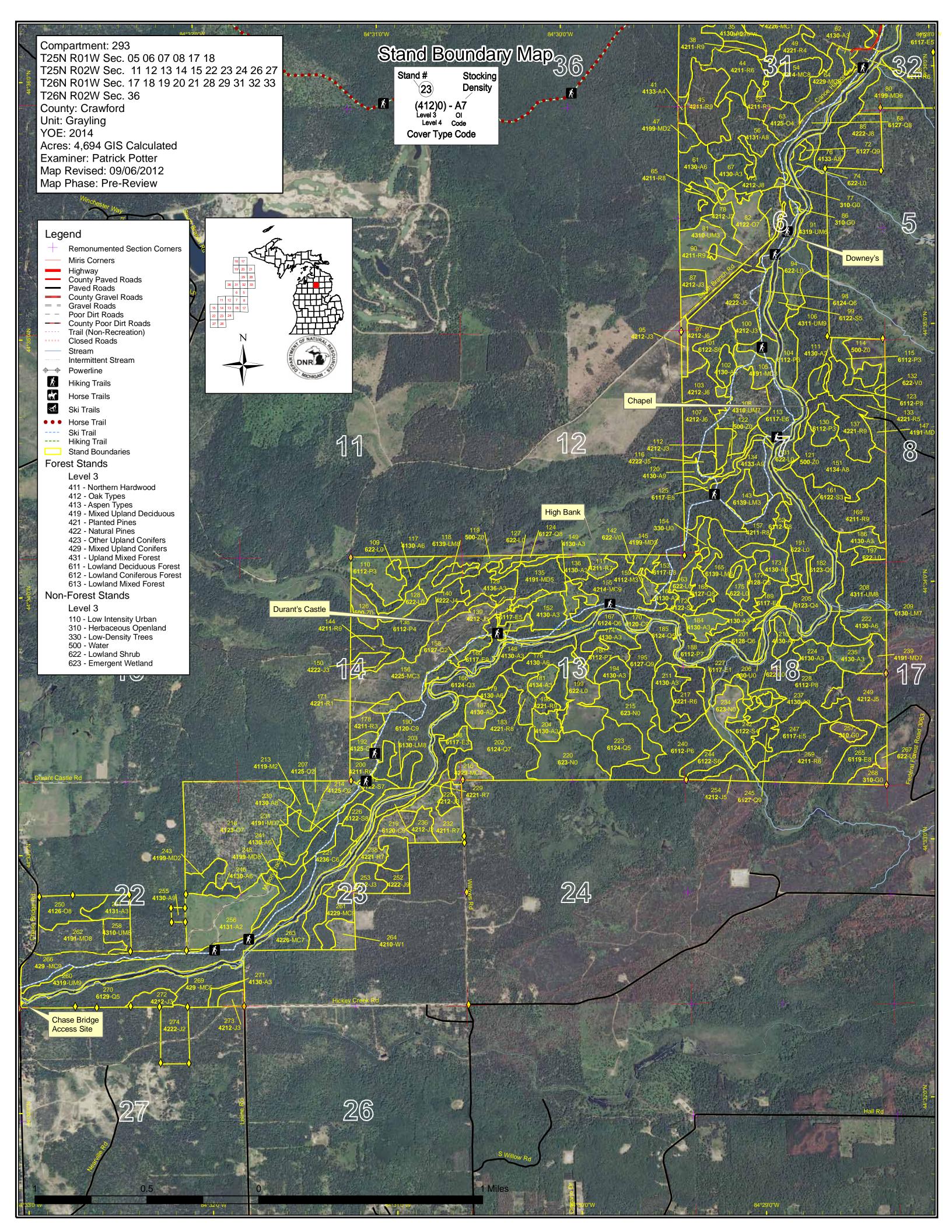
**Fire Protection:** County roads and open two-tracks provide good access to the compartment's dry upland types. Else, where within the compartment, the road system is poor and many areas are not easily accessible to fire fighting equipment.

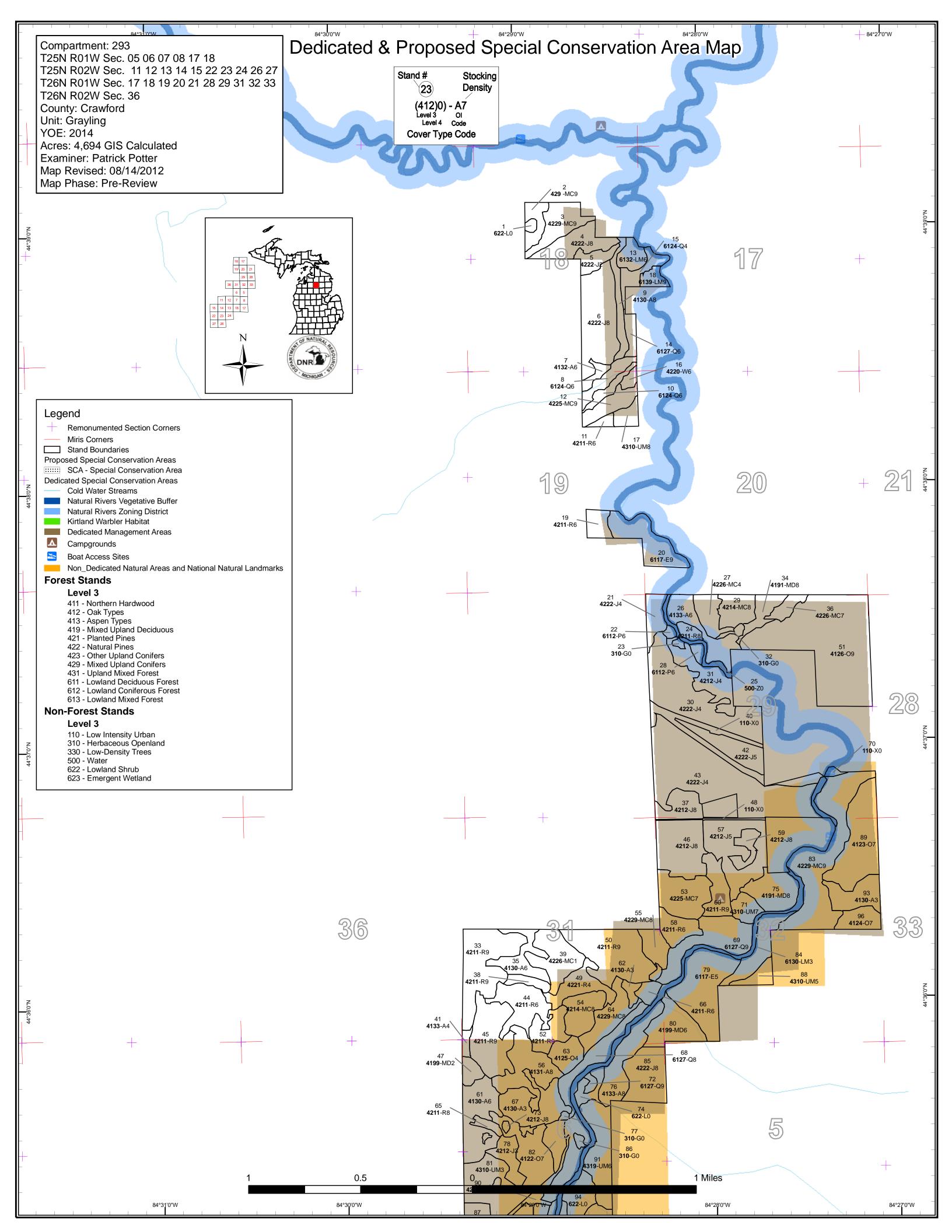
- **➤** The following reports are available:
  - **♦** Total Acres by Cover Type and Age Class
  - **♦** Proposed Treatment Summaries
  - **♦** Dedicated Conservation Area Details
  - **♦** Listing of Forested Stands
  - **♦** Listing of Non-Forested Stands
  - **♦** Proposed Treatments with No Limiting Factor
  - **♦** 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
  - **♦** Dedicated & Proposed Special Conservation Areas

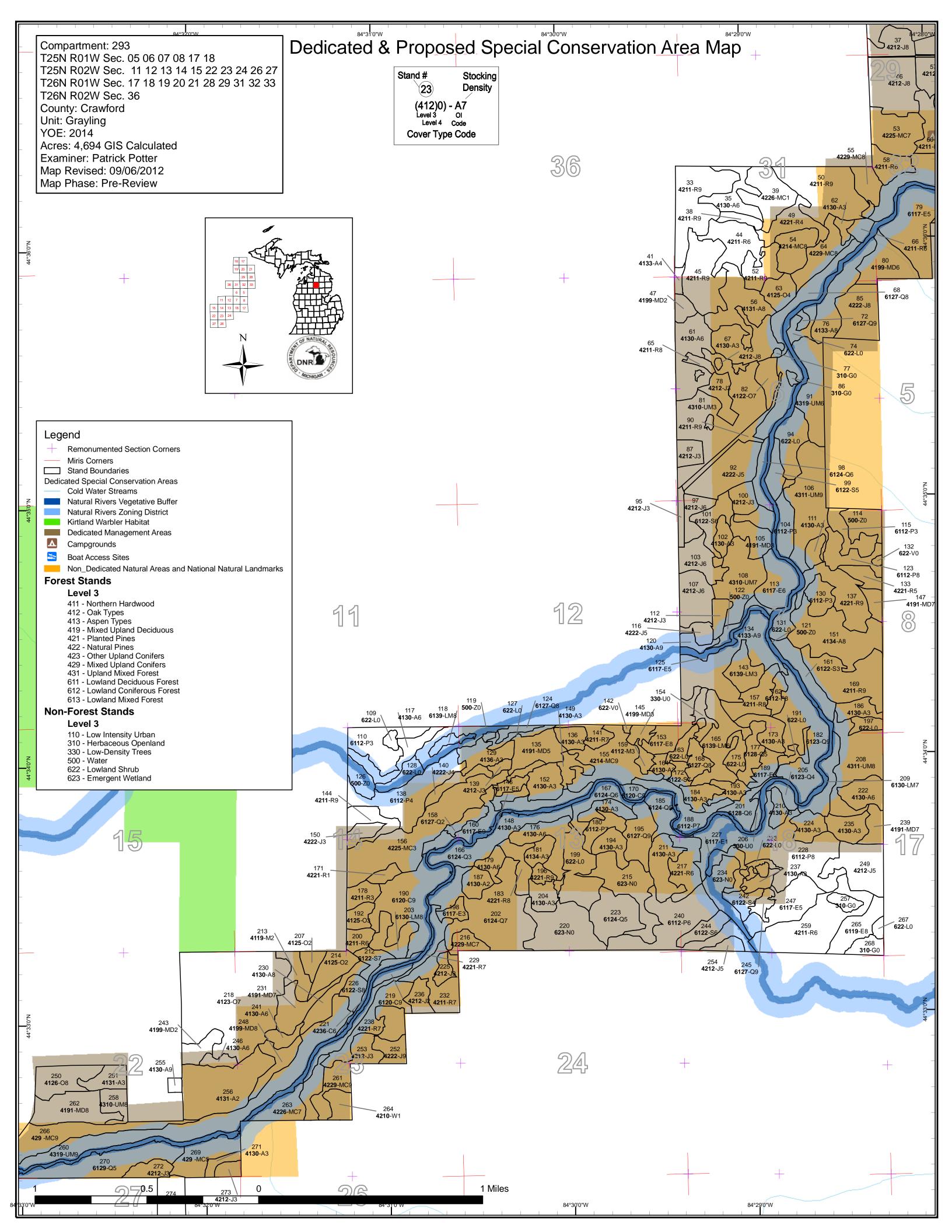












### Compartment 293 Year of Entry 2014

Grayling Mgt. Unit
Patrick Potter : Examiner



#### Age Class

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Aspen	109	111	138	39	19	50	77	73	30	0	0	0	0	0	647	
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Cedar	0	0	0	0	0	0	0	0	0	0	0	4	59	0	63	
Herbaceous Openland	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Jack Pine	0	20	242	13	39	92	39	81	71	0	0	0	0	92	688	
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Lowland Aspen/Balsam Poplar	24	20	12	11	74	100	10	34	0	0	0	0	0	0	286	
Lowland Conifers	0	6	0	119	43	6	45	139	24	8	0	0	2	0	393	
Lowland Deciduous	0	5	0	12	26	13	115	45	0	0	0	0	0	0	218	
Lowland Mixed Forest	0	18	14	0	9	0	5	42	13	5	0	0	0	0	106	
Lowland Shrub	110	0	0	0	0	0	0	0	0	0	0	0	0	0	110	
Lowland Spruce/Fir	0	0	0	8	24	16	0	22	0	8	0	0	0	0	77	
Marsh	85	0	0	0	0	0	0	0	0	0	0	0	0	0	85	
Mixed Upland Deciduous	0	12	11	10	39	0	19	0	18	40	0	0	28	0	178	
Natural Mixed Pines	0	92	0	19	0	8	0	25	50	0	65	10	14	11	294	
Northern Hardwood	4	0	11	0	0	0	0	0	0	0	0	0	0	0	15	
Oak	21	0	6	0	0	0	0	0	174	21	109	0	20	0	352	
Planted Mixed Pines	0	0	0	0	0	0	0	53	14	0	0	0	0	0	67	
Red Pine	0	5	27	141	64	34	64	74	19	27	18	0	0	47	521	
Upland Conifers	0	0	0	0	21	9	0	30	0	0	0	0	0	0	60	
Upland Mixed Forest	63	0	0	0	0	29	0	123	14	41	0	0	0	45	314	
Urban	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
Water	153	0	0	0	0	0	0	0	0	0	0	0	0	0	153	
White Pine	0	0	0	9	0	0	0	3	0	0	0	0	0	0	12	
Total	626	290	462	380	358	357	375	745	427	150	192	15	123	194	4694	



### **Table 2 – Proposed Treatment Summaries**

Grayling Mgt. Unit

Compartment 293

Year of Entry 2014

Total Compartment Acres: 4694

### **Acres by Treatment Type**

Commercial Harvest - 1163 Site Prep - 0 Tree Planting - 8 Prescribed Burn - 0 Other - 0

Habitat Cut - 9 Opening Maintenance - 8 Tree Seeding - 0 Pesticide - 0

### **Cover Type by Harvest Method**

	Cover Type by Harvest Metrica								
	/	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		100 Kg	No O	Citation Of St.		No. No.	
Aspen	163	0	0	0	0	0	163		
Jack Pine	284	20	0	0	0	0	303		
Lowland Aspen/Balsam Poplar	92	0	0	0	0	0	92		
Lowland Conifers	39	0	0	0	17	0	56		
Lowland Deciduous	35	0	0	0	0	0	35		
Lowland Mixed Forest	28	0	0	0	0	0	28		
Lowland Spruce/Fir	14	0	0	0	0	0	14		
Mixed Upland Deciduous	52	0	0	0	0	0	52		
Natural Mixed Pines	31	0	0	0	0	0	31		
Oak	10	0	109	0	0	0	118		
Planted Mixed Pines	41	0	0	0	0	0	41		
Red Pine	9	9	0	6	113	0	137		
Upland Conifers	9	0	0	0	0	0	9		
Upland Mixed Forest	49	0	0	0	42	0	92		
Total	857	29	109	6	172	0	1173		

### Table 3 -- Treatments Prescribed with No Limiting Factor

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npartment: 293	OF NATURA
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n	Treatment	Acres	CoverType
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- Mixed Upland High Conifers Density Log

Size

Density

BA

Range

Stand

Age

57

86

Harvest Clearcut with Reserves

**Treatment** 

Method

4133 - Aspen, Mixed Pine

**Cover Type** 

Objective

Cmpt. Review Proposal

**Approval** 

Status

Prescription Treat with the adjacent stand #3. Final harvest all aspen, black spruce, oak and red maple.

Specs: Other\_

d

Upland mixture of red pine, oak, white pine and Quaking aspen as you move down to the stream. Stand transitions to black spruce, balsam fir,

Comments: cedar and some red maple

Regeneration survey, and if not fully stocked plant red pine. <u>Next</u>

429

Steps:

**Proposed** 

11/08/2013 Start Date:

72293003-Cut

Name

72293002-Cut

42290 - Natural Mixed Pine

High Density Log Harvest

**Treatment** 

Type

Clearcut with Reserves

42290 - Natural Mixed Pine

Cmpt. Review Proposal

Prescription harvest all jack pine

Specs:

Many canopy balsam fir tops are snapped off from snow storm. As you move north in stand red pine becomes a little more dominate and balsam Other\_ fir is much denser in the sub-canopy. Stand is already set up for treatment. Comments:

Next

Regeneration survey and follow with planting of red pine if needed

Steps:

<u>Proposed</u>

Start Date: 11/08/2013

72293004-Cut 42220 - Natural 42220 - Natural Cmpt. Review 19.6 Medium 86 Harvest **Group Selection** Jack Pine Jack Pine Density Log Proposal

Prescription Harvest all jack pine and oak

Specs:

Other Stand is uset up for sale fairly open in areas about 75% closure. Mainly jack pine with scattered red pine, white pine and northern pin oak.

Comments: Stand appears to have had past fires plowlines are still visible. Ground cover blueberry and grasses.

Next

Regeneration Survey--plant red pine if need for full stocking

Steps:

<u>Proposed</u>

11/08/2013 Start Date:

72293006-Cut 42220 - Natural Harvest Clearcut 42120 - Planted Cmpt. Review 44.3 Medium Jack Pine Density Log Jack Pine Proposal

Prescription Final harvest with no retention and replant jack pine.

Specs:

Other Stand is open in area due to mature oak and jack pine dieing out.

Comments:

Regeneration survey

Next Steps:

Proposed

Start Date: 11/08/2013

72293012-Cut 12.4 42250 - Pine, Oak High 88 Harvest Clearcut 42120 - Planted Cmpt. Review Jack Pine Proposal Density Log

Prescription Final harvest with no retention. and replant to jack pine

Specs:

Other Mature jack pine and oak stand heavy slash in area from dead jack pine.

Comments:

Replant to jack pine, Regeneration survey

Next Steps:

<u>Proposed</u>

Acres

64

#### Table 3 -- Trea with No L

Type

Harvest

Range

	ents Prescrib	ed	Compartment: 293	TOF NATURAL PROPERTY OF THE PR
O LIM	iting Factor		Year of Entry 2014	DNR DNR
ВА	Treatment	Treatment	Cover Type	Approval

Objective

42120 - Planted

Jack Pine

Status

Cmpt. Review

Proposal

Method

Clearcut

Mix Density Log Prescription Final harvest with no retention. Treat with stand 12. Leave retention along Oxbow trail for visual

Size

Density

Medium

Stand

Age

80

Specs:

Other\_

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17

Jack pine oak stand with a mix of oak and white pine regeneration

CoverType

4310 - Pine, Oak

Comments:

Re-plant jack pine, and Regeneration survey follow planting at appropriate interval

<u>Next</u> Steps:

**Proposed** 

10/01/2013 Start Date:

**Treatment** 

Name

72293017-Cut

72293024-Cut 15 42110 - Planted Medium 79 200+ Harvest Crown Thinning 42110 - Planted Cmpt. Review Red Pine Density Log Red Pine Proposal

Prescription Do a marked thinning and harvest all jack pine.

Specs:

Red pine plantation a couple of rows were taken out the middle. Black spruce west side of man made trout run. Very mature jack pine east Other\_

edge of plantation Comments:

<u>Next</u> Steps:

<u>Proposed</u>

Start Date: 10/01/2013

72293029-Cut 14.0 42141 - Planted 81-110 42110 - Planted Cmpt. Review Medium 81 Harvest Clearcut with Red Pine Mixed Pine. Mixed Density Log Proposal Reserves

Deciduous

Prescription Final harvest. Retention will be the large diameter red pine 18+ at DBH. Access if off of USFS road 4076

Specs:

Stand has a lot of old cleared roads, it appears that prior to State ownership the private property owner was think of selling lots. Stand is an old Other\_ red pine plantation. Red pine was planted around residual oak and large diameter red pine. There are a few small pockets of just natrual red Comments:

pine regeneration.

Re-plant red pine. Regeneration survey follow planting at appropriate interval. <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

34 72293034-Cut 10.1 4191 - Mixed Medium 98 51-80 Harvest Clearcut 42110 - Planted Cmpt. Review Upland Deciduous **Density Log** Red Pine Proposal

with Conifer Prescription Final harvest.

Specs:

**Other** Oak is declining, Stand is on a south slope.

Comments:

Replant to red pine with stand 29. No herbicide treatment for site prep. Regeneration survey after planting at the appropriate interval.

Next Steps:

<u>Proposed</u>

10/01/2013 Start Date:

72293037-Cut 42120 - Planted 42110 - Planted 37 13.8 Medium 75 111-140 Harvest Clearcut with Cmpt. Review Jack Pine **Density Log** Reserves Red Pine Proposal

Prescription Final harvest protect pockets of white pine regeneration. Leave retention along the patchway.

Specs:

Other\_ Deer browse on all oak regeneration five feet or less in height.

Comments:

Re-plant jack pine, Regeneration survey to follow planting at the appropriate interval

<u>Next</u> Steps:

**Proposed** 

10/01/2013 Start Date:

### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293 Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	72293038-Cut	5.3	42110 - Planted Red Pine	High Density Log	67 I	171-200	Harvest	Clearcut	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Final harvet no retention due to small acres.

Specs:

Other\_ Red pine plantation, Stand was thinned last YOE under timbersale 720430401. The stand is 67 years old and the trees are 96 feet tall.

Comments:

Re-plant red pine Regeneration survey to follow planting at appropriate interval <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

72293045-Cut 34 3 42110 - Planted High 171-200 Harvest Crown Thinning 42110 - Planted Cmpt. Review Red Pine Density Log Red Pine Proposal

Prescription Mark to cut down to 100-120 BA.

Specs:

Diameter range (9-16 inches) Stand part of timbersale 720029501.all trees marked with orange paint and all aspen, jack pine and mixed oak Other\_

were cut. Stand was thinned (TS# 720430401) issued 5/05 closed 1/08 this was the second time this stand was thinnined. Comments:

None need at this time. <u>Next</u>

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

72293046-Cut 42120 - Planted 42110 - Planted 46 33.6 Medium 111-140 Harvest Clearcut with Cmpt. Review Jack Pine Red Pine Density Log Reserves Proposal

Prescription Final harvest protect oak regeneration and the dense pockets of white pine regeneration. Focus visual management around the campground

Specs: and along the pathway.

Deer browse on all oak regeneration five feet or less in height. Split form stand 37 because of powerline width. A few nice pockets of white pine Other

Comments: regeneration

Re-plant red pine for better visual concern it is a longer lived species. Regeneration survey to follow planting at appropriate interval Next

Steps:

<u>Proposed</u>

10/01/2013 Start Date:

72293051-Cut 4126 - White, Seed Tree with Cmpt. Review 108.8 High 101 111-140 Harvest 4122 - Oak, Pine Black, N. Pin Oak Density Log Reserves Proposal

Prescription Seed tree harvest. Mark 20 BA of oak to leave or every 100 feet mark 3-5 trees to leave. Leave all red & white pine trees larger the 20 inches.

Specs:

Other Heavy white pine regeneration. Steep slope south west corner leave for retention. Oak seedling only in the ground cover. West section stand

Comments: aspen and red maple cut early 70's.

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of oak, conifer, aspen and overstory upland Next

Steps: deciduous species.

Proposed

Start Date: 10/01/2013

72293056-Cut 30.2 4131 - Aspen, Oak Medium 87 51-80 Harvest Clearcut with 4131 - Aspen, Oak Cmpt. Review Density Log Reserves Proposal

Prescription Final harvest with retention of at least 3 acres, focus all retention around the original mason tract gift.

Specs:

Other Dry site, some tornado damage 1998, bracken fern, blueberry some sweet fern ground cover. Natural regeneration, if oak and aspen do not Comments:

regenerate plant jack pine.

Monitor the success of regeneration the next treatment period. Acceptable regeneration moderate to well stocked mix Oak, Aspen, Conifers. If Next Steps:

regeneration is not acceptable plant jack pine.

<u>Proposed</u>

# Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293
Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
57	72293057-Cut	36.8	42120 - Planted Jack Pine	Medium Density Pole	75	1-50	Harvest	Clearcut	42110 - Planted Red Pine	Cmpt. Review Proposal

<u>Prescription</u> Final harvest no retention except around the campground and along the pathway.

Specs:

S

Other Stand was treated last YOE under timbersale # 720440601 jack pine was marked to a residual of 30-40 BA and all red & white pine was left.

Comments: Because of previous treatment in which we created a multi-storied/uneven-aged stand now has the potential to produce abundant male flowers

and to help create and substain a budworm outbreak.

Next Steps: Re-plant red pine to meet visual management. Regeneration survey after planting at the appropriate interval

Proposed

Start Date: 10/01/2013

59 72293059-Cut 7.8 42120 - Planted Medium 75 81-110 Harvest Clearcut 42110 - Planted Cmpt. Review Jack Pine Density Log Red Pine Proposal

Prescription Final harvest protect pocket of advance regeneration.

Specs:

Other Deer browse on all oak regeneration five feet or less in height.

Comments:

Re-plant red pine for better visual concern and it is a longer lived species. Regeneration survey to follow planting at the appropriate interval

Next Steps:

Proposed Start Date: 10/01/2013

**61 72293061-Cut** 29.3 4130 - Aspen High 50 81-110 Harvest Clearcut 4133 - Aspen, Cmpt. Review Density Mixed Pine Proposal

Pole

Prescription Herbicide the Japanses barberry between March and April with a 5% solution of glyphosate mixed with water and a surfactant. prior to Final

Specs: harvest and allow natural regeneration

Other Stand harvested early 60's. Heart rot in most of the aspen. Heavy pocket of Japanese Barberry approx. 6 acres in size marked with OFS points

Comments:

Next Monitor the success of herbicide treatment one month after treatment. Monitor the success of regeneratin the next treatment period.

Steps: Acceptable regneration will be any mix of aspen, conifers, and overstroy upland deciduous species

Proposed

Start Date: 10/01/2013

65 72293065-Cut 4.1 42110 - Planted Medium 78 111-140 Harvest Clearcut 4130 - Aspen Cmpt. Review
Red Pine Density Log Proposal

<u>Prescription</u> Final harvest and No retention Treat and let the aspen expand/natural regeneration.

Specs:

Other Red pine plantation. Stand was thinned (TS# 720420602) issued 11/07 closed 1/08 this was the second time this stand was thinnined. Final

<u>Comments:</u> harvest and let the aspen expand.

Next Monitor the success of regeneration the next treatment period. Acceptable regeneration is any mix of aspen, conifers, and overstory upland

deciduous species.

Steps: Proposed

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293 Year of Entry 2014

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а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment Cover Type** n **Approval** Method Name Density Objective Status Age Range Type d 72293075-Cut 13.8 4191 - Mixed 98 1-50 Clearcut with 42110 - Planted 75 Medium Harvest Cmpt. Review Upland Deciduous Red Pine Density Log Reserves Proposal with Conifer

Prescription Harvest all oak, Jack pine and aspen and plant red pine. Follow natural river set-back a 200 foot buffer created and boundary has been adjusted. Leave retention along the pathway. Stand is part of the original Mason gift and the planned harvest is greater than 10 acres. The Specs:

stand consists of overmature jack pine and oak.

Stand starts out high and dry then slope down and the ground becomes a little softer the 200 foot buffer protects most of this area. Sub-surface Other\_

ground water flow to the river. Stand is adjacent to one of the canoe camp site. Comments:

<u>Next</u> Replant red pine. Regeneration survey to follow planting at relevant interval

Steps:

Proposed

Start Date: 10/01/2013

82 72293082-Cut 9.6 4122 - Oak, Pine Low 98 1-50 Harvest Clearcut with 42110 - Planted Cmpt. Review Density Log Reserves Red Pine Proposal

Prescription Final harvest with retention. No legal access at this time. If access is granted divide stand into two 10 acre cuts

Specs:

Part of the original Mason Gift. Other\_

Comments:

Re-plant red pine. Regeneration survey to follow planting at the right interval. <u>Next</u>

Steps:

**Proposed** 

Start Date: 10/01/2013

90 72293090-Cut 9.5 42110 - Planted High 67 200+ Harvest Single Tree 42110 - Planted Cmpt. Review Red Pine **Density Log** Selection Red Pine Proposal

Prescription Do an individual mark to create a more natural stand. Treat with adjacent stand 82.

Specs:

Other\_ Five rows of planted red pine and planted jack pine with some residual northern pin oak between South branch road and red pine plantation.

Comments:

<u>Next</u> None at this time

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

72293097-97 10.4 42120 - Planted High 81-110 Harvest Clearcut 42110 - Planted Cmpt. Review Cut1 Jack Pine Density Red Pine Proposal

Prescription Final harvest no retention. Treat stands 101, 103, 107, 116 and 120 at the same time as one sale.

Specs:

**Other** Jack pine diameter ranges from 6-8 inched DBH. Heavy slash of dead jack pine. Stand is deteriorating.

Pole

Comments:

Re-plant jack pine Regen survey after planting at the appropriate interval. Next

Steps: **Proposed** 

10/01/2013 Start Date:

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293 Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
101	72293101-Cut	13.6	6122 - Black Spruce	High Density	48	81-110	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal

Prescription Final harvest, treat with the adjacent stand. Put retention around all wetland and sub-surface flow areas, allow harvest in summer or winter.

Specs:

S

**Other** Tag alder in the sub-acre wetland areas. A four acre mature aspen pocket north end. .

Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration any mix of lowland conifer and upland deciduous Next

species. Steps:

<u>Proposed</u>

10/01/2013 Start Date:

Cmpt. Review 72293103-Cut 42120 - Planted High 42120 - Planted 103 16.1 81-110 Clearcut with Harvest Jack Pine Density Reserves Jack Pine Proposal

Pole

Prescription Final harvest place retention along two-track. Treat stands 97, 101, 107, 116 and 120 at the same time as one sale.

Specs:

Planted jack pine shallow trenches early 30's possible CCC. Areial photo show harvest late 60's early 70's can not find old TS information so am Other Comments:

not sure if it was a salvage cut because of budworm or take all 4 inches and up.

<u>Next</u> Steps: Re-plant jack pine. Regeneration survey after planting at the right interval.

**Proposed** 

10/01/2013 Start Date:

106 72293106-Cut 42.4 4311 - Pine, Aspen High 76 141-170 Harvest Low Thinning 4311 - Pine, Aspen Cmpt. Review Density Log Mix Mix Proposal

Prescription Final harvest aspen and mark red pine down to 70 focusing on the suppessed trees and final harvest all aspen for grouse management. Leave all Specs:

super canpoy red pine and some balsam fir. . Herbicide the barberry.

**Other** Stand is mostly red pine with a mixed age (cored three RP trees age at DBH-66, 55 & 49) West edge is a little different caused by a tornado in 1998, the red pine was salvaged. This created a transition zone of mostly mature oak, with aspen and white pine regeneration along the west Comments:

edge. Small strip of pure black spuce & balsam fir north edge adjacent to the creek. A large pocket of TA in the middle of the stand 53 years

old. Found a dense pocket of Japanese Barberry ~24 acres size.

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen & conifers. If regeneration is not <u>Next</u>

acceptable plant red pine.

Steps: <u>Proposed</u>

10/01/2013 Start Date:

72293107-Cut 42120 - Planted 42120 - Planted 21.3 High 81-110 Harvest Clearcut with Cmpt. Review Jack Pine Density Reserves Jack Pine Proposal

Pole

Prescription Final harvest standard retention. Treat stands 97, 101, 103, 116 and 120 at the same time as one sale.

Specs:

<u>Other</u> Budworm present but not a heavy population. Lots of deer trails with some browsing. Planted jack pine shallow trenches early 30's possible Comments: CCC. Areial photo show harvest late 60's early 70's can not find old TS information so am not sure if it was a salvage cut because of budworm

or take all 4 inches and up.

Re-plant jack pine. Regeneration survey after planting operations are compeleted and the appropriate interval. <u>Next</u>

Steps:

**Proposed** 10/01/2013 Start Date:

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#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293 Year of Entry 2014

Grayling	Mgt.	Uı

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Approval	

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
116	72293116-Cut	6.0	42220 - Natural Jack Pine	Medium Density Pole	84	111-140	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Final harvest, cut all jack pine, leave all red and white pine in addtion leave all oak. Natural regen. Plant jack pine if natural regen fails. Treat stands 97, 101, 103, 107 and 120 at the same time as one sale. Specs:

**Other** A lot of down and dead jack pine. Lots of oak regerneration 5-15 feet tall. Deep trenches, and browse on all oak less than 3 feet tall. Most of the oak regeneration is the pin oak. The mature oak is dieing because of age. Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of oak & conifers. If natural regeneration is not Next acceptable plant jack pine. Steps:

S

<u>Proposed</u> 10/01/2013 Start Date:

72293117-Cut 4130 - Aspen Cmpt. Review 15.5 4130 - Aspen High 68 81-110 Clearcut with 117 Harvest Density Reserves Proposal Pole

Prescription Treat in 2015 with the adjacent compartment if treated . Final harvest all the aspen leave all pine as retentions. Natural regeneration. Specs:

Heart rot in most of the aspen. Stand sparse in a few areas. Should consider expanding into the adjacent compartment. Crossed two small Other\_

Comments: drainages easiely crossed with the mats. Both ages taken on aspen.

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen & conifers. If regeneration is not <u>Next</u> Steps: acceptable plant red pine.

**Proposed** 10/01/2015 Start Date:

High 120 72293120-Cut 19 4130 - Aspen 56 141-170 Harvest Clearcut with 4130 - Aspen Cmpt. Review Proposal Density Log Reserves

Prescription Final harvest with retention stay 1/2 chain from edge of slope will be by retention. Final harvest no retention. Treat stands 97, 101, 103, 107 and 116 at the same time as one sale. Specs:

Heavy conks on all the aspen (False tinder conk, Phellinus trmulae). Stand is on top of a hill and slopes down toward Thayer Creek. Other

Comments: Next Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen and conifers. Plant jack pine if

regeneration is not acceptable. Steps:

Proposed

10/01/2013 Start Date:

Cmpt. Review 120 72293120-Cut 1.9 4130 - Aspen High 141-170 Clearcut with 4130 - Aspen 56 Harvest Reserves Proposal Density Log

Prescription Final harvest with retention stay 1/2 chain from edge of slope will be by retention. Treat with adjacent stand 116.

Specs:

<u>Other</u> Heavy conks on all the aspen (False tinder conk, Phellinus trmulae). Stand is on top of a hill and slopes down toward Thayer Creek. Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen and conifers. Plant jack pine if <u>Next</u> regeneration is not acceptable.

Steps:

**Proposed** 

10/01/2013 Start Date:

72293120-Cut 1.9 4130 - Aspen High 56 141-170 Harvest Clearcut with 4130 - Aspen Cmpt. Review **Density Log** Proposal

Prescription Final harvest with retention stay 1/2 chain from edge of slope will be by retention. Treat with adjacent stand 116.

Specs:

Heavy conks on all the aspen (False tinder conk, Phellinus trmulae). Stand is on top of a hill and slopes down toward Thayer Creek. Other\_

Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen and conifers. Plant jack pine if Next

regeneration is not acceptable. Steps:

**Proposed** 

### Table 3 -- Treatments Prescribed

Compartment: 293 Year of Entry 2014

Proposal

with No Limiting Factor s t а **Treatment** BA **Treatment Treatment Cover Type** Acres CoverType Size Stand **Approva**l n Density Name Method Objective Status Range d Age Type 72293123-Cut 123 15 2 6112 - Lowland Medium 72 81-110 Harvest Clearcut with 6112 - Lowland Cmpt. Review **Density Log** Reserves Aspen

Prescription Final harvest cut everything two inches and larger, leave and protect all cedar

Aspen

Specs:

Other\_ Final harvest heavy heart rot, Dense pocket of cedar middle of the stand about an acre in size. Stand has a few scattered white pine, and a few

Comments: small pockets of red pine along the west edge.

Monitor the success of regeneration the next treatment period. Acceptable regeneration mixh of aspne and conifers. <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

72293134-Cut 316 4133 - Aspen, High 111-140 Harvest Clearcut with 4133 - Aspen, Cmpt. Review Mixed Pine Density Log Mixed Pine Proposal Reserves

Prescription The stands boundary as been adjusted to exclude a two hundred foot buffer. Harvest all Aspen, Balasm fir & Black spruce. Protect red & white Specs: super canopy pine. Final harvest with reserves leave all red pine. Put islands around some of BF. Retention will include islands around some of

the Balsam fir in the south section of the stand consisting of three 1/2 acres islands

East of ski trail stand slopes down toward the river, with a heavy balsam fir understory. White pine regen is variable in density. Stand will Other\_

converting to balsam/spruce stand. Stand has a few sub-acre wetlands. Comments:

Observe the successs fo regeneration the next treatment period. Acceptable regeneration mix of aspen & conifers. If regeneration is not <u>Next</u>

Steps: acceptable plant red pine.

**Proposed** 

10/01/2013 Start Date:

42220 - Natural 42220 - Natural 72293140-Cut 86 Low 1-50 Harvest Clearcut with Cmpt. Review Jack Pine Density Reserves Jack Pine Proposal Pole

Prescription Final harvest all jack pine. Protect all pockets of regeneration. Natural regeneration. Watch visual along road. May not need any because of the

Specs: aspen and jack pine regeneration.

Other\_ Mason Tract fire summer 1995, did not kill all the trees and we only salvage the dead trees. There are areas of heavy down and dead JP.

Dense pockets of jack pine regen mix with some quacking aspen. Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen, jack pine and oak. Plant jack if Next

regeneration is not acceptable.

Steps: Proposed

10/01/2013 Start Date:

72293144-Cut 12.0 42110 - Planted High 47 141-170 Harvest Systematic 42110 - Planted Cmpt. Review Red Pine **Density Log** Thinning Red Pine Proposal

Prescription Do a third row thining on the west side of Mason Tract road and mark to cut on the east side taking out most of the suppressed trees.

Specs:

Other\_ Red pine plantation planted in 1965. Needs to be thinned.

Comments:

<u>Next</u> Not at this time

Steps:

Proposed

Start Date: 10/01/2013

72293151-Cut 39.0 4134 - Aspen, Medium 68 81-110 Harvest Clearcut with 4134 - Aspen, Cmpt. Review Spruce/Fir **Density Log** Reserves Spruce/Fir Proposal

Prescription Final harvest with reserves leave all red pine. Put islands around some of BF. Retention will include islands around some of the Balsam fir in the south section of the stand consisting of three 1/2 acres islands and the buffer along the intermittent stream (50 feet each side). Leave drumming Specs:

logs (one every five acres)

Other\_ heavy heart rot aspen, scattered dense pocket of Balsam fir, few sub-acre wet areas, Black ash mostly dead (EAB).

Comments:

<u>Next</u> Monitor the sucess of regeneration the next treatment period. Acceptable regeneration would be moderately stocked mix of aspen, black spruce

and balsam fir with inclusions of lowland and upland shrubs.

Steps: <u>Proposed</u>

10/01/2013 Start Date:

### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293

Grayling Mgt. Unit

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Year of Entry 2014

n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
153	72293153-Cut	17.9	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	77	111-140	Harvest	Clearcut with Reserves	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal

Prescription Final harvest with retention which will be all red & white pine super canopy trees and buffer all ephemeral wetlands found while crusing, also place retention along the pathway (clumps of 3-5 trees every 100 feet). Allow natural regeneration. Treat in summer time. Specs:

Other\_ Stand mostly consist of over-mature aspen and dense pockets of pole size balsam fir and red maple. Heart rot in all the aspen. Stand does have a few sub-acres ephemeral wetlands. Stand also has a few sub-acre pockets of 20-30 inch red and white pine. Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix fo aspen, conifers, and overstory upland edciduous Next

species. Steps:

<u>Proposed</u>

10/01/2013 Start Date:

42111 - Planted 72293155-Cut 26.9 42141 - Planted 111-140 Clearcut with Cmpt. Review 155 High 73 Harvest Mixed Pine, Mixed Density Log Reserves Red Pine, Mixed Proposal Deciduous Deciduous

<u>Prescription</u> Final harvest, leave all super canopy red and white pine along with all oak for retention. Natural regeneration. Put retention along the pathway Specs:

History of this stand is interesting. The stand was gifted to the state in the 50's but before we acquired portions of this stand was harvested and Other\_ replanted with red pine around the residual trees. In the north part of the stand all the aspen was cut back in the 70's based on the age no cut Comments: record found. Super canopy stand of red and white pine with a good mix of regeneration. A large portion of the planted red pine is suppressed.

Next Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen, conifer and oak. Plant red pine if

Steps: regeneration is unacceptable

Proposed

Start Date: 10/01/2013

162 72293162-Cut 6.5 6112 - Lowland Medium 55 51-80 Harvest Clearcut with 6112 - Lowland Cmpt. Review Reserves **Density Log** Proposal Aspen Aspen

Prescription Final harvest with reserves leave all super canopy white & red pine for retention. Retention will include three 1/2 acre islands scattered.. Allow

natural regeneration Specs:

Other A few large diameter Quaking Aspen and Red pine on slope leading down into stand 173. Conks already forming on the aspen trees. Would be beneficial for wildlife needs to harvest the aspen. Stand has excellent potential as a breeding site for amphibians and invertebrates. Comments:

Monitor the sucess of regeneration the next treatment period. Acceptable regeneration would be moderately stocked mix of aspen, black spruce Next and balsam fir with inclusions of lowland and upland shrubs. Steps:

Proposed

Start Date: 10/01/2013

165 72293165-Cut 28.4 6139 - Mixed High 70 81-110 Harvest Clearcut with 6139 - Mixed Cmpt. Review Lowland Forest Density Reserves Lowland Forest Proposal Pole

Prescription Harvest everything 2 inches and up. Standard retention

Specs:

Other\_ Lots of dead and down aspen and standing snags. Heavy pockets of BF and Red maple regeneration. Aspen is disappeaing and stand is

Comments: converting to a white pine/red maple/baslam fir/black spruce stand. Small drainage south end adjacent to stand 182

Monitor the sucess of regeneration the next treatment period. Acceptable regeneration would be moderately stocked mix of aspen, black spruce Next

and balsam fir with inclusions of lowland and upland shrubs. Steps:

**Proposed** 

# Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293 Year of Entry 2014

Graylin S nent: 293 Entry 2014

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
177	72293177-Cut	11.2	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	78	51-80	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal
Pres	cription Final ha	vest prote	ect all wetlands allow n	atural regen	eration.	Treat with	stand 155. Put	equipment limitation	n small cut-to-length p	ocessor. For

<u>Prescription</u> Final harvest protect all wetlands allow natural regeneration. Treat with stand 155. Put equipment limitation small cut-to-length processor. Fo <u>Specs:</u> retention create two 1/2 acre islands one at the north and south end of stand. Give the option to harvest summer or winter.

Other Stand has a lot of characteristic of an ephemeral wetland with a few easily identifiable sub-acre wetlands. Ground becomes solfter as you head south and you pick up more black spruce and quaking aspen.

Next Monitor the sucess of regeneration the next treatment period. Acceptable regeneration would be moderately stocked mix of aspen, black spruce and balsam fir with inclusions of lowland and upland shrubs.

<u>Proposed</u>

Start Date: 10/01/2013

182 72293182-Cut 27.4 6123 - Lowland Fir High 37 111-140 Harvest Clearcut with 6123 - Lowland Fir Cmpt. Review
 Density Log Reserves Proposal

<u>Prescription</u> Final harvest leave all cedar and buffer all sensitive areas. Treat all of the stand north of stand 119 leave the south portion for retention. Stand <u>Specs:</u> boundary has been adjausted for the Natural riverr/Mason tract plan. Adjacent boundary line as need to stay out of sub-surface ground water

Other Other Stand slopes down toward the AuSable River then levels off for 200-300 feet before reaching the river's banks. Stand starts out with white pine with balsam fir understory, then changes to over mature aspen with heavy understory of 1-3 stick Balsam fir. There is a small pocket of cedar 20+ dia and again heavy balsam fir understory which is showing signs of stress due to the higher water table this is easily ID on the IR photos. Pricky ash & wild raisin along the river bank. Stand has areas of wetlands sub-acres in size.

Next Monitor the sucess of regeneration the next treatment period. Acceptable regeneration would be moderately stocked mix of aspen, black spruce Steps: and balsam fir with inclusions of lowland and upland shrubs.

Proposed

Start Date: 10/01/2013

**195 72293195-Cut** 17.2 6127 - Lowland Pine High 86 171-200 Harvest Low Thinning 6127 - Lowland Pine Cmpt. Review Density Log Proposal

Prescription Reduce BA down to between 90-120 BA and final harvest 33 feet around the Bark beetle area.

Specs:

Other Other White pine is located mostly down by the river. Stand was marked last YOE but pulled because of the cost to installing a portable bridge. We no longer need to contract road work and bridge installation because of the crane mat the State has purchased. Already have a pocket of dead and dying red pine cause by Bark Beetle. Need to remove stressed tree and create more space between the remaining trees for forest health.

Next Monitor bark beetle damage.

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

19672293196-Cut5.642210 - NaturalHigh50141-170HarvestShelterwood42110 - PlantedCmpt. ReviewRed PineDensity LogRed PineProposal

<u>Prescription</u> Shelterwood harvest-- mark trees to leave to residual BA of 40. Leave all super canopy red and white pine.

Specs:

Other Small area planted around residual super canopy red pine with a few scattered oak and jack pine trees.

Comments:

Monitor the success of regeneration the next treatment period. Acceptable regeneration mix aspen and conifers.

Steps: Proposed

<u>Next</u>

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s t			Gra	yling Mgt. Unit	Tab			ents Prescrib ting Factor	oed	Compartment: 293 Year of Entry 2014	DNR
a n d		atment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
208	72293	3208-Cut	7.3	4311 - Pine, Aspen Mix	Medium Density Lo	75 g	81-110	Harvest	Clearcut with Reserves	4311 - Pine, Aspen Mix	Cmpt. Review Proposal
Preso Spec	_			residual (leave all wh m the center of the cre					tered Create cor	nservation buffers arour	nd all creeks 50
Othe Com	<u>r</u> ments:	Small w	et area. F	leart rot in most of the	aspen. Poo	kets of r	ed pine (B	A 60-90). Couple	e of small drainage	es with defined channels	s and banks.
Next Steps	<u>s:</u>	Monitor	the succe	ss of regenerating the	next treatme	ent perio	d. Accepta	able regeneration	mix of aspen, oak	and conifers.	
Propo Start I		10/01/20	13								
208	72293	3208-Cut	7.3	4311 - Pine, Aspen Mix	Medium Density Lo	75 g	81-110	Harvest	Clearcut with Reserves	4311 - Pine, Aspen Mix	Cmpt. Review Proposal
Preso Spec	-									nservation buffers arour rth side of creek and all	
Othe Com	<u>r</u> ments:	Small w	et area. ⊦	leart rot in most of the	aspen. Pod	kets of r	ed pine (B	A 60-90). Couple	e of small drainage	es with defined channels	s and banks.
Next Steps		Monitor	the succe	ss of regenerating the	next treatme	ent perio	d. Accepta	able regeneration	mix of aspen, oak	and conifers.	
Propo Start I		10/01/20	13								
208	72293	3208-Cut	26.0	4311 - Pine, Aspen Mix	Medium Density Lo	75 g	81-110	Harvest	Clearcut with Reserves	4311 - Pine, Aspen Mix	Cmpt. Review Proposal
Preso Spec				residual (leave all wh in the center of the cre					tered Create cor	nservation buffers arour	nd all creeks 50
Othe Com	<u>r</u> ments:	Small w	et area. F	leart rot in most of the	aspen. Poo	kets of r	ed pine (B	A 60-90). Couple	e of small drainage	es with defined channels	s and banks.
Next Steps	<u>3:</u>	Monitor	the succe	ss of regenerating the	next treatme	ent perio	d. Accepta	able regeneration	mix of aspen, oak	and conifers.	
Propo Start I		10/01/20	13								
208	72293	3208-Cut	26.0	4311 - Pine, Aspen Mix	Medium Density Lo	75	81-110	Harvest	Clearcut with Reserves	4311 - Pine, Aspen Mix	Cmpt. Review Proposal

208	72293208-Cut	26.0	4311 - Pine, Aspen	Medium	75	81-110	Harvest	Clearcut with	4311 - Pine, Aspen	Cmpt. Review
			Mix	Density Log				Reserves	Mix	Proposal

Prescription Final harvest with residual (leave all white pine and oak and a 10 BA red pine trees scattered.. Create conservation buffers around all creeks 50 feet each side from the center of the creeks. Allow natural regeneration. Harvest two 10 acres patches north side of creek and all of the south Specs:

Small wet area. Heart rot in most of the aspen. Pockets of red pine (BA 60-90). Couple of small drainages with defined channels and banks. <u>Other</u>

Comments:

Monitor the success of regenerating the next treatment period. Acceptable regeneration mix of aspen, oak and conifers.

<u>Next</u> Steps:

**Proposed** 

# Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293
Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
217	72293217-Cut	16.8	42210 - Natural Red Pine	High Density Pole	86	200+	Harvest	Low Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal

Prescription Low thinning mark trees to a residual of 100-120 BA.

Specs:

S

Other White pine is located mostly down by the river. Stand was marked last YOE but pulled because of the cost to installing a portable bridge. We no Comments: longer need to contract road work and bridge installation because of the crane mat the State has purchased. Need to remove stressed tree and

create more space between the remaining trees for forest health

Next

monitor for bark beetle damage.

Steps:

**Proposed** 

Start Date: 10/01/2013

Medium 72293228-Cut 50.9 6112 - Lowland 81-110 6112 - Lowland Cmpt. Review 228 41 Harvest Clearcut with Aspen Density Log Reserves Aspen Proposal

<u>Prescription</u> Final harvest with retention. Leave all super canopy white and red pine. Buffer sub-acres wetland for retention. Create brush piles for snowshoe

Specs: hare. Treat with stand 249, 259 as one sale.

Other Aspen stand intermixed with pockets of BF & BS. A slight elevation change of just a few feet is the only different beween solft spongy and

Comments: high/dry ground. Most of the aspen is 41 years old with a few mucher older 60s to rotten in the center can not age. Harvest for wildlife needs.

<u>Next</u> Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen, conifers.

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

230 72293230-Cut 13.0 4130 - Aspen Medium 68 81-110 Harvest Clearcut with 4130 - Aspen Cmpt. Review Density Log Reserves Proposal

<u>Prescription</u> Final harvest with reserves leave all pine and oak. Natural regeneration. Leave three (1 acre retention islands)

Specs:

Other Most of the oak is along the ski trail. Aspen starting to break-up, pockets of hypoxlyon

Comments:

Next Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen and conifers.

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

72293240-Cut 19.7 6112 - Lowland 111-140 Clearcut with 6112 - Lowland Cmpt. Review 240 High 59 Harvest Density Reserves Proposal Aspen Aspen

Pole

<u>Prescription</u> Final harvest with reserves and cut all black ash that is attainable. Standard retention in islands.

Specs:

Other Found an un-mapped intermitten seasonal stream. Heavy wet soild around the black ash. EAB is present and just getting started. Would be

<u>Comments:</u> very beneficial to wildlife to harvest aspen. Access would be difficult, stand would have to be entered from the north and south.

Next Steps: Monitor the success of regeneration the next treatment period. Acceptable regeneration mix of aspen and conifers

**Proposed** 

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ompartment: 293	
ear of Entry 2014	

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**Treatment Cover Type Approval** Treatment Treatment Acres CoverType n Size Stand BA Density Method Objective Name Age Status Range Type d 72293249-Cut 42120 - Planted Harvest Clearcut 42110 - Planted Cmpt. Review 249 28.3 Medium 62 81-110 Jack Pine Red Pine Density Proposal Pole

Prescription Final harvest no retention. Treat with stands 228, 259 as one sale.

Specs:

Other\_ Red paint along the boundary. Heavy deer browse on all oak 5 feet and less in height

Comments:

<u>Next</u> Re-plant red pine. Regeneration survey after planting following the appropriate interval.

Steps:

<u>Proposed</u>

10/01/2013 Start Date:

72293252-Cut 42220 - Natural Clearcut 42110 - Planted Cmpt. Review 252 9.1 High 83 81-110 Harvest Jack Pine **Density Log** Red Pine Proposal

Prescription Final harvest no retention Kotar shows PVC but I have 83 year old jack pine.

Specs:

Other\_ Jack pine past its ecological mature punky in the center with dwarf mistletoe on a few of the trees. Stand also has a few nice red pine scattered

Comments: throughout the stand.

Re-plant jack pine. Regeneration survey after planting following the appropriate interval <u>Next</u>

Steps:

<u>Proposed</u>

10/01/2013 Start Date:

72293255-Cut 2.6 4130 - Aspen High 111-140 Harvest Clearcut 4130 - Aspen Cmpt. Review **Density Log** Proposal

Prescription Final harvest no retention.

Specs:

Small BTA stand. Heart rot starting to show Other\_

Comments:

Monitor the success of regeneratio the next treatment period. Acceptable regeneration mix aspen and conifers. <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

72293258-Cut 4310 - Pine, Oak 42110 - Planted 258 9.7 Medium 72 81-110 Harvest Clearcut with Cmpt. Review Red Pine Mix **Density Log** Reserves Proposal

Prescription Final harvest leave all red and white pine within one chain of the road. Focus retention along the road.

Specs:

<u>Other</u> Lots of jack pine & oak on the ground (root rot). Heavy sub-canopy of mixed pine, oak close to the road

Pole

Comments:

Re-plant red pine. Regeneration survey following planting at the appropriate interval

<u>Next</u> Steps:

<u>Proposed</u>

10/01/2013 Start Date:

48.2 72293259-Cut 42110 - Planted 42110 - Planted 259 High 171-200 Harvest Systematic Cmpt. Review Red Pine Red Pine Proposal Density Thinning

Prescription Need to thin/third row. Treat wtih stands 228, 249 as one sale.

Specs:

A couple of spot fire 100% dead red pine-non forested stand now. Other\_

Comments:

Next none at this time now.

Steps:

Proposed

10/01/2013 Start Date:

### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 293 Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
262	72293262-Cut	27.7	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	120	81-110	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Final harvest all NPO, Aspen and Jack pine. Leave all red & white pine & white oak. Treat with adjacent stand. Natural regeneration. Focus

retention along the road. Specs:

Other\_ First plot 30 BA dead oak- which is very similar throughout the stand the oak is dying. Very good advance oak regen. Couple pockets of BT

aspen (170 BA). Comments:

**Next** Monitor seccess of regeneration at the appropriate interval. If unacceptable plant red pine.

Steps:

<u>Proposed</u>

10/01/2013 Start Date:

72293265-Cut 17.5 6119 - Mixed 265 6119 - Mixed Medium 68 81-110 Harvest Clearcut with Cmpt. Review Lowland Deciduous Density Log Reserves **Lowland Deciduous** Proposal Forest Forest

<u>Prescription</u> Final harvest leaving all super-canopy Red and White pine and create islands around the seasonal wet areas for retention. Natural regeneration. Specs:

Stand is mainly a Aspen, Red maple & Balsam fir stand with a few scattered super-canopy Red & white pine. Stand also includes a couple small Other\_ seasonal wet areas.

Comments:

Monitor thesuccess of regeneration the next treatment period. Acceptable regeneration mix of aspen, red maple and conifers. <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

42110 - Planted 72293274-Cut 20.8 42220 - Natural Medium 68 51-80 Harvest Clearcut with Cmpt. Review Jack Pine Red Pine Density Reserves Proposal

Sapling

Prescription Harvest all trees 2 inches and larger except leave all oak for retention.

Specs:

Other More mature Jack pine on the south side of the road. The older JP must be my seed source for the thirty year old Jack pine. Can not find or

Comments: see any burn scars or much downed jack pine which leads to to believe that portions of this stand was harvested back in the 70's.

Re-plant jack pine Regeneration survey after planting at the appropriate interval Next

Steps:

Proposed

Start Date: 10/01/2013

42290 - Natural 7.7 1-50 216 72293216-Low 56 Tree Planting Hand Plant 42110 - Planted Cmpt. Review Mixed Pine Red Pine **Plant Density Log** Proposal

Prescription No natural regeneration has happen. Need to trench and plant. Agreeded upon at the compartment pre-review to change the FTP species to

red pine. Specs:

Other Final harvested 2008 leaving all white pine & red pine. Stand was treated under TS# 720360601. FTP 72-607--Plant jack pine where no natural

regeneration has occurred. Furrow all landings and skid trails. Completed 5/2010.

Next Steps:

Comments:

Regeneration survey after planting following the appropriate interval

**Proposed** 

Unspecified Start Date:

**Total Treatment** 

1190.3 Acreage Proposed:

s t		Gray	ling Mgt. Unit	Table 4		eatment -imiting	s Prescribed Factor	with	Compartment: 293 Year of Entry 2014	DNR DNR
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
85	72293085-Cu	26.8	42220 - Natural Jack Pine	Medium Density Log	88	111- 140	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
Preso Spec		arvest and p	plant red pine if we ca	an get access	s. Reter	ntion will b	e the super cano	py red and white p	ine.	
Other Comm	<u>ment:</u> all Jack	c pine as you		ound cover is	mostly r	moss with			pine regeneration. Station with a few red pine	
Next Steps		eration surve	ey following planting	at the right tin	ne.					
Propo Start [		013								
	ng Factor and I	No 2A: acc	Adjacent landowner ess	denied						
		The mar	State owns the adja nagement only for the	cent landown e hunting right	er huntii ts.	ng rights.	Landowner woul	d be willing to give	the state an easement	for
98	72293098- NonFor	8.2	6124 - Lowland Spruce-Fir	High Density Pole	98	81-110	Non-Forest Management	Other - Specify	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
Preso Spec			dual plants of Japanovith water and a surfa		despers	ed throug	hout the stand. 1	reat the Japanese	Barberry witha 5% so	ution of
Other Com		covers the fl	oodplain and slope o	n the west sid	de of the	e river. Ve	ry wet near the ri	ver, pockets of ced	dar, gray dogwood pres	ent, & nine bark.
Next Steps		the succes	s of herbicide treatm	ent at the righ	nt interva	al				

Proposed Start Date: Unspecified

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

1C: Other dept or div proc/practices

35.0

South branch of AuSable River--Natural Rivers & 200' no cut zone Mason Tract Management plan.

**Total Treatment** 

Acreage Proposed:

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

Year of Entry: 2014

 Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status	
72269_OYOE_	2.0					Harvest	Clearcut	4131 - Aspen, Oak	Cmpt. Review	

<u>Prescription</u> Final harvest except leave any beech, ash, and conifers. No additional retention specified due to small stand size and the proximity of retention <u>Specs:</u> in comp 268 stand 28. Set up concurrent with compt 268 (2014 YOE) stand 28.

Other Comments:

Next Natural regen survey. Natural regen goal is a mixture of aspen, oak and hardwoods.

Steps:

<u>Proposed</u>

Start Date: 10/01/2013

72272\_OYOE\_ 5.6 Harvest Clearcut 42120 - Planted Cmpt. Review Ccr Jack Pine Proposal

Prescription Final harvest except leave the RP & WP. No additional retention due to small stand size. Run the north & west boundary to include the operable transition ground (where the densest black spruce cover is) down to the swamp. Cut all JP & Scotch pine stems regardless of merchantability. Harvest concurrent with the adjacent comp 268 stand 6 (aquired through the same land transaction). When harvesting this stand's planted SP, site a secondary landing immediately adjacent to the plantation so that Scotch pine doesn't get dragged through the general stand area, distributing its weed seed. Add hare habitat improvement spec to fell the red-painted boundary line trees bordering the swamp.

Other Protect the survey monument and any witness trees associated with the north quarter corner of section 22. Borders the Lovells KW Unit,

Comments: Management Block 56.

Next Steps: Trench and plant JP to KW specs. May need site prep treatments (that could include burning, herbicide, etc.) to control scotch pine regen before planting. Artificial regen surveys. Acceptable regen is JP at stockings suitable for KW habitat, with minor components of naturally-established

mixed deciduous and native conifer species.

Proposed Start Date: 10/01/

Start Date: 10/01/2013

**72289\_OYOE\_** 6.7 Harvest Clearcut 42120 - Planted Cmpt. Review cc Jack Pine Proposal

Prescription Final harvest, leaving any RP, WP and white oak. No additional retention due to small stand size. Treat concurrent with the adjacent comp 290

Specs: stand 2

Other Protect the survey monument and witness trees associated with the quarter corner common to sections 26 & 27.

Comments:

Next Trench and plant JP to KW specs. Artificial regen surveys. Acceptable regen is JP at stockings suitable for KW habitat, along with naturally-

established oak and pine.

**Proposed** 

Steps:

Start Date: 10/01/2013

Total Treatment

Acreage Proposed: 14.3

S	Grayling	Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 293 Year of Entry: 2014
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	429 - Mixed Upland Conifers	High Density Log	9.1	57		Upland mixture of red pine, oak, white pine and Quaking aspen as you move down to the stream. Stand transitions to black spruce, balsam fir, cedar and some red maple. In the stream corridor full spruce/fir regen. Balsam popular also present
3	42290 - Natural Mixed Pine	High Density Log	19.1	86		Many canopy balsam fir tops are snapped off from sonw storm. As you move north in stand red pine becomes a little more dominate and balsam fir is much denser in the sub-canopy.  Stand is already set up for treatment.
4	42220 - Natural Jack Pine	Medium Density Log	19.6	86		Stand is uset up for sale fairly open in areas about 75% closure.  Mainly jack pine with scattered red pine, white pine and northern pin oak. Stand appears to have had past fires plowlines are still visible. Ground cover blueberry and grasses.
5	42220 - Natural Jack Pine	Medium Density	8.4	31		Jack pine regeneration following 1970's fire stand is in the 70% crown closure . Not much sub canpoy present.
6	42220 - Natural Jack Pine	Medium Density Log	44.3	51		Stand is open in area due to mature oak and jack pine dieing out.
7	4132 - Aspen, Jack Pine	High Density Pole	4.3	56		Tranistion slope consisting of aspen with mixed conifer. Small diameter stand with lowland conifer in sub-canopy
8	6124 - Lowland Spruce- Fir	High Density Pole	9.3	79		Mixed lowland stand of mixed conifer with some hardwood component. sub canopy lowland species with pockets of heavy black spruce and balsam fir regeneration. Tamarack is denser along the stream.
9	4130 - Aspen	Medium Density Log	10.9	57		Steep slope east aspen with aspen, oak, red maple and white pine. Some areas are to steep.
10	6124 - Lowland Spruce- Fir	High Density Pole	6.0	48		Aspen more dominant on the western side of stand also more black cherry present as well.
11	42110 - Planted Red Pine	High Density Pole	2.8	47	141-170	Red pine plantation with scattered oak and jack pine. If any treatment final harvest and plant jack pine, the area is not a red pine site.
12	42250 - Pine, Oak	High Density Log	12.4	88		Mature jack pine and oak stand heavy slash in area from dead jack pine.
13	6132 - Mixed Lowland Forest with Cedar	High Density Pole	8.9	47		Nice lowland swamp with cedar and aspen as primary compornent. Free standing elevated deer stand marked as a OFS point
14	6127 - Lowland Pine	High Density Pole	5.7	53		Over mature aspen with stand white pine and a few other species. White pine either super canopy or sap/pole size. Also a few super canopy red pine. Stand is converting to white pine stand.

s t	Grayling	y Mgt. Unit		5 – Fo	orested Sta	Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	6124 - Lowland Spruce- Fir	Low Density Pole	9.9	79		Lowland conifer/hardwood stand with a smattering of black ash, aspen, red maple and birch. Mixed with baslam fir and black spruce. Some tramarack but not enough to record. Tag alder is heavy throughout stand.
16	42200 - Natural White Pine	High Density Pole	3.0	72		Majority of stand is pole size white pine. White pine also has super canopy and log component.
17	4310 - Pine, Oak Mix	Medium Density Log	6.4	80		Jack pine oak stand with a mix of oak and white pine regeneration
18	6139 - Mixed Lowland Forest	High Density Log	5.2	93		Nice pocket of super canpoy white pine next to the stream, average diameter at DDH is 20+. Lowland stand over all. Small area dominated by tag alder and black ash.
19	42110 - Planted Red Pine	High Density Pole	8.1	35	81-110	Small red pine plantation just starting to self prune.
20	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	25.8	77	51-80	Stand covers the slope and floodplain. Very steep slope. Ground very soft in areas, sub-surface flow/drainage to the AuSable River does not appear to freeze during the winter.
21	42220 - Natural Jack Pine	Low Density Pole	10.5	27	1-50	Dead tops in the log size jack pine & broken top on the younger jack pine damage caused form snow strom.
22	6112 - Lowland Aspen	High Density Pole	1.6	55	81-110	Black canker on all the aspen. A couple of white pine, red pine and balsam fir tree. Stand is mainly on the slope leading down to the AuSable river with an half-acre filled wetland before you reach the river.
24	42110 - Planted Red Pine	Medium Density Log	4.2	79	200+	Red pine plantation a couple of rows were taken out the middle. Black spruce west side of man made trout run. Very mature jack pine east edge of plantation
26	4133 - Aspen, Mixed Pine	High Density Pole	21.5	38	81-110	White pine east coner along the road. Small pocket of planted red pine. Could not find the property corner.
27	42260 - Natural Pine, Mixed Deciduous	Low Density Pole	12.2	35	1-50	Stand is very open by is filling in. Heavy flagging on the white pine. Found on scotch pine tree should be cut.
28	6112 - Lowland Aspen	High Density Pole	2.6	55	81-110	Black canker on all the aspen. A couple of white pine, red pine and balsam fir tree. Stand is on the access road leading down to the old Truettner lodge.
29	42141 - Planted Mixed Pine, Mixed Deciduous	Medium Density Log	14.0	81	81-110	Stand has a lot of old cleared roads, it appears that prior to State ownership the private property owner was think of saliling lots.  Stand is an old red pine plantation. Red pine was planted around residual oak and large diameter red pine. There are a few small pockets of just natrual red pine regeneration.
30	42220 - Natural Jack Pine	Low Density Pole	58.8	27	1-50	Stand was treated last YOE under timbersale # 720380601 All trees six inches or more in diameter were harvested.

s t	Grayling	Grayling Mgt. Unit			orested Sta	nds Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	42120 - Planted Jack Pine	Low Density Pole	22.1	71	51-80	Stand was a plantation at one time. There was a wild fire and the jack pine was salvaged prior to the state recieving the property 90's. Stand should be managed as a Pine Barren.  Large super canopy red and white pine along the river. Found Hill's thistle marked site as OFS. A couple of rows of planted red pine adjacent to parking lot.
33	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	43.4	35	111-140	Red pine is branchy. Stand final harvested early 70's and planted around the oak stump sprouts to red pine a lot of skips in the planting or survival. Red pine just strating to self prune.  Aspen dieing to much shade.
34	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	10.1	98	51-80	Oak is declining, Stand is on a south slope.
35	4130 - Aspen	High Density Pole	16.3	40	81-110	Stand was final harvest 1971, oak and red pine was left.
36	42260 - Natural Pine, Mixed Deciduous	Low Density Log	6.4	30	1-50	Stand is mainly the regeneration after the road clearing of the road. Very mature jack pine at the north edge of the road.
37	42120 - Planted Jack Pine	Medium Density Log	13.8	75	111-140	Deer browse on all oak regeneration five feet or less in height.
38	42110 - Planted Red Pine	High Density Log	5.3	67	171-200	Red pine plantation, Stand was thinned last YOE under timbersale 720430401. The stand is 67 years old and the trees are 96 feet tall.
39	42260 - Natural Pine, Mixed Deciduous	Low Density Sapling	24.8	15	1-50	Stand harvested last YOE everything four inches and larger harvested except for red and white pine trees plus green marked trees.
41	4133 - Aspen, Mixed Pine	Low Density Pole	2.8	49	1-50	Stand was cut with the adjacent compartment and stand. Whom ever ran the line/cut the sale took the boundary to the red pine stand.
42	42220 - Natural Jack Pine	Medium Density Pole	17.9	27	1-50	Stand was treated last YOE under timbersale # 720380601 All trees six inches or more in diameter were harvested. Because of visual concerns the producer left some larger diameter red pine and NPO
43	42220 - Natural Jack Pine	Low Density Pole	97.5	27	1-50	Stand was treated last YOE under timbersale # 720230701 all jack pine trees ex inches or larger in diameter was harvested.  All Oak trees and red pine were left
44	42110 - Planted Red Pine	High Density Pole	24.1	35	51-80	Planted red pine under oak and aspen. Over-all stand diameter keeps changing form p-s to s-p. lots of male GM flying around
45	42110 - Planted Red Pine	High Density Log	34.3	63	171-200	Diameter range (9-16 inches) Stand part of timbersale 720029501.all trees marked with orange paint and all aspen, jack pine and mixed oak were cut. Stand was thinned (TS# 720430401) issued 5/05 closed 1/08 this was the second time this stand was thinnined.

s t	Grayling	Grayling Mgt. Unit			rested Sta	Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	42120 - Planted Jack Pine	Medium Density Log	33.6	75	111-140	Deer browse on all oak regeneration five feet or less in height.  Split form stand 37 because of powerline width. A few nice pockets of white pine regeneration
47	4199 - Other Mixed Upland Deciduous	Medium Density	5.7	25		Stand was final harvested under (TS# 720430401) issued 5/05 closed 1/08. Aspen poles on the west slope 5-6 inches. A few residual pole size oak were left.
49	42210 - Natural Red Pine	Low Density Pole	17.0	35	1-50	Stand treated under timbrsale 720220701, everything 4 inches and larger was harvested except not red pine, white pine or oak was to be cut. Also an one acre leave island was left. 70 BA is the leave island.
50	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	44.3	40	111-140	Stand covers valley and ridges. Stand was planted late 60's early 70's around residual oak and red pine by the USFS. Original stand treated late 30's and left residual red pine and oak. Stand has a lot of suppressed red pine. Most of the oak is located on the top of the hill and was not planted.
51	4126 - White, Black, N. Pin Oak	High Density Log	108.8	101	111-140	Heavy white pine regeneration. Steep slope south west corner leave for retention. Oak seedling only in the ground cover. West section stand aspen and red maple cut early 70's.
52	42110 - Planted Red Pine	High Density Log	14.9	63	141-170	Stand part of timbersale 720029501.all trees marked with orange paint and all aspen, jack pine and mixed oak were cut. Stand was thinned (TS# 720430401) issued 5/05 closed 1/08 this was the second time this stand was thinnined.
53	42250 - Pine, Oak	Low Density Log	25.2	75	1-50	Stand marked to leave over all residual BA 30-40 last YOE. Two leave island created for visual. Need to harvest all the jack pine. Stand has a very healthy and dense sub-canopy of mixed oak regeneration.
54	42141 - Planted Mixed Pine, Mixed Deciduous	Medium Density Log	17.3	73	81-110	Stand is a red pine plantation in which the red pine was planted around residual oak. Stand was cut mid-70's removing most of the oak and red maple. Left all white oak.
55	42290 - Natural Mixed Pine	Medium Density Log	10.7	Uneven Age	81-110	Stand treated/harvested mid-late 30's, left most of th eoak and some of the red pine. Heavy area of suppressed red pine. Suppressed red pine makes the canopy appear fuller when looking at the DOQ's.
56	4131 - Aspen, Oak	Medium Density Log	30.2	87	51-80	Dry site, some tornado damage 1998, bracken fern, blueberry some sweet fern ground cover.
57	42120 - Planted Jack Pine	Medium Density Pole	36.8	Uneven Age	1-50	Stand was treated last YOE under timbersale # 720440601 jack pine was marked to a residual of 30-40 BA and all red & white pine was left. Because of previous treatment in which we created a multi-storied/uneven-aged stand now has the potential to produce abundant male flowere and to help create and substain a budworm outbreak.
58	42110 - Planted Red Pine	High Density Pole	12.1	25	1-50	Stand harvested early 80's with a few red pine left along the road and scattered in the stand.and re-planted 1987. Also there is a small aspen clone along the road.

Grayling Mgt. Unit			5 – Fo	orested Sta	nds Compartment: 293 Year of Entry: 2014
Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42120 - Planted Jack Pine	Medium Density Log	7.8	75	81-110	Stand was left for visual concern when surround stand was treated last YOE.
42110 - Planted Red Pine	High Density Log	15.6	73	111-140	Planted red pine. A small sub acre wetland with black spruce
4130 - Aspen	High Density Pole	29.5	50	81-110	Stand harvested early 60's. Heart rot in most of the aspen. Heavy pocket of Japanese Barberry approx. 6 acres in size marked with OFS points
4130 - Aspen	High Density Sapling	5.1	16		Stand final harvested 1996. Left a couple of white pine along the road.
4125 - Black, N. Pin Oak	Low Density Pole	11.6	92	1-50	All jack pine harvested last YOE.
42290 - Natural Mixed Pine	Medium Density Log	18.7	80	51-80	Stand has a south and east slope and is almost two different stands. Jack pine down by the road with a white pine and NPO sub-canopy. On the slopes plnated red pine in places. Jack pine on its way out. Hard to pin dow exactly what this stand is. It keeps changing pockets of white pine regeneration, very mature jack pine in areas and planted red pine. In addition some of the oak has been cut and has stump sprouted.
42110 - Planted Red Pine	Medium Density Log	4.1	78	111-140	Red pine plantation. Stand was thinned (TS# 720420602) issued 11/07 closed 1/08 this was the second time this stand was thinnined. Final harvest and let the aspen expand.
42110 - Planted Red Pine	High Density Pole	5.3	47	111-140	Dog town. Red pine plantation planted 1965 with a few residual jack pine and NPO.
4130 - Aspen	High Density Sapling	27.2	15		Stand harvested and trenched but never planted allowed for natural regen.
6127 - Lowland Pine	Medium Density Log	19.0	71	51-80	Stand east side of the road, and covers the slope down to the river. Tag alder along river. A couple area of tornado damage with very nice oak regeneration. A lot of dead jack pine on the ground.
6127 - Lowland Pine	High Density Log	32.0	65	51-80	Stand covers the hill top and slope and floodplain. Hil top and slop dominated by Red & white pine. Most of the Jack pine is dead
4310 - Pine, Oak Mix	Low Density Log	8.6	98	1-50	Canoe camp site. It appears he have cut most of the oak and jack pine.
6127 - Lowland Pine	High Density Log	2.2	125	81-110	A small pocket of large diameter white pine.
42120 - Planted Jack Pine	Medium Density Log	3.4	75	51-80	Large retention island
	Level 4 Cover Type  42120 - Planted Jack Pine  42110 - Planted Red Pine  4130 - Aspen  4125 - Black, N. Pin Oak  42290 - Natural Mixed Pine  42110 - Planted Red Pine  42110 - Planted Red Pine  42110 - Lowland Pine  6127 - Lowland Pine  4310 - Pine, Oak Mix	Level 4 Cover Type  42120 - Planted Jack Pine  42110 - Planted Red Pine  4130 - Aspen  4130 - Aspen  4125 - Black, N. Pin Oak Low Density Pole  42290 - Natural Mixed Pine  42110 - Planted Red Pine  4310 - Aspen  High Density Log  Medium Density Log  6127 - Lowland Pine  High Density Log  6127 - Lowland Pine  High Density Log  6127 - Lowland Pine  High Density Log  Medium Density Log  High Density Log	Level 4 Cover Type  #2120 - Planted Jack Pline  #2110 - Planted Red Pine  #130 - Aspen  #130 - Aspen  #130 - Aspen  #130 - Natural Mixed Pine  #2290 - Natural Mixed Pine  #2110 - Planted Red Pine  #2290 - Natural Mixed Pine  #2110 - Planted Red Pine  #2290 - Natural Mixed Pine  #2210 - Planted Red Pine  #2220 - Natural Mixed Pine  #2310 - Planted Red Pine  #24210 - Planted Red Pine  #252 - Planted Pine  #263 - Planted Pine  #264 - Planted Pine  #265 - Planted Pine  #266 - Planted Pine Pole  #267 - Lowland Pine Pole Pole  #267 - Lowland Pine Pole Pole Pole Pole Pole Pole Pole Pol	Level 4 Cover Type         Size Density         Acres         Stand Age           42120 - Planted Jack Pine         Medium Density Log         7.8         75           42110 - Planted Red Pine         High Density Log         15.6         73           4130 - Aspen         High Density Pole         29.5         50           4130 - Aspen         High Density Sapling         5.1         16           4125 - Black, N. Pin Oak         Low Density Pole         11.6         92           42290 - Natural Mixed Pine         Medium Density Log         18.7         80           42110 - Planted Red Pine         High Density Log         4.1         78           42110 - Planted Red Pine         High Density Sapling         27.2         15           6127 - Lowland Pine         Medium Density Log         19.0         71           6127 - Lowland Pine         High Density Log         32.0         65           4310 - Pine, Oak Mix         Low Density Log         8.6         98           6127 - Lowland Pine         High Density Log         2.2         125           42120 - Planted Jack         Medium         3.4         75	Level 4 Cover Type         Size Density         Acres         Stand Age         BA Range           42120 - Planted Jack Pine         Medium Density Log         7.8         75         81-110           42110 - Planted Red Pine         High Density Log         15.6         73         111-140           4130 - Aspen         High Density Pole         29.5         50         81-110           4125 - Black, N. Pin Oak Sapling         Low Density Sapling         5.1         16           4125 - Black, N. Pin Oak Density Pole         11.6         92         1-50           42290 - Natural Mixed Pine         Medium Density Log         18.7         80         51-80           42110 - Planted Red Pine         High Density Density Density Pole         5.3         47         111-140           42110 - Planted Red Pine         High Density Pole         27.2         15           6127 - Lowland Pine Density Sapling         27.2         15           6127 - Lowland Pine Density Log         19.0         71         51-80           6127 - Lowland Pine Density Log         8.6         98         1-50           6127 - Lowland Pine Density Log         8.6         98         1-50           6127 - Lowland Pine Density Log         4.2         125         81-110

S t	Grayling	ı Mgt. Unit		5 – Fo	orested Sta	Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
75	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	21.2	98	1-50	Stand starts out high and dry then slope down and the ground becomes a little softer. Ground water flow to the river. Stand is adjacent to one of the canoe camp site.
76	4133 - Aspen, Mixed Pine	Medium Density Log	25.0	75	81-110	Heavy mix of white and balsam fire with pockets fo black spruce understory. Lots of down and dead . Where the overstory is pine heavy balsam and black spruce regeneration Where aspen is the overstory heavey white pine regneration.
<del></del>	42120 - Planted Jack Pine	High Density Sapling	11.3	16		Stand was part of sale # 720049501 issued 2/95 closed 5/96 final harvest.
79	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	43.5	62	51-80	Mostly an aspen stand with white pine understory. Some red pine along the stream, but as you head away from the river the stand becomes more drier. The tornado in 97 created the heavy slash and pockets of aspen regeneration.
80	4199 - Other Mixed Upland Deciduous	High Density Pole	22.6	45	51-80	Small pocket of planted red pine 1957. Stand is mostly black cherry and quaking aspen small diameter with a few larger diameter scattered jack pine, NPO, and black spruce. Ground cover is primarily sweet fern and blueberry with areas of rough fescue. Stand has been cleared-no stumps or any old burn scars on the older scattered trees. Checked the photos all the way back to 38's could not find any signs of man made structures. Also could not find anything on the ground to verify but it appears that thes area has had the stumps removed and possibly cleared for farming after the early logging activities. Sweet fern shows a strong preference for dry, sandy soils with full exposure to the sun. These sites, which include dry sandy soils with full exposure to the sun, exposed slopes, abandoned pastures, pine barrens, gravel pits, weathered mine tailings, and cut-over forested land, that have experienced some form of disturbance in either the recent or distant past.
81	4310 - Pine, Oak Mix	High Density Sapling	63.4	6		Stand was final harvested #720830401and planted FTP C72-574-May 2011 with six retention islands ranging in size of (0.5-1 acre). A three chain wide strip along South Branch Road was marked to 40 BA the rest of the stand was final harvested. Area of heavy mix oa,k jack pine and black cherry regeneration. More oak regeneration along the road.
82	4122 - Oak, Pine	Low Density Log	9.6	98	1-50	Part of the Downenys site. Most of the oak is just about dead.  Open areas with black cherry a couple small pockets of aspen not enough to call. White pine along the road.
83	42290 - Natural Mixed Pine	High Density Log	64.9	101	111-140	Steep slopes along north section, smoothing out as you head south. A tornado in 1998 created a lot of down and dead, which also created regen gaps filling in with aspen, white pine and red maple
84	6130 - Fir, Aspen, Maple	High Density Sapling	18.0	15	1-50	Tornada summer 1997 left a few scattered red maple everything else down. Very good quaking aspen and white pine regeneration.

s t	Graylin	g Mgt. Unit		5 – Fo	orested Sta	Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
85	42220 - Natural Jack Pine	Medium Density Log	26.8	88	111-140	Large diameter Red and White pine pocket along the west edge of the stand with a mix of suppressed red pine regeneration. Stand transition to all Jack pine as you head east. The ground cover is mostly moss with white pine and balsam fir regeneration with a few red pine trees. remains me of a old lake bed but not possilbe due to the stands location.
87	42120 - Planted Jack Pine	High Density Sapling	8.7	16		Stand was harvested under timbersale # 720049501, and completed 5/10/96.
88	4310 - Pine, Oak Mix	Medium Density Pole	7.1	84	51-80	Stand is on the edge of the storm damage from 1997. The blown down area has been added to stand 73.
89	4123 - Red Oak	Low Density Log	43.3	86	51-80	Stand was treated under timbersale # 7030050, completed 2/2010. Treated was a sheltwood cut. Heavy deer browse on the oak stump sprouts, mild on the aspen and red maple. Did three randon regeneration survey strip while walking through the stand past no problem, there is enough oak regen. More seed orgin oak on the south facing slopes.
90	42110 - Planted Red Pine	High Density Log	9.6	67	200+	Five rows of planted red pine and planted jack pine with some residual northern pin oak between South branch road and red pine plantation.
91	4319 - Mixed Upland Forest	High Density Pole	29.0	57	81-110	No access except through the adjacent private property. Stand slope down/west toward the AuSable river heavy balsam fir and black spruce on the slope. Quaking aspen scatter and in clones throughout the stand. Small pocket of large diameter RP & WP north end. Stand has a creek on the north and south end. Found a few more large 1+ acres patches of barberry.
92	42220 - Natural Jack Pine	Medium Density Pole	47.7	50	81-110	Aerial photo starting with the 1939 shows the area as grass only "Downey's". Stand appears to have never planted allowed to fill in naturally,. Lots of scattered small grass openings. A couple of 1/2-1/4 acres planted red pine planted 1957 planting records.
93	4130 - Aspen	High Density Sapling	17.5	15		Stand was set-up for harvest in 1994 and Closed (12/31/97). No BA at this time very good aspen regeneration. Oak stump sprouts and right up there with the aspen and red maple
95	42120 - Planted Jack Pine	High Density Sapling	5.7	25		Stand was harvested with the adjacent compartment stand.
96	4124 - Red with White Oak	Low Density Log	11.1	84	1-50	Stand was treated under timbersale # 7030050, completed 2/2010. Treated was a sheltwood cut. Not as much deer browse on the oak stump sprouts as stand #81, mild on the aspen and red maple. Did a three randon regeneration survey strip while walking through the stand the stand past no problem, there is enough oak regen. Areas of tornado damage 1998.
97	42120 - Planted Jack Pine	High Density Pole	10.4	67	81-110	Jack pine diameter roages from 6-8 inched DBH. Heavy slash of dead jack pine. Stand is deteriorating.

s t	Grayling		5 – For	ested Sta	rnds Compartment: 293 Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
98	6124 - Lowland Spruce- Fir	High Density Pole	8.2	98	81-110	Stand covers the floodplain and slope on the west side of the river. Very wet near the river, pockets of cedar, gray dogwood present, & nine bark. Patches and individual plants of Japanese Barberry despersed throughout the stand.
99	6122 - Black Spruce	Medium Density Pole	9.2	72	51-80	High water table, old heavy beaver damage east edge. 1998 photos show flooding along east but completely dry at this time.
100	42120 - Planted Jack Pine	High Density Sapling	9.3	25		Planted jack pine with some oak stumps sprouts and black cherry.
101	6122 - Black Spruce	High Density Pole	13.6	48	81-110	Tag alder in the sub-acre wetland areas. A four acre mature aspen pocket north end.
102	4130 - Aspen	High Density Sapling	7.8	25		Stand harvested TS# 720758601, issued 12/86 closed 2/87. Everything two inches and larger DBH was harvested. Open area south end of stand old landing site.
103	42120 - Planted Jack Pine	High Density Pole	16.1	47	81-110	Planted jack pine shallow trenches early 30's possible CCC.  Areial photo show harvest late 60's early 70's can not find old TS information so am not sure if it was a salvage cut because of budworm or take all 4 inches and up.
104	6112 - Lowland Aspen	High Density Sapling	20.3	13		A3 stand with some white pine seeding in. Stand has regenerated after 1998 salvage cut.
105	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	12.2	14		Stand was salvage cut 1998 because of tornado. A few residual red pine and oak still standing
106	4311 - Pine, Aspen Mix	High Density Log	44.8	Uneven Age	141-170	Stand is mostly red pine with a mixed age (cored three RP trees age at DBH-66, 55 & 49) West edge is a little different caused by a tornado in 1998, the red pine was salvaged. This created a transition zone of mostly mature oak, with aspen and white pine regeneration along the west edge. Small strip of pure black spuce & balsam fir north edge adjacent to the creek. A large pocket of TA in the middle of the stand 53 years old. Found a dense pocket of Japanese Barberry ~1-2 in size.
107	42120 - Planted Jack Pine	High Density Pole	22.7	47	81-110	Budworm present but not a heavy population. Lots of deer trails with some browsing. Planted jack pine shallow trenches early 30's possible CCC. Areial photo show harvest late 60's early 70's can not find old TS information so am not sure if it was a salvage cut because of budworm or take all 4 inches and up.
108	4310 - Pine, Oak Mix	Low Density Log	32.4	98	1-50	Stand was a planted jack pine plantation with some NPO and Red pine residual scattered about. Stand salvage cut because 1998 tornado. Stand has great oak and jack pine regeneration.
110	6112 - Lowland Aspen	High Density Sapling	24.2	3		Stand cut under sale # 720130601 closed 8/12/09. Everything harvest except red and white pine. Need to do a regen survey. Regeneration survey done summer 2012 we have a fully stocked aspen stand at this time.

S t	Grayling	g Mgt. Unit		5 – Fo	orested Sta	rinds Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
111	4130 - Aspen	High Density Sapling	5.8	15		Stand was set-up for harvest in 1994 and Closed (12/31/97). No BA at this time very good aspen regeneration, with a few red pine seeding in the landing area.
112	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	6.9	25		Stand Cut by Larry BaynhamTS# 720768601, issued 12/2/86 and closed 2/28/87. All trees two inches or more in diameter were harvested. Planted Jack pineFTP 72108 completed 11/87
113	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	20.9	68	81-110	Stand borders the AuSable river. Cedar is only near the river. Pockets of red maple and sub-acre wetlands. Most of the aspen is located on the second terraces.
115	6112 - Lowland Aspen	High Density Sapling	12.5	23		Stand was set-up for harvest in 1987 and closed (04/15/89). Beaver activity has caused some flooding along the southern border of the stand. Stand drys out and is on a little higher ground along the west edge.
116	42220 - Natural Jack Pine	Medium Density Pole	6.6	84	111-140	A lot of down and dead jack pine. Lots of oak regerneration 5-15 feet tall. Deep trenches, and browse on all oak less than 3 feet tall. Most of the oak regeneration is the pin oak. The mature oak is dieing because of age.
117	4130 - Aspen	High Density Pole	15.5	68	81-110	Heart rot in most of the aspen. Stand sparse in a few areas. Should consider expanding into the adjacent compartment. Crossed two small drainages easiely crossed with the mats. Both ages taken on aspen.
118	6139 - Mixed Lowland Forest	Medium Density Log	4.7	60	81-110	Stand is located between Thayer creek and a man-made ditch. Stand is dry at this time, but I did find some Betula pumilla (bog brich).
120	4130 - Aspen	High Density Log	5.0	56	141-170	Heavy conks on all the aspen (False tinder conk, Phellinus trmulae). Stand is on top of a hill and slopes down toward Thayer Creek.
123	6112 - Lowland Aspen	Medium Density Log	15.2	72	81-110	Final harvest heavy heart rot, Dense pocket of cedar middle of the stand about an acre in size. Stand has a few scattered white pine, and a few small pockets of red pine along the west edge.
124	6127 - Lowland Pine	Medium Density Log	5.0	68	51-80	Sub-acre wetland area in middle of stand. Stand starts out as aspen and white pine, then changes to black spruce/white pine and some aspen & jack pine, skip to the next island mostly red white pine. Stand is split between two old stream channels
125	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	7.4	68	51-80	Stand covers the slope leading down to thayer creek.
129	4136 - Aspen, Mixed Conifer	High Density Sapling	14.5	26		Part of timber sale # 720778601 (three small stand totaling 34 acres) cut by Larry Baynham. Stand was set up 12/86 and closed 2/28/87. There is a small pocket of large 26+ dia Red pine west side of two-track then just north of the red pine is a pocket of black spruce & balsam fir regen. In addition scattered white pine throughout the stand. In addition there are a couple wet pocket with tag alder.

s t	Grayling	Grayling Mgt. Unit			rested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
130	6112 - Lowland Aspen	High Density Sapling	10.9	30	1-50	stand cut - left cedar, some aspen & spuce/fir. 180 BA CEDAR pocket. Almost no BA of aspen all to small in diameter
133	42210 - Natural Red Pine	Medium Density Pole	7.7	Uneven Age	111-140	
134	4133 - Aspen, Mixed Pine	High Density Log	48.2	77	111-140	East of ski trail stand slopes down toward the river, with a heavy balsam fir understory. White pine regen is variable in density. Stand will converting to balsam/spruce stand. Stand has a few sub-acre wetlands.
135	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	19.3	68	81-110	Stand slopes toward thayer creek, and you start picking-up wild raisin, tag alder & cinnamon fern. Most of the jack pine is on the ground the rest will be soon. Jp was allowed to die red maple and quaking aspen filling in (red maple winning)
136	4130 - Aspen	High Density Sapling	7.9	35		Part of timber sale # 720778601 ( three small stand totaling 34 acres) cut by Larry Baynham. Stand was set up 12/86 and closed 2/28/87
137	42210 - Natural Red Pine	High Density Log	27.2	94	111-140	Stand adjacent to Chapel. Stand could be thinned, but this would be a good canidate to allow go to ecological maturity.
138	6112 - Lowland Aspen	Low Density Pole	39.7	52	51-80	Steep slope down to Thayer creek. More white pine in the sub- canopy on the south side of road. Jp falling a part with some oak sapling.
139	42120 - Planted Jack Pine	High Density Sapling	2.9	22		
140	42220 - Natural Jack Pine	Low Density Pole	8.6	84	1-50	Mason Tract fire summer 1995, did not kill all the trees and we only salvage the dead trees. There are areas of heavy down and dead JP. Dense pockets of jack pine regen mix with some quacking aspen.
141	42110 - Planted Red Pine	Low Density Log	7.4	75	51-80	Stand was an intermixed jack pine / red pine plantation with a few white pine trees. Stand was treated last YOE everything was harvested except the red & white pine
143	6139 - Mixed Lowland Forest	High Density Sapling	13.9	25	1-50	Planted jack pine with some red pine mixed in. Heavy white pine, pin oak and white oak understory. Mature planted jack & red pine low density most of the jack pine has died and is on the ground. The white pine and oak regeneration is healthy and vigourous.
144	42110 - Planted Red Pine	High Density Log	12.0	47	141-170	Red pine plantation planted in 1965. Needs to be thinned
145	4199 - Other Mixed Upland Deciduous	High Density Sapling	5.7	25		Stand was cut during the winter of 1986-87 but was never replanted.

S t	Grayling	Grayling Mgt. Unit			orested Sta	nds Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
146	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	5.0	58	51-80	Over all the stand is a lowland mix, but the northwest corner is on a hillside and is very dry. Front part of stand is heavy with white pine regen (35 yrs). Then stand changes into more mix of red maple, black spruce, balsam poplar. Ground is soft ground with heavy fern cover mostly Cinnamon, but did find some Sensitive and Interupted fern.
147	4191 - Mixed Upland Deciduous with Conifer	Low Density Log	6.0	89	1-50	Wildfire 20 years at leastwhite pine regen 16 years old
148	4130 - Aspen	High Density Sapling	7.9	4	1-50	Stand cut under sale # 720130601 closed 8/12/09. Everything harvest except red and white pine, a few of the aspen were also left. Need to do a regen survey. Stand is OK heavy aspen regen with some white pine.
149	4130 - Aspen	High Density Sapling	7.6	3		Stand cut under sale # 720130601 closed 8/12/09. Everything harvest except red and white pine. Need to do a regen survey. Regeneration survey done 7/30/2010-Stand is 95 percent aspen with a few residual red and white pine trees
150	42220 - Natural Jack Pine	High Density Sapling	6.7	20	1-50	Planted jack pine with some residual red & white pine scattered about. A small area at the southwest is planted red pine. South boundary follows the Mason Tract fire's plowline.
151	4134 - Aspen, Spruce/Fir	Medium Density Log	46.0	68	81-110	heavy heart rot aspen, scattered dense pocket of Balsam fir, few wet areas, Black ash mostly dead (EBA)
152	4130 - Aspen	High Density Sapling	14.4	12		Unit two of Mason Tract North (720729401) issued 12/94 closed 5/96. All stands final harvested.
153	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	19.5	77	111-140	Stand mostly consist of over-mature aspen and dense pockets of pole size balsam fir and red maple. Heart rot in all the aspen. Stand does have a few sub-acres ephemeral wetlands. Stand also has a few sub-acre pockets of 20-30 inch red and white pine
155	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	35.5	73	111-140	History of this stand is interesting. The stand was gifted to the state in the 50's but before we acquired portions of this stand was harvested and replanted with red pine around the residual trees. In the north part of the stand all the aspen was cut back in the 70's based on the age no cut record found. Super canopy stand of red and white pine with a good mix of regeneration. A large portion of the planted red pine is suppressed
156	42250 - Pine, Oak	High Density Sapling	67.3	17		Mix regeneration after the mason tract fire summer 1995. A large pocket of dead jack pine southwest corner (Root Collar Weevil) Health report has been submitted.
157	42111 - Planted Red Pine, Mixed Deciduous	Medium Density Log	17.1	55	141-170	Majority of stand is planted 55 year old red pine. Red pine supressed by over-mature aspen in the south and east parts of the stand. The aspen is heavily infected with black canker, heart rot & hypoxylon. Planted red pine in the north is growing exceptionally well, where it drops down into a low area. Super canopy red and white pine throughout. Smaller diameter white pine stressed, lots of flagging in denser pockets.

s t	Grayling Mgt. Unit			5 – For	ested Sta	Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
158	6127 - Lowland Pine	Medium Density	6.0	17	1-50	A strip of large 30+ dia RP & WP along the edge. There is also a small less than a wet area marked with OFS point filled with tag alder. Outside the wet area the stand is filled with white pine & balsam fir regeneration heavy in spots with a scattering of other species.
159	4112 - Maple, Beech, Cherry Association	High Density Sapling	4.4	3		Stand cut under sale # 720130601 closed 8/12/09. Everything harvest except red and white pine. Need to do a regen survey. Regeneration survey was done during standard OI field review. Compartment review said we would accept a mix of regeneration. Stand is regenerating to a nice mix of species "see canopy species" Some pole size red maple and white pine was left.
160	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	25.9	68	81-110	Most of the black as is dead EAB, but the is a nice shrub layer of wild raisin. Harvesting the aspen would help enhance the wildlife habitat both for hunting and wildlife observation purposes. Heavy deer browse on the wild raisin & pricky ash.
161	6122 - Black Spruce	High Density Sapling	16.1	53	1-50	heavy balsam fir with a few scattered mature Northern White Cedar and White Pine trees. Stand is in the first flood zone adjacent to AuSable river. The tree and slow growing, high water table. Stand has the potential for heavy mortality during drought year because of the fluctuating water table. There is signs of it having occured before (stand dead and down saplings)
162	6112 - Lowland Aspen	Medium Density Log	6.5	55	51-80	A few large diameter Quaking Aspen and Red pine on slope leading down into stand 173. Conks already forming on the aspen trees.
164	4130 - Aspen	High Density Sapling	4.9	35		Stand final harvested mid 70' aspen not doing as well as expected averaging 4 inch at DBH, left white pine and oak and scattered aspen both BT & TA. Small pocket of red pine east side. Ski trail run throught stand.
165	6139 - Mixed Lowland Forest	High Density Pole	28.4	70	81-110	Lots of dead and down aspen and standing snags. Heavy pockets of BF and Red maple regeneration. Aspen is disappeaing and stand is converting to a white pine/red maple/baslam fir/black spruce stand. Small drainage south end adjacent to stand 182
166	6124 - Lowland Spruce- Fir	High Density Sapling	29.4	35	1-50	All ages and at DBH (Red Pine 90, Quaking Aspen 87, Balsam fir & Black spruce 35). stand is the natural river's vegetation strip when the adjacent stand was havested.
167	6124 - Lowland Spruce- Fir	High Density Pole	12.3	76	111-140	Heavy heart rot in the aspen, Balsam fir dia (4-6 inches, straight averaging 2-3)
168	6127 - Lowland Pine	Medium Density Log	8.4	68	81-110	Bunchberry in the ground cover. White pine scattered throughout stand but very dense in a few pockets. Sub-acre bog northeast part of stand. Overall stand is dry and is a mix of white pine/black spruce stand is treatable.
169	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	39.1	Uneven Age	111-140	Old plantation ready too final harvest replant. Mostly RP with pockets of aspen & red maple

S t	Grayling		5 – Fo	orested Sta	nds Compartment: 293 Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
170	6120 - Lowland Cedar	High Density Log	4.2	132	171-200	Some planted NWC along the river edge mostly "Frinds of the Ausable". Cinnamon fern in the ground cover. Stand mostly a cedar stand with a dense pock of Black spruce along the east side with heavy Black spruce and Balsam fir sub-canopy. No visiable natural cedar regeneration.
171	42210 - Natural Red Pine	Low Density Sapling	4.8	17	1-50	Stand treated last YOE left a few scattered island and super- canopy red pine. Good oak regen except for the heavy deer browse even on the volunteer jack pine. Still enough to pass the regen check.
172	6122 - Black Spruce	Low Density Log	5.2	74	1-50	Stand appears to have some sub-surface flow ground is soft.  Lots of Cinnamon fern in the ground cover.
173	4130 - Aspen	High Density Sapling	12.3	16		Unit four fo Mason Tract North (720729401) issued 12/94 closed 5/96. A few red and white pine trees were left.
174	4130 - Aspen	High Density Sapling	9.5	25		Stand Cut by Abitibi TS# 720828601, issued 12/10/86 and closed 11/25/87. All trees two inches or more in diameter were harvested.
176	4130 - Aspen	High Density Pole	19.9	26	111-140	Lots of hypoxyon and black canker fungusHypoxylon mammatum & Ceratocystis fimbriata
177	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	11.2	78	51-80	Stand has a lot of characteristic of an ephemeral wetland with a few easily identifiable sub-acre wetlands. Ground becomes solfter as you head south and you pick up more black spruce and quaking aspen.
178	42110 - Planted Red Pine	High Density Sapling	8.6	24	51-80	Stand was final harvested 1986-87. Then trenched and planted to Red pine around the residual red and white pine (completed 11/87) FTP 72-184
179	4130 - Aspen	High Density Pole	6.9	26	111-140	heavy black canker
180	6112 - Lowland Aspen	Low Density Log	10.1	68	1-50	Open areas with black cherry, black spruce along the edge of stand 189. A few black spruce in the interior with a few seeding in. Found one pin oak. Some residual aspne which was not cut with the adjacent A3 stand. A few nice dense pocket of RP. Part of the stand was flooded freom Beaver activity late 80's.
181	4134 - Aspen, Spruce/Fir	High Density Sapling	7.6	3		Final harvested 2008-2009
182	6123 - Lowland Fir	High Density Log	48.4	37	111-140	Stand slopes down toward the AuSable River then levels off for 200-300 feet before reaching the river's banks. Stand starts out with white pine with balsam fir understory, then changes to over mature aspen with heavy understory of 1-3 stick Balsam fir. There is a small pocket of cedar 20+ dia and again heavy balsam fir understory which is showing signs of stress due to the higher water table this is easily ID on the IR photos. Pricky ash & wild raisin along the river bank. Stand has areas of wetlands sub-acres in size.

S t	Grayling	Grayling Mgt. Unit			orested Sta	nds Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
183	42210 - Natural Red Pine	Medium Density Log	11.2	56	141-170	All the aspen was harvested last YOE. With very good aspen regen. Stand is now a mixed age of red pine, with a small area of planted red pine along the west edge.
184	4130 - Aspen	High Density Sapling	9.4	4		Final harvested last YOE. A few scattered individual aspen & balsam fir plus retention island.
185	6124 - Lowland Spruce- Fir	Medium Density Pole	12.5	76	51-80	Stand has influence over the 1st flood plain south side of the AuSable River. Large 30+ diameter white pine covers the slope then transition into more Black spruce, Balsam fir, Cenar and some paper birch. What you see from the river is cedar spruce with large white pine towering over them. A heavy balsam fir sub canopy makes the stand appear to be fuller on the photos than the stand actually is.
186	4130 - Aspen	High Density Sapling	9.2	23		Stand was set up for harvest in 1987 and closed (4/15/89) TS# 720618701. All trees 2 inches and larger were harvested.
187	4130 - Aspen	Medium Density	9.2	3		
188	6112 - Lowland Aspen	Low Density Log	18.5	77	1-50	Stand covers the slope leading down to the Ausable River and the floodplain along the river. Floodplain has large dia cedar and dead/dying black ash. West part of stand pick up more oak and red pine.
189	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	8.5	55	51-80	Just a few of the black ash ares still alive. Stand is more like an ephemeral wetland which temporarily hold water in the spring and early summer or after heavy rains, and drys up during midlate summer.
190	6120 - Lowland Cedar	High Density Log	48.1	122	171-200	Mostly NWC with scatterd paper brich. Stand rises a couple of feet creating a narrow strip before you reach the river which has very little cedar but is dominated by balsam fir and black spurce. Where there was any open area heavy balsam fir regen. Found two cedar seedling only
192	4125 - Black, N. Pin Oak	High Density Sapling	7.3	5	1-50	Stand was unit IV harvest under timbersale 720110601. All trees 2 inches and larger were cut except for green marked and balsam fir. Good oak regeneration easily pass regen survey. Heavy deer browse. Sweet fern and blueberry ground cover
193	4130 - Aspen	High Density Sapling	7.5	6		Unit three of Mason Tract North (720729401) issued 12/94 closed 5/96. All stands final harvested.
194	4130 - Aspen	High Density Sapling	10.4	25		Stand Cut by Abitibi TS# 720828601, issued 12/10/86 and closed 11/25/87. All trees two inches or more in diameter were harvested.

Grayling		5 – Fo	rested Sta	rnds Compartment: 293 Year of Entry: 2014	
Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
6127 - Lowland Pine	High Density Log	18.7	86	171-200	White pine is located mostly down by the river. Stand was marked last YOE but pulled because of the cost to installing a portable bridge. We no longer need to contract road work and bridge installation because of the crane mat the State has purchased. Already have a pocket of dead and dying red pine cause by Bark Beetle. Need to remove stressed tree and create more space between the remaining trees for forest health
42210 - Natural Red Pine	High Density Log	5.6	50	141-170	Small area planted around residual super canopy red pine with a few scattered oak and jack pine trees.
6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	5.3	15		Stand was set-up for harvest in 1994 and Closed (12/31/97). No BA at this time very good aspen regeneration, with a few red pine seedings, balsam fir, white pine and black spruce seedings.
42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	6.8	24	1-50	Stand was final harvested 1986-87. Then trenched and planted to Red pine around the residual oak (completed 11/87) FTP 72-184
6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	11.2	37	81-110	Most of the large diameter White pine and NPO are along the river. Lots of gooseberry also along the river bank. Most of the black ash and aspen is dead. Stand has sub-acre wetlands.
6124 - Lowland Spruce- Fir	Low Density Log	65.2	78	1-50	Stand looks better from the edges over all sparse with scattered mature trees and heavy balsam fir & black spruce regen with pockets of tag alder & black ash which is already hit with EAB.
6130 - Fir, Aspen, Maple	Medium Density Log	13.0	84	51-80	Stand keeps change for standing water to dry. Black spruce and Balsam fir on the drier sites with a little aspen. Red Maple on the wetter areas.
4130 - Aspen	High Density Sapling	9.7	4		Final harvested all aspen 2008. Stand was treated under TS# 720360601. All trees two inches or larger were harvested except for red pine, white pine and ash.
6123 - Lowland Fir	Low Density Pole	5.0	36	1-50	No sure what happen here no records indicating stand was treated but the balsam fir is 36 years old and DBH. Found one stream and on seep with some old beaver damage.
4125 - Black, N. Pin Oak	Medium Density	6.2	25	1-50	Final harvested 1986-87. Left scattered white pine.
4311 - Pine, Aspen Mix	Medium Density Log	38.1	75	81-110	Small wet area. Heart rot in most of the aspen. Pockets of red pine (BA 60-90). Couple of small drainages with defined channels and banks.
6130 - Fir, Aspen, Maple	Low Density Log	13.6	75	1-50	Found a old road which leads down to the AuSable River. Stand is a mix of sparse of large QA, WP, RP and pole size QA & BF. What stands out is the balsam fir sup-canopy
4130 - Aspen	High Density Sapling	6.3	25		Stand Cut by Abitibi TS# 720828601, issued 12/10/86 and closed 11/25/87. All trees two inches or more in diameter were harvested.
	Cover Type  6127 - Lowland Pine  42210 - Natural Red Pine  6117 - Lowland Deciduous, Mixed Coniferous  42111 - Planted Red Pine, Mixed Deciduous  6128 - Lowland Coniferous, Mixed Deciduous  6124 - Lowland Spruce-Fir  6130 - Fir, Aspen, Maple  4130 - Aspen  6123 - Lowland Fir  4125 - Black, N. Pin Oak  4311 - Pine, Aspen Mix	Cover TypeDensity6127 - Lowland PineHigh Density Log42210 - Natural Red PineHigh Density Log6117 - Lowland Deciduous, Mixed ConiferousHigh Density Sapling42111 - Planted Red Pine, Mixed DeciduousHigh Density Pole6128 - Lowland Coniferous, Mixed DeciduousLow Density Pole6124 - Lowland Spruce- FirLow Density Log6130 - Fir, Aspen, MapleMedium Density Log4130 - AspenHigh Density Sapling4125 - Black, N. Pin Oak 4311 - Pine, Aspen MixMedium Density Log6130 - Fir, Aspen, MapleLow Density Log4311 - Pine, Aspen MixMedium Density Log6130 - Fir, Aspen, MapleLow Density Log4130 - AspenHigh Density Log	Cover TypeDensityAcres6127 - Lowland PineHigh Density Log18.742210 - Natural Red PineHigh Density Log5.66117 - Lowland Deciduous, Mixed ConiferousHigh Density Sapling5.342111 - Planted Red Pine, Mixed DeciduousHigh Density Pole6.86128 - Lowland Coniferous, Mixed DeciduousHigh Density Pole11.26124 - Lowland Spruce- FirLow Density Log65.26130 - Fir, Aspen, MapleMedium Density Log9.76123 - Lowland FirLow Density Pole5.04125 - Black, N. Pin Oak 	Cover Type         Density         Acres         Age           6127 - Lowland Pine         High Density Log         18.7         86           42210 - Natural Red Pine         High Density Log         5.6         50           6117 - Lowland Deciduous, Mixed Coniferous         High Density Sapling         5.3         15           42111 - Planted Red Pine, Mixed Deciduous         High Density Pole         6.8         24           6128 - Lowland Coniferous, Mixed Deciduous         High Density Pole         11.2         37           6124 - Lowland Spruce- Fir         Low Density Log         65.2         78           6130 - Fir, Aspen, Maple Medium Density Log         13.0         84           4130 - Aspen         High Density Hog         5.0         36           4125 - Black, N. Pin Oak Density Pole         Medium Density         6.2         25           4311 - Pine, Aspen Mix Density Log         Medium Density Log         38.1         75           6130 - Fir, Aspen, Maple Low Density Log         13.6         75           4130 - Aspen High Density         6.3         25	Cover Type         Density         Acres         Age         Range           6127 - Lowland Pine         High Density Log         18.7         86         171-200           42210 - Natural Red Pine         High Density Log         5.6         50         141-170           6117 - Lowland Deciduous, Mixed Coniferous         High Density Sapling         5.3         15           42111 - Planted Red Pine, Mixed Deciduous         High Density Pole         6.8         24         1-50           6128 - Lowland Spruce- Fir         Low Density Pole Log         65.2         78         1-50           6130 - Fir, Aspen, Maple Fir         Medium Density Log         13.0         84         51-80           6123 - Lowland Fir         Low Density Sapling         9.7         4         4           6123 - Lowland Fir Pole         Low Density Sapling         5.0         36         1-50           4125 - Black, N. Pin Oak Pole         Medium Density         6.2         25         1-50           4311 - Pine, Aspen Mix Density Log         13.6         75         1-50           6130 - Fir, Aspen, Maple         Low Density Log         13.6         75         1-50

S t	Grayling	Grayling Mgt. Unit				Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
211	4130 - Aspen	High Density Sapling	18.6	25		Black canker is heavy in a lot of the stand.
212	6122 - Black Spruce	Low Density Log	7.5	97	1-50	Spongy ground, heavy balsam fir regen. Cored black spruce87 DBH ten years to reach DBH.
213	4119 - Mixed Northern Hardwoods	Medium Density	10.7	25	1-50	Stand split off of stand #209. small pocket of mature oak & white pine northwest corner. Flagging on the white pine. Stand cut late 80s oak was left most is on the ground now.
214	4125 - Black, N. Pin Oak	Medium Density	14.1	4		Stand was unit III harvest under timbersale 720110601. All trees 2 inches and larger were cut except for green marked and balsam fir.
216	42290 - Natural Mixed Pine	Low Density Log	7.7	56	1-50	Final harvested 2008 leaving all white pine & red pine. Stand was treated under TS# 720360601. FTP 72-607Plant jack pine where no natural regeneration has occurred. Furrow all landings and skid trails. Completed 5/2010. No natural regeneration has happen. Need to trench and plant.
217	42210 - Natural Red Pine	High Density Pole	19.1	86	200+	White pine is located mostly down by the river. Stand was marked last YOE but pulled because of the cost to installing a portable bridge. We no longer need to contract road work and bridge installation because of the crane mat the State has purchased. Need to remove stressed tree and create more space between the remaining trees for forest health
218	4123 - Red Oak	Low Density Log	119.4	84	1-50	Shelterwood cut left all red and white pine plus all green marked trees. Sale issued 12/07 closed 7/10. Harvested by AJD. Very good regeneration a mix of aspen, oak, white pine and red maple. Areas of heavy oak seedlings less than 3 feet. Oak corwns look healthy no sign of stress.
219	6120 - Lowland Cedar	High Density Log	4.3	111	81-110	Sphagnum moss ground cover, spongy soil no cedar regeneration.
221	42360 - Upland Cedar	High Density Pole	6.3	122	171-200	Lots of daown and dead cedar in places with on cedar regeration visible. Dead cedar along river edge.
222	4130 - Aspen	High Density Pole	14.5	25	51-80	Stand harvested TS# 720608701, issued 12/86 closed 12/87. Everything two inches and larger DBH was harvested
223	6124 - Lowland Spruce- Fir	Medium Density Pole	25.2	36	1-50	Tamarack along the edges and a little as you enter the stand, then it changes to mostly Black spruce with a few Balsam fir with large areas of cedar. The stand is a results of the long term beaver activity in the area.
224	4130 - Aspen	High Density Sapling	10.4	25		Aspen final harvested Stand Cut by Abitibi TS# 720828601, issued 12/10/86 and closed 11/25/87. All trees two inches or more in diameter were harvested.
225	42120 - Planted Jack Pine	High Density Sapling	5.2	25		Harvested 1986-87. Planted jack pine (J3)

s t	Grayling	g Mgt. Unit		5 – Fo	orested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
226	6122 - Black Spruce	Medium Density Log	7.7	78	51-80	Soft ground with interrupted fern with a few small pockets of tag alder & gray dogwood.
227	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Sapling	11.9	36	1-50	Change to forested stand 6/25. Stand is a bit of a catch all _Starts out with A3 ( 2" dia), then transition into areas with WP, BS, RP open grown (5-10 feet tall, 4" dia) with scattered A5 (7" dia) then transitions into a mix BS & QA with some small pockets of tag alder.
228	6112 - Lowland Aspen	Medium Density Log	74.4	41	81-110	Aspen stand intermixed with pockets of BF & BS. A slight elevation change of just a few feet is the only different beween solft spongy and high/dry ground. Most of the aspen is 41 years old with a few mucher older 60s to rotten in the center can not age.
229	42210 - Natural Red Pine	Low Density Log	18.2	109	1-50	Overstory dominated by large diameter white, red pine with some oak and aspen. Found two RDR where soil is entering the AuSable River caused by foot traffic for fishing and have been entered into the RDR database. Stand is mostly on a slope facing the river. One hundred year old plus red and white pine stand out, understory is dominated by balsam fir and black spruce. A foot trail runs along the top of the slope and there is some planted row of red pine on the south south of trail.
230	4130 - Aspen	Medium Density Log	13.0	68	81-110	Most of the oak is along the ski trail. Aspen starting to break-up, pockets of hypoxlyon.
231	4191 - Mixed Upland Deciduous with Conifer	Low Density Log	16.9	46	51-80	Stand is a mix bag with small ridges and appears to have been treated at on time (all red maple cut?) no records found. Heavy red maple sub-canopy with more oak aong the road. Also stand has quite a lot of dead oak root rot.
232	42110 - Planted Red Pine	Low Density Log	20.8	78	1-50	All the jack pine was harvested last YOE leaving all red & white pine. Stand has been trenched and planted to jack pine.
235	4130 - Aspen	High Density Sapling	12.5	15		Stand was set-up for harvest in 1994 and Closed (12/31/97). No BA at this time very good aspen regeneration, with a few red pine seeding in at the landing area. A few sparse areas in the interior portion of the stands.
236	42120 - Planted Jack Pine	Medium Density	7.1	25	1-50	Harvested 1986-87 and then Planted jack pine (J3). The south 165 feet was purchased in 1992 and harvested and plant with jack pine last YOE. The south portion has some scattered pole size red pine and sapling size balsam fir residual.
237	4130 - Aspen	High Density Sapling	5.6	15		stand final harvested as part of timber sale 720719401 issued 12/94 closed 12/97. All trees 2 inches and larger were harvested.

S t	Grayling	Grayling Mgt. Unit			orested Sta	rinds Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
238	42210 - Natural Red Pine	Low Density Log	22.4	79	1-50	Final harvested 2008 leaving all red & white pine and black spruce. More red pine in this part approximately 30% crown cover. Stand was treated under TS# 720360601. All trees two inches or larger were harvested except for red pine, white pine, spruce and ash. FTP 72-607Plant jack pine where no natural regeneration has occurred. Furrow all landings and skid trails. Completed 5/2010. Stand failed first regen check and was replanted 2012.
239	4191 - Mixed Upland Deciduous with Conifer	Low Density Log	8.4	92	1-50	Fire killed most of the stand. A few large oak and red pine scattered about. Lot of suppressed red pine and dead white pine in the sub-canopy. Areas of nice oak seedlings.
240	6112 - Lowland Aspen	High Density Pole	49.8	59	111-140	Found an un-mapped intermitten seasonal stream. Heavy wet soild around the black ash. EAB is present and just getting started. Would be very beneficial to wildlife to harvest aspen. Access would be difficult, stand would have to be entered from the north and south.
241	4130 - Aspen	High Density Pole	5.9	25	51-80	Stand just becoming pole size. Stand harvested TS# 720798601, issued 12/86 closed 2/87. Everything two inches and larger DBH was harvested.
242	6122 - Black Spruce	Low Density Pole	8.1	38	1-50	Young black spruce stand with wet areas and staghum moss as ground cover
243	4199 - Other Mixed Upland Deciduous	Medium Density	9.7	34	1-50	Stand harvested 1978. Left a few white pine and oak.
244	6122 - Black Spruce	High Density Pole	9.9	48	81-110	Mix of log size cedar and black spruce with a little bit of red maple. Stand is close to Douglas creek and includes a few scattered paper birch and Balsam Popular. Ground is to wet now could be a lot drier in the summer.
245	6127 - Lowland Pine	High Density Log	5.4	82	171-200	Aspen on the edges only-can tell this stand was planted because trees do not grow in a straight lines.
246	4130 - Aspen	High Density Pole	4.8	34	111-140	Mature bigtooth on the south edge about 0.5 chain width which was not treated with the adjacent harvest. Most of the oak is dying out. Red maple stump and individual in both canopy & sub-canopy. Stand was treated at the same time stand 230 just less oak. More pine and oak west side.
247	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	26.3	45	111-140	Stand has a few wet areas. Stand also appears to have been final harvested (all pine) turn of the century, then all aspen and hardwood taken around 1967.
248	4199 - Other Mixed Upland Deciduous	Medium Density Log	12.2	87	81-110	Stand should have been treated with the adjacent harvest. Pocket of few large dia white pine northwest side of the road. The remaining stand is a mix of Oak, Aspen & red maple with heavy pockets of red maple and white pine regeneration.
249	42120 - Planted Jack Pine	Medium Density Pole	28.3	62	81-110	Red paint along the boundary. Heavy deer brouwse on all oak 5 feet and less in height.

S t	Grayling	g Mgt. Unit		5 – For	rested Sta	nds Compartment: 293 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
250	4126 - White, Black, N. Pin Oak	Medium Density Log	20.4	128	81-110	Stand was harvested at one time everything cut but the white oak. Areas of pure white oak. Aspen breaking up. Areas of heavy white oak seedlings 1-3 feet tall. South facing slope. Lots of witch Hazel, no visible deer browse.
251	4131 - Aspen, Oak	High Density Sapling	10.7	16		Unit six of Mason Tract North (720729401) issued 12/94 closed 5/96. All stands final harvested.
252	42220 - Natural Jack Pine	High Density Log	9.1	83	81-110	Jack pine past its ecologcial mature punky in the center with dwarf mistletoe on a few of the trees. Stand also has a few nice red pine scattered throughout the stand.
253	42120 - Planted Jack Pine	High Density Sapling	34.5	Uneven Age		Harvested 1986-87. Planted jack pine (J3)
254	42120 - Planted Jack Pine	Medium Density Pole	4.9	30	1-50	Stand is a jack pine plantation (hard to tell) planted around residual oak. Sizable areas failed. More white pine on slop leading down toward the creek which is in the adjacent stand.
255	4130 - Aspen	High Density Log	2.6	68	111-140	Small BTA stand. Heart rot starting to show. Should final harvest now.
256	4131 - Aspen, Oak	Medium Density	50.2	5		Stand was units I & II harvest under timbersale 720110601 closed 2008. All trees 2 inches and larger were cut.
258	4310 - Pine, Oak Mix	Medium Density Log	9.7	72	81-110	Lots of jack pine & oak on the ground (root rot). Heavy sub- canopy of mixed pine, oak close to the road.
259	42110 - Planted Red Pine	High Density Pole	48.2	30	171-200	Planted red pine. Need to thin/third row
260	4319 - Mixed Upland Forest	High Density Log	74.7	76	1-50	1st floodplain from the river wet soil. Most of the black as is already dead. Stand is a mix of areas of mature trees and areas of just the sub-canopy. Large dia 25+ white pine stand out.
261	42290 - Natural Mixed Pine	High Density Log	10.3	111	111-140	Heavy slash, with lots of dead and downed jack pine
262	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	27.7	120	81-110	First plot 30 BA dead oak- which is very similar throughout the stand the oak is dying. Very good advance oak regen. Couple pockets of BT aspen (170 BA)
263	42260 - Natural Pine, Mixed Deciduous	Low Density Log	14.1	120	51-80	A very alluring stand, large diameter very tall white pine trees scattered, with a mix of paper birch, red maple and quaking aspen. Pick up more red maple as you get closer to the river. Heavy balsam fir regeneration.
264	42100 - Planted White Pine	Low Density Sapling	8.8	35		Stand was treated under TS# 720360601. All trees two inches or larger were harvested except for red pine, white pine. FTP 72-607Plant jack pine where no natural regeneration has occurred. Furrow all landings and skid trails. Completed 5/2010

s t	Graylin	g Mgt. Unit		5 – For	ested Sta	Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
265	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	17.5	68	81-110	Stand is mainly a Aspen, Red maple & Balsam fir stand with a few scattered super-canopy Red & white pine. Stand also includes a couple small seasonal wet areas.
266	429 - Mixed Upland Conifers	High Density Log	30.5	78	111-140	Strips of trench and Planted black spruce poor survival (36 years at DBH add 10 because of SI planted late 60). Over all a mix stand along the river of big white pine with some red pine mixed in with areas of very mature oak, jack pine (78 DBH) and aspen.  Lots of down jack pine. All ages at DBH.
269	429 - Mixed Upland Conifers	Medium Density Pole	20.6	40	51-80	Pockets of oak regeneration scattered with some cedar along the river. Stand mostly BF, BS & JP with heavy BF & WP sub canopy. Heavy pockets of balsam fir with sparse area between which imitate human activity such as some type of harvest which helps explain the areas of oak regeneration and hevy pockets of BF.
270	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	36.8	44	81-110	Stand consist of a cleared area of old beaver activity with no regeneration, a couple acres stand of 36 year old planted black spruce, small pockets of 83 years old jack pine, scattered 30+diameter white pine and lots of mid 40 year old quaking aspen, balsam fir and white pine. Also a small area of black ash close to the chase bridge access site no EAB present at this time.
271	4130 - Aspen	High Density Sapling	4.7	24		Aspen regeneration which was not planted when adjucent stand 256 was planted 10/88.
272	42120 - Planted Jack Pine	High Density Sapling	8.6	24		Stand was final harvested 1987 and trenched and replanted to jack pine 10/88
273	42120 - Planted Jack Pine	High Density Sapling	4.8	24		Stand was final harvested 1987 and planted jack pine 10/88
274	42220 - Natural Jack Pine	Medium Density	20.8	Uneven Age	51-80	More mature Jack pine on the south side of the road. The older JP to be my seed source for the thirty year old Jack pine. Can not find or see any burn scars or much downed jack pine which leads to to believe that portions of this stand was harvested back in the 70's.

# 6 - Nonforested Stands

Compartment: 293 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	6220 - Alder/willow	1.7	No	Unspecified	
23	3102 - Grass	1.1	No	Unspecified	
25	50 - Water	6.1	No	Unspecified	
32	3102 - Grass	2.0	No	Unspecified	
40	11 - Low Intensity Urban	21.5	No	Unspecified	
48	11 - Low Intensity Urban	1.9	No	Unspecified	
70	11 - Low Intensity Urban	1.6	No	Unspecified	
74	6220 - Alder/willow	7.1	No	Unspecified	
77	3102 - Grass	0.9	No	Unspecified	
86	3102 - Grass	1.5	No	Unspecified	
94	6220 - Alder/willow	18.7	No	Unspecified	
109	6220 - Alder/willow	2.7	No	Unspecified	
114	50 - Water	13.1	No	Unspecified	
119	50 - Water	15.5	No	Unspecified	
121	50 - Water	103.4	No	Unspecified	
122	50 - Water	5.8	No	Unspecified	
126	50 - Water	9.0	No	Unspecified	
127	6220 - Alder/willow	4.8	No	Unspecified	

# 6 - Nonforested Stands

Compartment: 293 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	MICHIGAN
128	6220 - Alder/willow	8.3	No	Unspecified		
131	6220 - Alder/willow	7.5	No	Unspecified		
132	6225 - Bog	1.1	N\A	Unspecified		
142	6225 - Bog	0.9	No	Unspecified		
154	3302 - Low Density Conifer Trees	7.2	No	Unspecified		
163	6220 - Alder/willow	6.4	No	Unspecified		
175	6220 - Alder/willow	7.9	No	Unspecified		
191	6220 - Alder/willow	5.1	No	Unspecified		
197	6220 - Alder/willow	5.3	No	Unspecified		
199	6220 - Alder/willow	28.3	No	Unspecified		
206	3301 - Low Density Deciduous Tree	2.7	No	Unspecified		
215	6239 - Mixed Emergent Wetland	31.5	No	Unspecified		
220	6239 - Mixed Emergent Wetland	36.4	No	Unspecified		
233	6220 - Alder/willow	3.1	No	Unspecified		
234	6239 - Mixed Emergent Wetland	17.6	No	Unspecified		
257	3105 - Mixed Upland Herbaceous	5.3	No	Unspecified		
267	6221 - Fen	2.6	No	Unspecified		
268	3102 - Grass	7.4	No	Unspecified		
						<u> </u>

Grayling Mgt. Unit

Compartment: 293 Year of Entry: 2014



# 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.

Stand	SCA Type	SCA Name	Acres	Comments
263	Unique Site - SCA	72293263	14.1	

# Compartment: 293 Year of Entry 2014

ERA = Ecological Reference Area



### **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.

Conservation Type Area		Description	HCVA = High Conservation Value Area SCA = Special Conservation Area	
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish space year to year. Coldwater streams in Michigan typically provide contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	pecies (e.g., slimy sculpin) to persist from these conditions due to substantial	
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or hear State Forest campgrounds, motorized and non-motorized trai access sites.		
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific marules, as governed by Part 5, Department of Natural Resource 324.504). Section 38 of the Administrative Procedures Act (M the promulgation of rules. This is an active program, with one DNR.	es, of the NREPA (MCL 324.502(2) and ICL 24.238) provides for public requests for	
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and council U.S. Fish and Wildlife service for the recovery of threatened a 365, Endangered Species Protection, of the Natural Resource PA 451, and the Federal Endangered Species Act of 1973. The species plans in various stages of review. As of now only two Plover Habitat.	and endangered species, as governed by Part es and Environmental Protection Act, 1994 his is an active program, with proposed	
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from approved distance from the river centerlines. The Natural Rivers to Natural Rivers. The Vegetative Buffer ranges from 25 to and Vegetative Buffers for each Natural River see the table to folder.	vers Zoning District is a 400 foot buffer for to 100 feet. To view specific Zoning Districts	
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and proposed for legal dedication, but for which legal dedication be nomination process is defined by Part 351, Wilderness and N Environmental Protection Act, 1994 PA 451. The program is a require the submittal of a Natural Areas Nomination Packet to proposed sites in various stages of review. Final dedication of Areas is accomplished through legislative action.	by legislature has not occurred. The latural Areas, of the Natural Resources and administered by the DNR. Nominations by the DNR. This is an active program, with	