

Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61132 Entry Year 2022 Acreage: 3,376

County Kalkaska

Management Area: Camp Grayling

Revision Date: 2020-08-03

Stand Examiner: Kelly Standerfer

Legal Description:

T26N R6W, Sections 25, 26 & 36

T26N R5W, Sections 28, 29, 30, 31, 32 & 33

T25N R5W, Section 4

Identified Planning Goals:

The Camp Grayling management area (MA) is the Michigan National Guard training grounds used primarily for military exercises while allowing varying degrees of Department of Natural Resources (DNR) management on certain portions depending on classification of ownership. The department will coordinate all prescribed activities with the National Guard to ensure they are compatible with military training needs. On these lands military training has precedence over resource management activities. Management in the Camp Grayling management area will emphasize continued balancing the ageclass of aspen on suitable sites and regenerating the aging oak resource. Management will strive to sustainable produce various forest products, enhance game and non-game wildlife habitat and protect areas of unique character while accommodating military training. Management activities will be constrained or modified based on military training needs. Expected trends within this 10-year planning period are introduced pests and diseases and the difficulty in regenerating oak.

Soil and topography:

Lupton Muck, Newton Loamy sand, Grayling sand and Graycalm sand.

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

Primarily state owned Military Board land with some private parcels along the Manistee River. Outside of the military use, the land use in this compartment centers primarily upon recreation. Most of the private holdings along the Manistee river have a cabin built near the riverbank.

Unique Natural Features:

Red-shouldered hawk, N. Kirtland's warbler and Massasauga recorded in compartment.

Archeological, Historical, and Cultural Features:

There is a concern in section 33.

Special Management Designations or Considerations:

The Manistee River and all associated tributaries in the compartment are Designated Trout Streams, and the Manistee River in this area is considered a "Blue Ribbon Trout Stream" by Fisheries Division. The Manistee River is under Natural Rivers designation, therefore, no cutting should take place within 175 feet of the Manistee River or within 50 feet of any of the other small tributaries in this area. The river corridor within this compartment is a Quality fishing area with special regulations including "flies only" restrictions. The Manistee River in this area is very heavily used by anglers and recreational canoeists. Most of the compartment is Military Board Land that is dedicated to the military for training and maneuvers. The military use is coordinated by Camp Grayling National Guard.

Watershed and Fisheries Considerations:

The Manistee River, Clear Creek, and several unnamed tributaries flow through Compartment 132. All are Designated Trout Streams. The Manistee River hosts self-sustaining populations of brown, brook, and rainbow trout. The Manistee River in this vicinity is very heavily fished by anglers seeking trout. In addition, the Manistee River is protected under the Upper Manistee River Natural Rivers Designation. For Stand 28, bmps should be followed along the unnamed stream.

Wildlife Habitat Considerations:

Most of this compartment falls in a broad, flat outwash plain with dry, sandy soils. This is historically a highly dynamic, fire —driven ecosystem. Maintain a variety of age classes of jack pine within the compartment, aiming for relatively equal acreage of each age class. Thus, a continual presence of mature cover will be present in this important deer wintering area, as well as diverse habitat for numerous songbirds and small mammals, etc. Red pine plantations should retain

deciduous trees (e.g. cherry, oak) and down logs as much as possible to diversify within-stand habitat. Bottomland types also provide deer winter cover and habitat for hares, bobcats, and bears. Lowland hardwood forests here have been clearcut in the past with poor results. Some small patch cuts in these types may be appropriate to replicate natural blowdown events, but care must be taken to avoid converting sites to emergent wetland cover. Military operations call for avoidance of creating Kirtland's warbler habitat, so jack pine cuts should be designed with relatively small sized or irregular patches, retaining deciduous trees, snags, and other features useful to wildlife in general but not conducive to KW occupancy. State owned lands along the river should be maintained in mature forest cover as much as possible, including some super canopy white pine for potential eagle/osprey nests or roosts.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium and dune sand. The glacial drift thickness varies between 200 and 800 feet. Beneath the glacial drift are the Mississippian Michigan Formation and Marshall Sandstone. The Michigan is quarried for gypsum and the Marshall has been used for a building stone in the past. The nearest gravel pit is within one mile to the southeast in the SW of Section 3. Gravel potential in the compartment is considered good, especially the southeast corner. This area is located one mile north of Garfield 8 Field. The field produces from the Devonian Richfield and the Ordovician PdC. The PdC has produced over 46 Bcf gas. There may be additional Devonian and Ordovician potential in the compartment. A couple parcels of DMVA lands are leased.

Vehicle Access:

Roads that are not designated county roads in this area have been closed to ORV's to minimize military training conflict.

Survey Needs:

The bulk of the needed survey corners for forest management activities were established for last YOE treatments.

Recreational Facilities and Opportunities:

CCC Bridge State Forest Campground - Stand 3 is the south unit of the CCC Bridge SFCG. River Access Sites - A number of access points to the Manistee River are in place along King Road. These informal access points are the subject of evaluation by the Upper Manistee River Access Committee. None of the river access points are officially managed now and some are causing concern due to overuse and degradation to the Manistee River. Most of these sites are simply traditional use areas that were established by fishermen over a period of many years. These same access points are now heavily used by canoeists, float tubers, kayakers and river boat fishermen. This stretch of the Manistee River has been a Quality Fishing area for several years. In 1999, this "Flies Only" area was expanded to include the stretch from M-72 to Yellow Trees Landing. The result was that a great deal of attention and increased use has focused upon the entire river corridor. Hunting - there is fairly heavy pressure during the whitetail deer season.

Fire Protection:

This compartment has been hit numerous times by moderately large fires. Large contiguous blocks of explosive Jack Pine fuels, cause this area to be vulnerable to wildfires of catastrophic proportions. Few natural fuelbreaks exist, with the exception of the Manistee River. Heavy use of the area by Military troops in the summer months increases the human factor. The military has, to some degree, reduced careless use of incendiary devices lowering the fire incidence on their land base somewhat. The threat of loss of life due to being trapped by a full fledged Jack Pine wildfire is a serious concern during peak periods of Military training. Sharon Truck Trail/Howe Road is designated as a fuelbreak. VFD protection is from Bear Lake Fire Dept., and DNR protection is from the Kalkaska Field Office. The entire compartment falls within Zone 5 which means on a Very High or an Extreme Fire day, DNR equipment from several stations respond to the fire. Urban Interface is a major concern along the river, with many cabins and seasonal residences present.

Additional Compartment Information:

The following reports from the Inventory are attached:

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

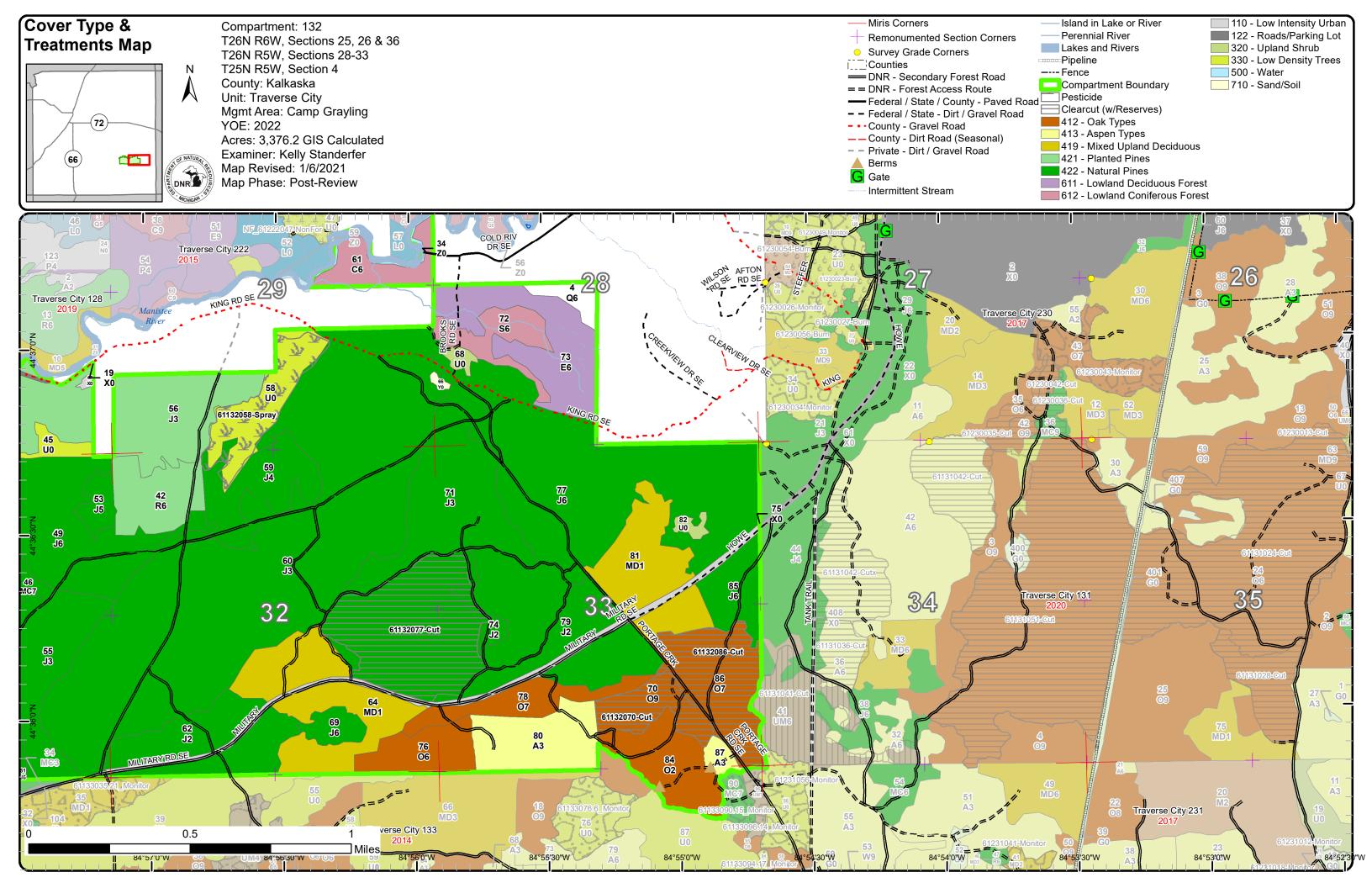
The following information is displayed, where pertinent, on the attached compartment maps:

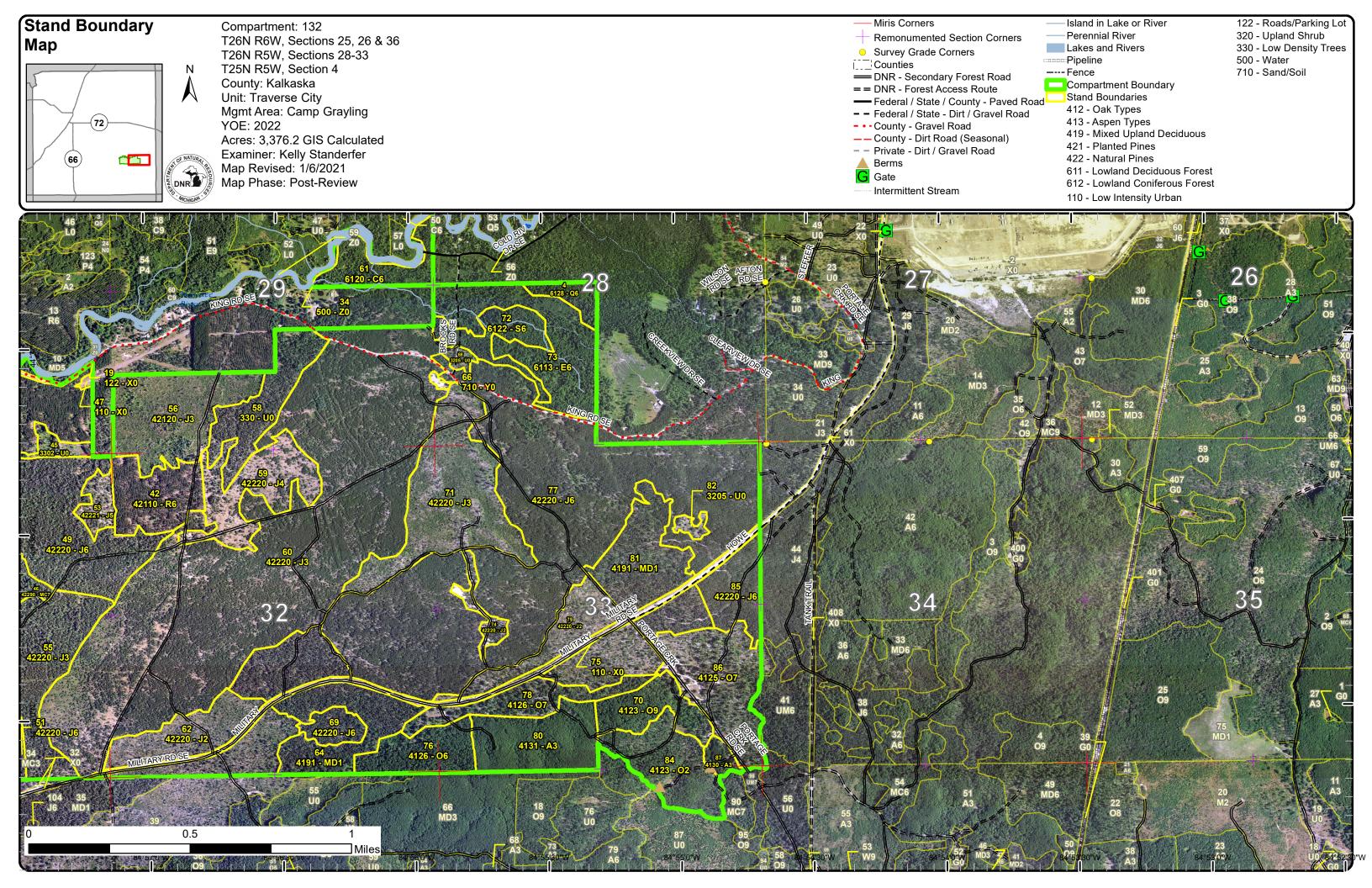
Base feature information, stand boundaries, cover types, and numbers

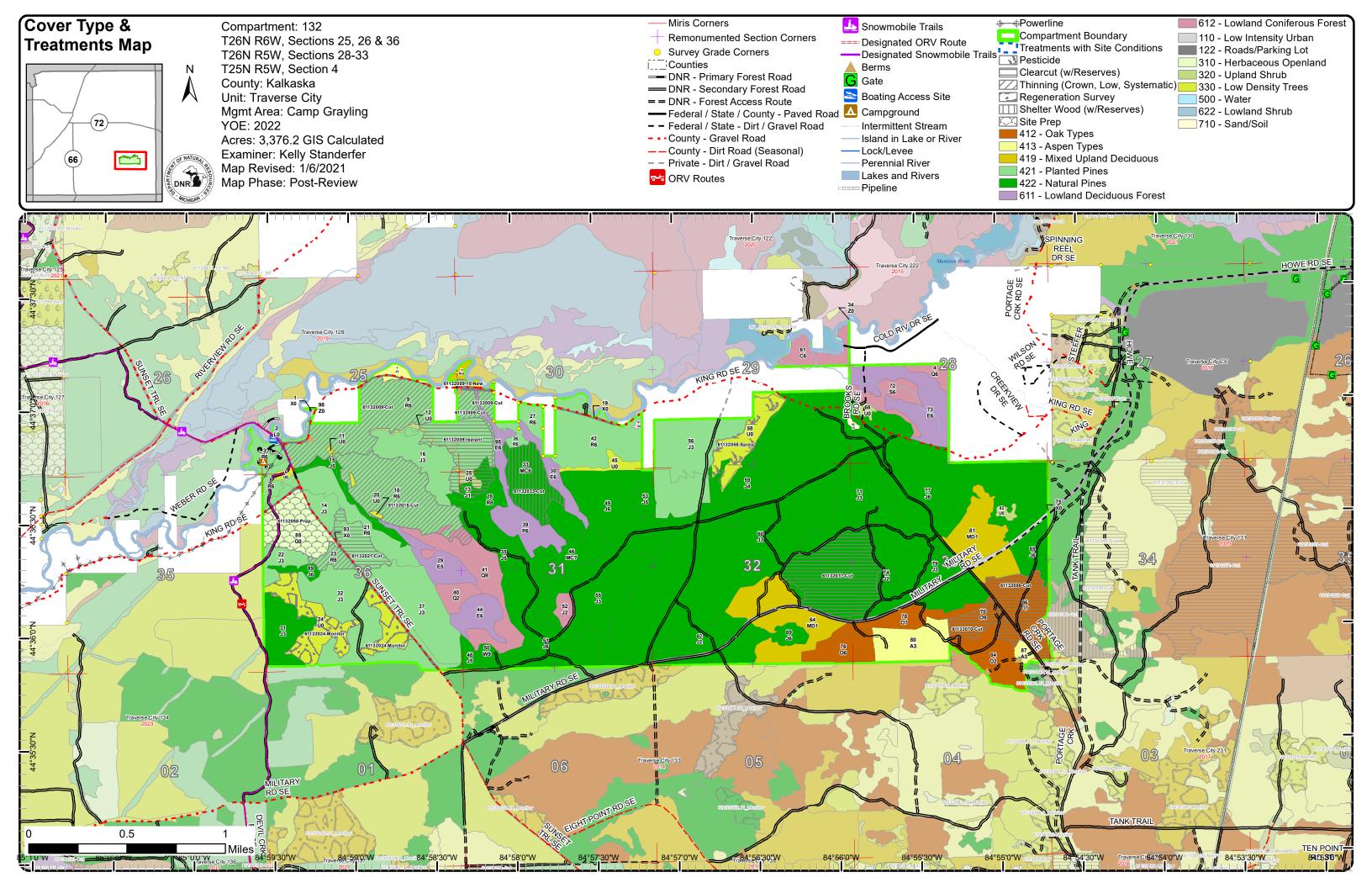
Proposed treatments

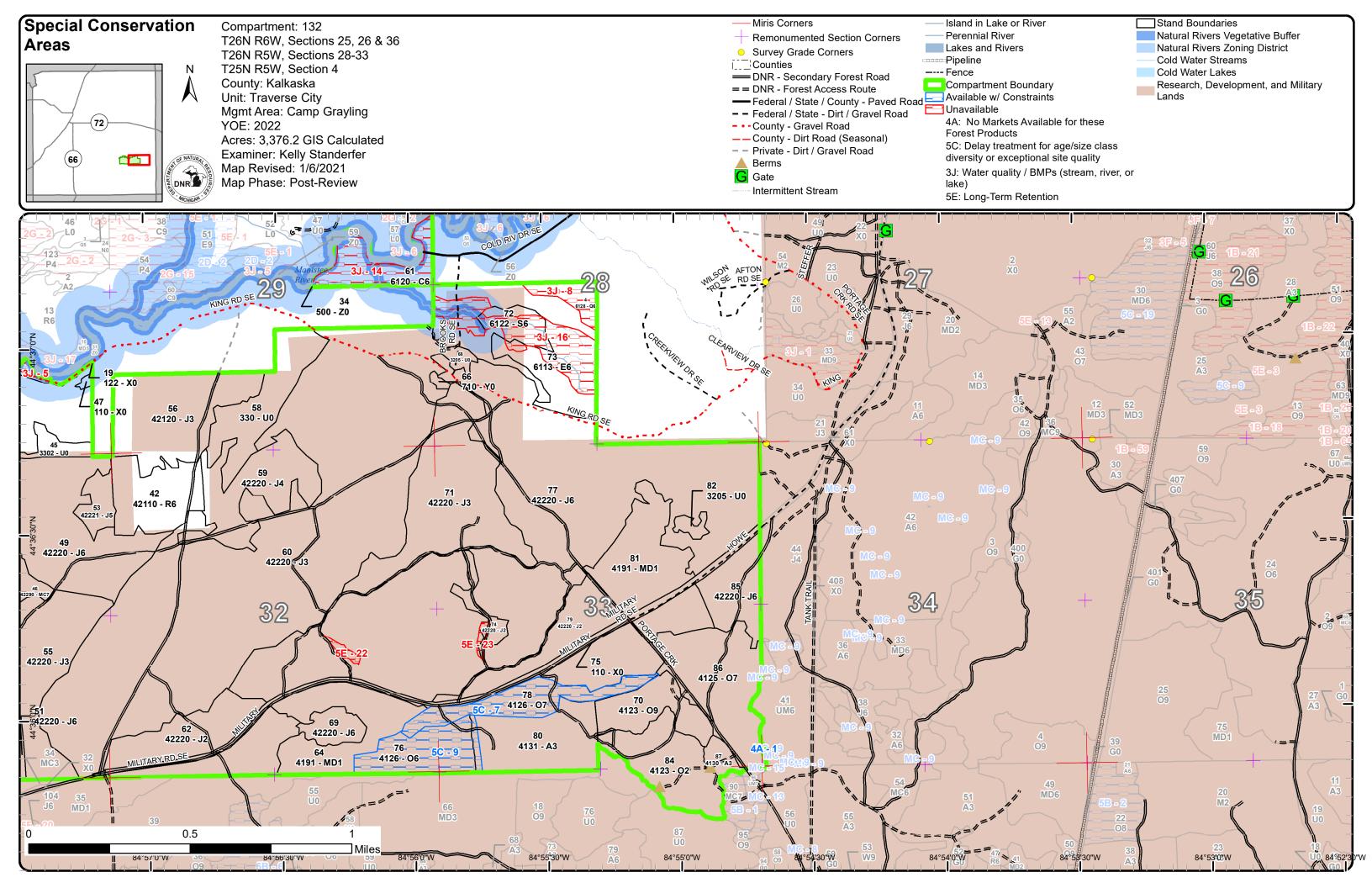
Site condition boundaries

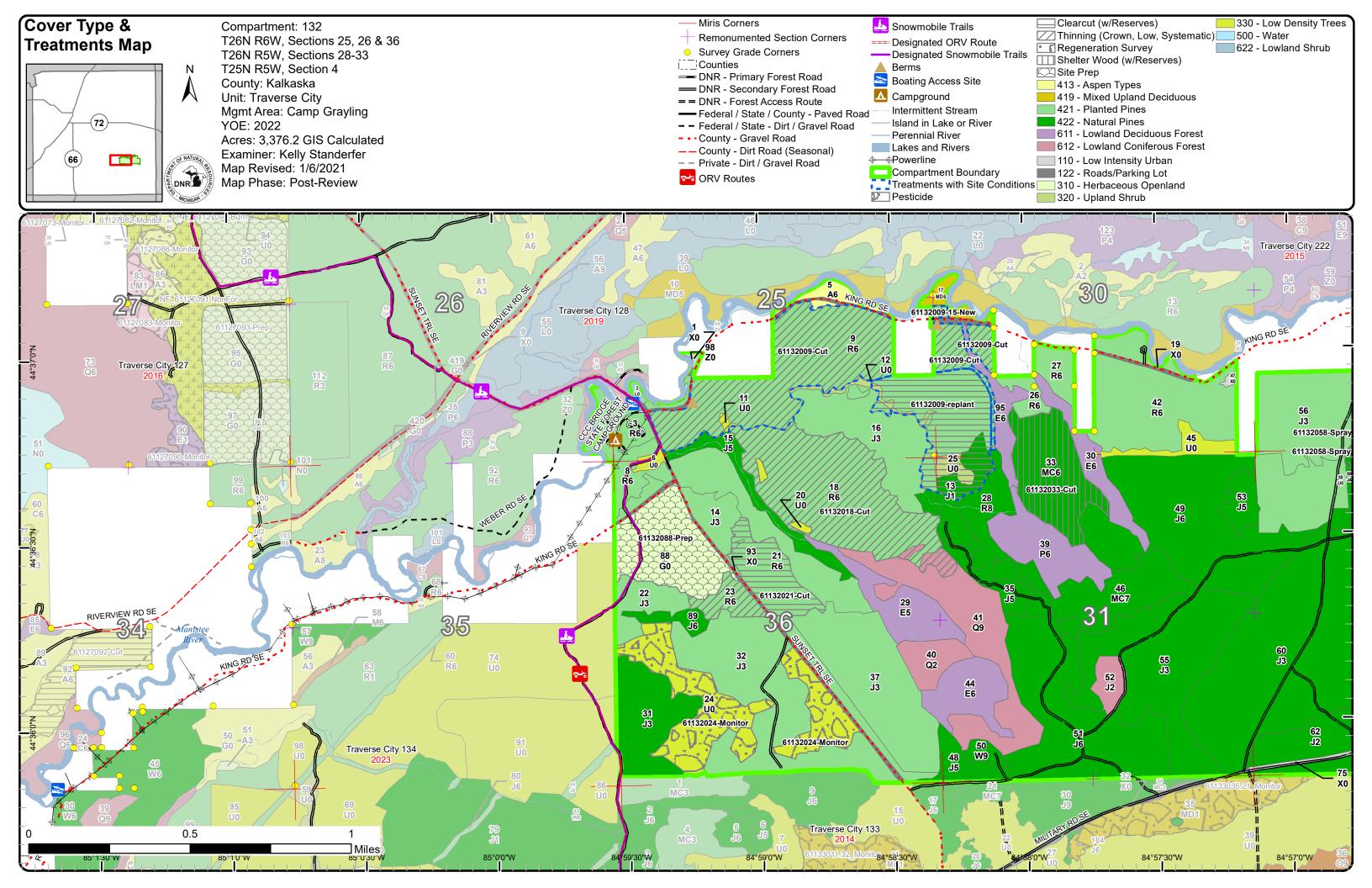
Details on the road access system

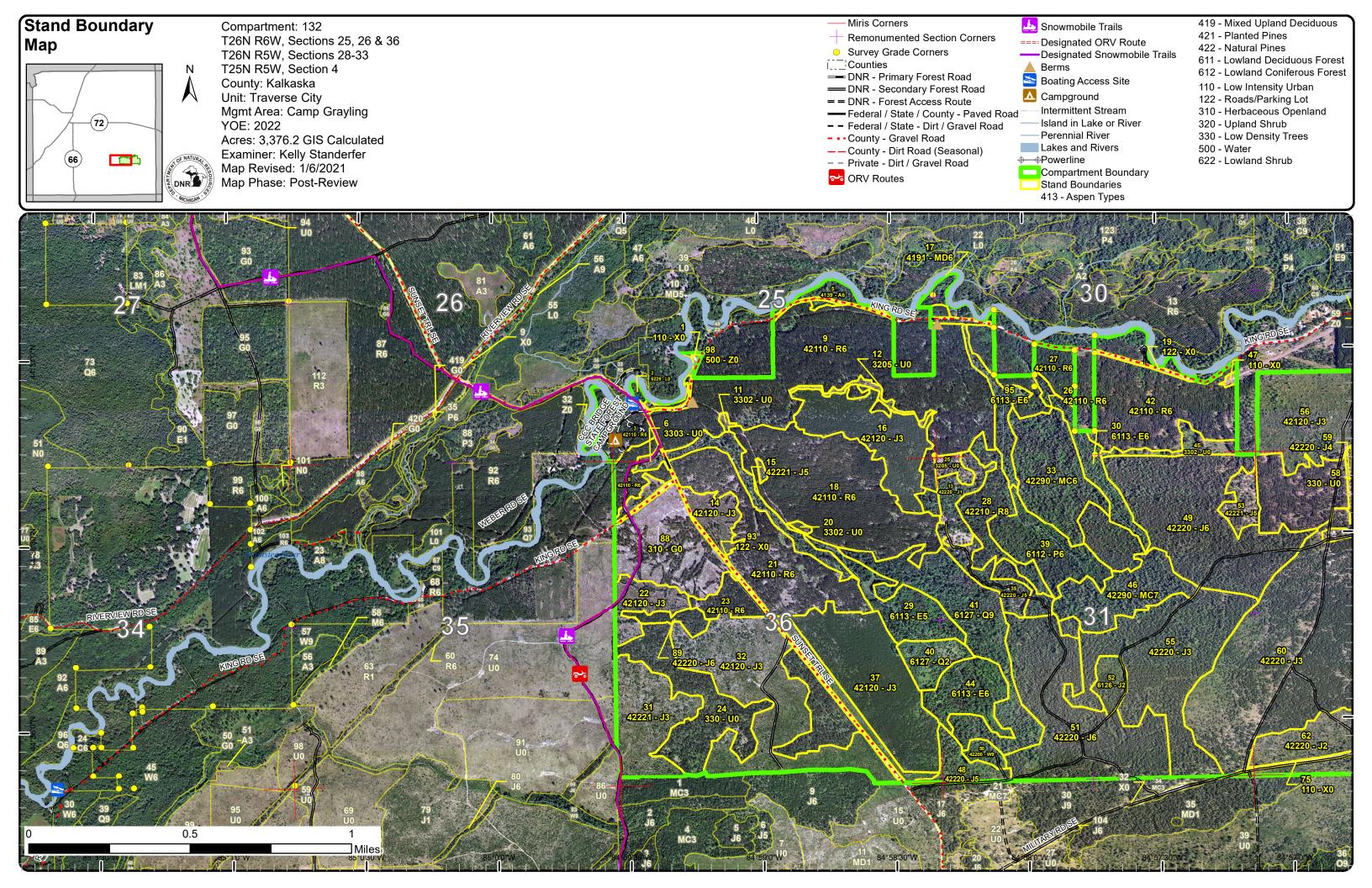


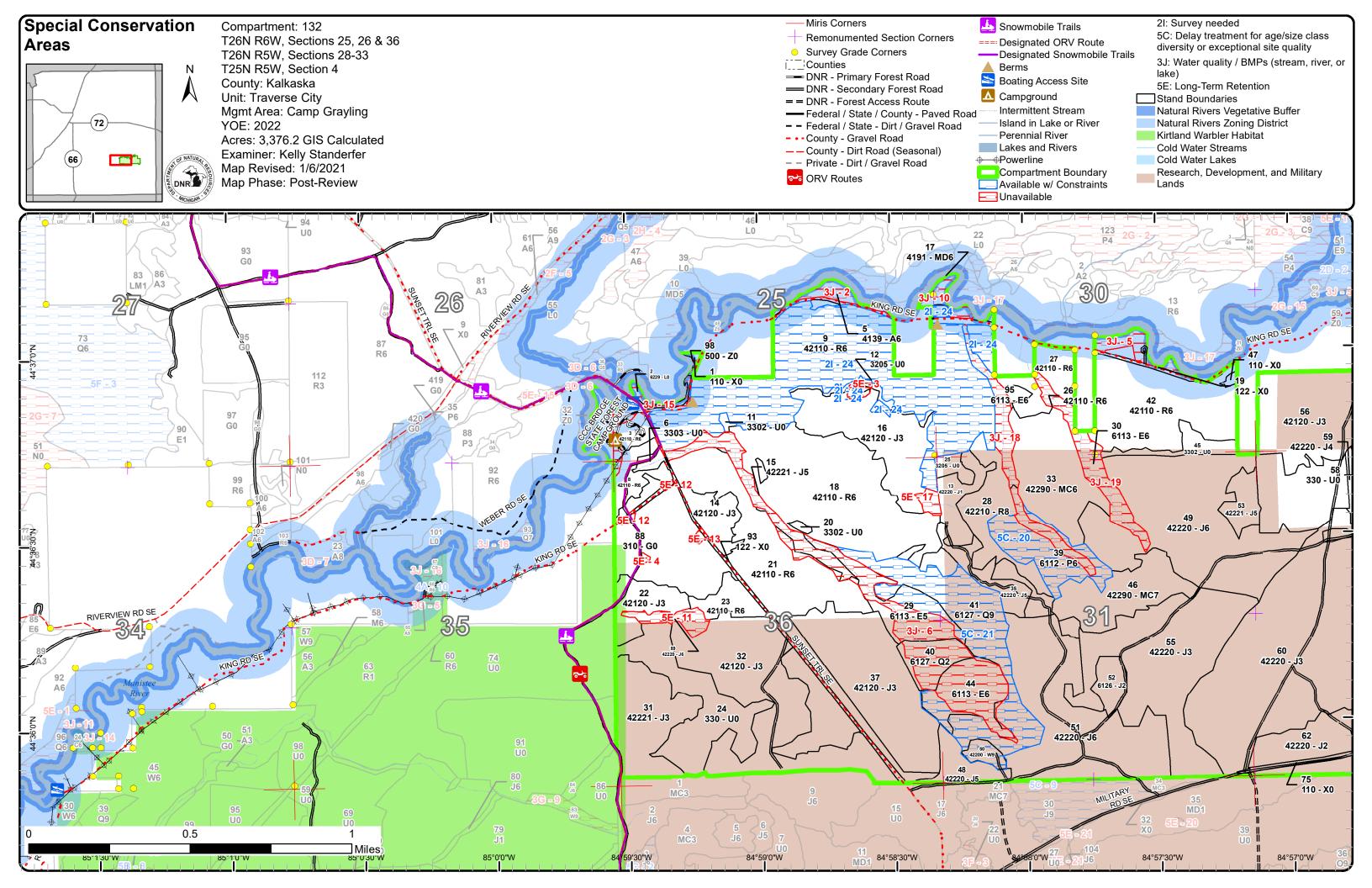












Traverse City Mgt. Unit

Kelly Standerfer: Examiner

Compartment 132 Year of Entry 2022



Age Class

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Aspen	0	0	0	0	51	7	0	0	0	0	0	0	0	0	0	0	0	0	58
Cedar	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	24
Herbaceous Openland	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Jack Pine	0	23	331	179	759	474	35	0	7	0	17	0	0	0	0	0	0	0	1824
Low-Density Trees	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	32
Lowland Conifers	0	0	0	14	0	0	0	0	74	0	0	0	0	0	0	0	0	0	88
Lowland Deciduous	0	0	0	0	0	0	0	0	62	85	0	0	0	0	0	0	0	0	147
Lowland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	24
Mixed Upland Deciduous	0	134	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	141
Natural Mixed Pines	0	0	0	0	0	0	47	0	0	0	36	0	0	0	0	0	0	0	83
Oak	0	42	0	0	0	0	0	0	0	0	55	87	0	0	0	0	0	0	184
Red Pine	0	0	0	0	0	0	245	278	0	0	0	0	0	0	0	0	0	0	523
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Upland Shrub	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Urban	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
Total	244	199	331	193	810	481	334	310	167	85	108	116	0	0	0	0	0	0	3376



Report 2 – Treatment Summary

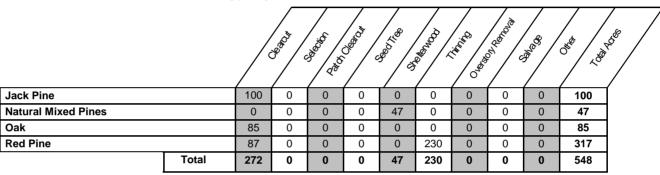
Traverse City Mgt. Unit Year of Entry: 2022

Acres of Harvest

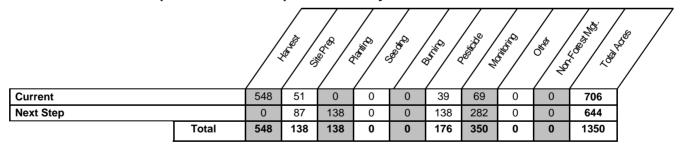
Compartment 132
Total Compartment Acres: 3,376

Commercial Harvest - 372 Harvests with Site Condition - 176 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 132 Year of Entry: 2022 DNR DICHIGAN

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Treatment Name Acres

Stand CoverType

Size Density Stand I

BA Range Treatment Type Treatment Method Cover Type Objective Age Structure Habitat Cut

Approved Treatments:

61132009-15-1.3 42110 - Planted Poletimber 141-Harvest Systematic 4211 - Planted Even-Aged No Red Pine Red Pine New Well 170 Thinning

Prescription cut one leave two row thinning

Specs:

Next Step Treatments:

Acceptable not a regen harvest

Regen:
Other
Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2021

9 61132009-Cut 114.5 42110 - Planted Poletimber 63 141- Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine Well 170 Red Pine

<u>Prescription</u> thin stand to a target residual BA of 120 sqft per acre. Target the removal of smaller diameter red pine and mark to remove poor formed trees <u>Specs:</u> and for overall spacing, cut all the remaining jack pine out of the stand.

Next Step

Treatments:

Acceptable not a regen harvest

Regen: Other

Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2021

42110 - Planted Poletimber 63 4211 - Planted 61132009-60.3 141-Harvest Clearcut with Even-Aged No replant Red Pine Well 170 Retention Red Pine

<u>Prescription</u> this was the lower stocked area of the stand so final harvesting now and replanting to red pine to break up the red pine age in the area. <u>Specs:</u> South end has some cherry bruch and low stocking tree areas that we will incorporate into the replant area. site will need to be chip

harvested if at all possible for follow up cult work.

Next Step Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable per policy, 80% free to grow red pine. some areas of lower stocking ok post planting however hoping for 80% of the site to be free to grow

Regen: red pine.

Other Comment:

Site Condition Survey Needed

Proposed Start Date: 3 /10/2020

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Treatment Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age Habitat Method Name CoverType Density Age Range Type Objective Structure Cut

 18
 61132018-Cut
 103.0
 42110 - Planted
 Poletimber
 60
 141 Harvest
 Crown Thinning
 4211 - Planted
 Even-Aged
 No

 Red Pine
 Well
 170
 Red Pine
 Red Pine
 Red Pine
 Red Pine

<u>Prescription</u> thin stand to a target residual BA of 120 sqft per acre. Target the removal of smaller diameter red pine and mark to remove poor formed trees and for overall spacing. cut all the remaining jack pine out of the stand. two small pockets at SE end that are added from stand 41, remove jack pine and orange mark threw these areas.

Next Step Treatments:

Acceptable not a regen harvest

Other Comment:

Regen:

Site Condition

Proposed Start Date: 10/1 /2021

21 61132021-Cut 26.9 42110 - Planted Poletimber 59 81-110 Harvest Clearcut with 4211 - Planted Even-Aged No Red Pine Well Retention Red Pine

<u>Prescription</u> Final harvest all trees 2" and up. Try to get it chipped however if markets make chipping impossible use the spec to cut up tops and scatter <u>Specs:</u> in short sections under 3" diameters so the site can be trenched. final harvest, let set a year, then trench, then spray, then plant to red pine.

<u>Next Step</u> SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant <u>Treatments:</u>

Acceptable ~80% free to grow red pine. some isolated areas of poor stocking or open areas OK but shooting for good red pine here.

Regen:

Other this treatment area will be treated alongside the larger clearcut and replant to the NE. LZ will likely need to be in this area and will have to fly

Comment: into NE block.

Site Condition

Proposed Start Date: 7 /23/2020

23 61132023-Cut 11.0 42110 - Planted Poletimber 59 141- Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine Well 170 Red Pine

<u>Prescription</u> lighlty thin the stand. ~1/4-1/3 volume removal. target the removal of smaller diameter red pine and remove the rest of the jack pine. then <u>Specs:</u> thin rest of the stand by taking poor formed or high risk trees and for overall residual tree spacing.

Next Step Treatments:

Acceptable not a regen harvest

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

2461132024-
Monitor68.8330 - Low-DensityNonstocked0MonitoringArtificial
Regen(3yr)4211 - PlantedEven-AgedNoNoRed Pine

Prescription regen check

Specs:

Next Step Treatments:

Acceptable Fully stocked stand of red pine

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/23/2018

Traverse	City	Mgt.	Unit
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CoverType

Acres

Report 3 -- Treatments

Type

Compartment: 132

Method

Objective

Structure

Cut

Nο

Year of Entry: 2022 Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat

33 61132033-Cut 46.6 42290 - Natural Poletimber 141-Harvest Shelterwood 4319 - Mixed Even-Aged Mixed Pine Well **Upland Forest** 170 Prescription green tree mark stand, try to mark in pockets trees to save for seed and a little shade. leave enough to come back for after stand has

Range

Age

Density

regenerated. some pockets of nice larger pine, save some of this Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Treatment

Name

Acceptable any mix of overstory species post harvest will be ok. expect to push to mixed, pine, oak and red maple. probably half deciduous and half Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

61132058-38.5 330 - Low-Density Nonstocked 0 Unspec Pesticide **ERROR** 4211 - Planted Even-Aged Nο 58 Spray Trees ified Red Pine

Prescription release spray site

Specs:

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Next Step Treatments:

Acceptable A fully stocked stand of red pine

Regen:

Percent to Treat = 100% Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

70 61132070-Cut 26.5 4123 - Red Oak Sawtimber 97 81-110 Harvest Clearcut 4122 - Oak, Pine Even-Aged No Well

Prescription final harvest. ok to save some or all pine and save some white oak as well for mast. can be painted out along edges or scattered throughout. expect to push to a deciduous, oak and pine mix. should jump off the stump pretty good as oak looks to be pretty healthy. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mixed oak, pine and mixed deciduous ok post harvest

Regen: Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 132 S Year of Entry: 2022 ŧ а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Habitat n CoverType Method Objective Name Density Age Range Type Structure Cut d 77 61132077-Cut 99.9 42220 - Natural Poletimber 51-80 Harvest Clearcut with 42221 - Natural Even-Aged Nο Jack Pine Well Retention Jack Pine. Mixed Deciduous Prescription final harvest all trees over 4" dbh except save all white oak and white and red pine. OK to mark some red oak to save however i think the best recruitment will be oak via stump sprouts. OK if it stays open to patchy, should be a fair amount of residual in the sub merchantable Specs: size class. Leave 1-2 islands for retention. Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable mixed jack pine, red and white pine and mixed deciduous, expect mostly jack pine volunteers and oak. Regen: Other Comment: Site Condition Proposed Start Date: 7 /23/2020 58.0 4125 - Black, N. Pin Sawtimber 101 61132086-Cut 1-50 Harvest Clearcut 4122 - Oak, Pine Even-Aged Nο Oak Prescription take the top off now. ok to save some or all red pine as there isnt much here as well as all or some white oak. bulk of the stand has regenerated so will be taking the top off via harvest to fully release understory regen. save as much regen as possible however areas that do Specs: get disturbed should fill back in. Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:**

Acceptable oak, pine and mixed deciduous. mixed now so expect nice mixed regen.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

88 61132088- 50.5 310 - Herbaceous Nonstocked 0 Unspec SitePrep Trenching 4211 - Planted Even-Aged No Prep Openland ified Red Pine

Prescription Trench site

Specs:

Next Step Pesticide, Skidder - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)

<u>Treatments:</u>

Acceptable Fully stocked stand of red pine.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

Total Treatment 705.8 Acreage Proposed:

Traverse City Mgt. Unit

Kelly Standerfer : Examiner

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Cond	ditions	s
Acres	Available	With Condition	Not Available		21	4A	5C	3J	5E
58	50	2	6	Aspen			2	6	
24	0	0	24	Cedar				24	
49	48	0	2	Herbaceous Openland					2
1824	1796	1	27	Jack Pine			1	16	11
122	122	0	0	Low-Density Trees				0	
32	0	25	7	Lowland Aspen/Balsam Poplar			25	7	
88	7	59	23	Lowland Conifers			59	23	
147	40	12	95	Lowland Deciduous			12	95	
1	0	0	1	Lowland Shrub				1	
24	15	0	9	Lowland Spruce/Fir				9	
141	135	0	6	Mixed Upland Deciduous				6	
83	83	0	0	Natural Mixed Pines					
184	126	58	0	Oak		0	58		
522	343	158	21	Red Pine	158			17	4
1	1	0	0	Sand, Soil					
16	15	0	1	Upland Shrub				0	0
45	41	0	4	Urban				3	1
8	6	0	2	Water				2	
5	0	5	0	White Pine			5		
3,376	2,830	319	228	Total Forested Acres	158	0	161	210	17
<u>———</u>	84%	9%	7%	Relative Percent					

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

Unspecified
Onspecified

Traverse City Mgt. Unit Kelly Standerfer: Examiner

2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: retention island for	61132009-replant.					
4	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	72	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Traverse City Mgt. Unit

Kelly Standerfer : Examiner

9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	31	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
11	Unavailable	5E: Long-Term Retention	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
13	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
14	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	24	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
15	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Traverse City Mgt. Unit Kelly Standerfer: Examiner

16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	36	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
17	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
18	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	19	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
19	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	18	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
20	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
21	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	75	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Compartment: 132

Traverse City Mgt. Unit

Kelly Standerfer : Examiner Year of Entry: 2022

22	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
23	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
24	Available	2I: Survey needed	158	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Survey corners and	I survey needs are unknown at	this time.				
35	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Traverse City Mgt. Unit Compartment: 132

Year of Entry 2022



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spectonditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions and those of other coldwater fish spectyear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for include the 5,847 acre Forest Fire Experiment Station, the 12,00 Area, the Beaver Islands Archipelago Wildlife Research Area (the High and Hog Islands, all state owned land on Beaver, South For Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research, and over 144,000 acres of Military Lands.	00 acre Houghton Lake Wildlife Research nat includes most of Garden Island, all of ox and North Fox Islands), the Cusino
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two explover Habitat.	I endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spapproved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 1 and Vegetative Buffers for each Natural River see the table loca folder.	s Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts



Stand	Level 4 C	over Type	s	ize De	ensity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
1	110 - Low Ir	ntensity Urb	oan	Nonst	ocked	0.8			No		Access site with scattered cherry.
					Ī	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
						Bla	ck Cherry	Trace		Sapling	
2	6229 - Mixed	d lowland sl	hrub	Nonst	ocked	1.4		Immature	No		
					Ī	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
						Re	ed Maple	Medium		Pole	
						Ta	ag Alder	Full		Tall Shrub	
3	42110 - Pla	nted Red P	Pine Po	oletimb	oer Well	19.9	60	141-170	N/A		
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Red Maple	3	Pole/Sapling	6			ed Pine	Low	Variable	Sapling	
	Bigtooth Aspen	2	Pole	8					I	1	
	Red Pine	93	Pole/Log	8	60						
	Black Cherry	2	Pole	6							
4		iduous	,		oer Well	9.9	78	141-170	N/A		Part of stand is Military Board Land. Creek bisects stand.tricky stand. few creeks that go below ground. ne end more spruce and cedar, some tag areas and some nice red maple log. think the amount of hydrology in
	Canopy Species	% Cover			H Age		nopy Species		Avg. Height	Size	the stand will prohibit treatments, hard to tell with snow but doesnt look
	Red Maple	15	Pole/Log	8	78		ed Maple	Low	Variable	Sapling	doable.
	Paper Birch	3	Pole	6			ck Spruce	Low	Variable	Sapling	
	Quaking Aspen	2	Pole	8			hite Pine	Low	Variable	Sapling	
	Black Spruce White Pine	8	Pole VI ag/Dala	18	76	16	ag Alder	High	Variable	Tall Shrub	
	Balsam Fir	22 25	XLog/Log/Pole Pole	7	66						
	Baisain Fii	25	Pole	/	00						
5	4139 - Aspen,				oer Well	7.1	40	81-110	N/A		Previous inventory had this as an unevenaged stand. Timber consists of red maple, aspen and a few red pine. bulk of stand is pretty young,
	Canopy Species		Size Class		H Age		nopy Species		Avg. Height	Size	some older trees present, looks kinda 2 aged. bulk of the stand is within
	Red Maple	55	Pole/Sapling	6	40		ed Maple	Medium	Variable	Sapling	the 175'natural river corridor so will likely never be managed. might be
	Bigtooth Aspen	40	Pole	8	40		ooth Aspen	Medium	Variable	Sapling	able to cut some south of king road
	Red Pine	5	Log/Pole	12	71	Bla	ck Cherry	High	Variable	Sapling	
6	3303 - Mixed L	ow Density	Trees	Nonst	ocked	2.6			No		
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Re	ed Maple	Low		Sapling	
						Bigto	ooth Aspen	Low		Pole	
						W	hite Oak	Low		Pole	
						Ja	ack Pine	Low		Seeding	

Black Cherry

Tag Alder

Compartment: 132 Year of Entry: 2022 Stand **Managed Site General Comments Level 4 Cover Type** Size Density Acres Stand Age BA Range First thinning in 2008. Sale #052-04. pretty slow growing stuff, should 42110 - Planted Red Pine Poletimber Well 12.0 59 111-140 N/A 8 hold 10 years good, not guite ready for a thin. Size **Canopy Species** % Cover Size Class DBH Age **Sub-Canopy Species Density** Ava. Heiaht Pole 8 Red Pine Bigtooth Aspen Low Variable Sapling 93 8 59 Red Pine Pole Jack Pine 5 Pole/Sapling 5 42110 - Planted Red Pine 63 N/A 9 Poletimber Well 159.6 141-170 Third row thinning was completed during winter and spring of 2005. King Road Red Pine Sale #041-02, ready for another thin, remove ~1\3 of the Size Class **Canopy Species** % Cover DBH Age volume. ok to cut all red pine under 5" via spec to save some paint time, Red Pine 100 8 Pole/Loa 63 rest will likely need marked. cut all jack pine, there are a few pockets that were to small to map out. 3302 - Low Density Conifer Trees 1.9 Unspecified 429 - Mixed Upland probably make a good landing again. ok to cut out merchantable trees for 11 Nonstocked Conifers surrounding timber sale or ok to push open again, will function as a nice little opening. Size **Sub-Canopy Species** Density Avg. Height Jack Pine Medium Seeding 3205 - Mixed Upland Shrub Nonstocked 4.4 Unspecified No long fingery opening with some thicker areas of trees and brush. east 12 eare will be trenched and planted with red pine. Size **Sub-Canopy Species** Density Avg. Height Jack Pine Seeding Trace Choke Cherry Low Sapling 42220 - Natural Jack Pine Sapling Poor 23.0 6 1-50 N/A Military Board Land. Very old jack pine. A lot falling down. jack pine, 13 aspen and red maple removed last voe, mixed red and white pine **DBH Age Canopy Species** % Cover Size Class remained post harvest, patchy, created a different stand for the thicker Red Pine 15 Log/Pole 12 56 areas of this stand, this one will be managed for understory regeneration. White Pine 10 Pole/Sap/Log 9 56 stand boundary was not updated because of inaccurate looking treatment 60 1 6 Jack Pine Sapling boundaries. Red Maple 15 1 6 Sapling 42120 - Planted Jack Pine 13 14 Sapling Well 17.6 Immature N/A looks to be more volunteer jack pine but says it was planted... either way it's young jack pine about 12 years old??scattered mature red pine as well % Cover Size Class DBH Age **Canopy Species** Jack Pine 100 Sapling 2 13 42221 - Natural Jack Pine, Mixed 90 Poletimber Medium 16.7 1-50 N/A patchy, some J3, some J5, some aspen, all is influenced by the 15 Deciduous intermittent drain, will add site condition for BMP/water impact % Cover Size Class **Canopy Species DBH Age Sub-Canopy Species Density** Avg. Height Size Quaking Aspen 40 Pole 8 Red Maple Medium Variable Sapling 60 12 Jack Pine Log/Pole 90 Red Oak Low 10 - 20 feet Pole

10 - 20 feet

Variable

Low

Low

Pole

Tall Shrub



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
16	42120 - Plan Canopy Species Jack Pine Black Cherry		Size Class Sapling Sapling	Sapling DBH 4	Well Age 25	46.7	25	Immature	N/A		Stand was cut in the fall of 1993. CCC Jackpine Sale #007-92. Was seeded or planted in 1996.
17	4191 - Mixed Upla Co	and Decidu	ous with	Poletimb	er Well	6.7	51	111-140	N/A		Consumers lease land M-42. Expired in 2011. small pocket of red pine that needs thinned, some will fall within 175' natural river corridor, thin
	Canopy Species	% Cover	Size Class	DBH	l Age						now with stand to south, likely take rows out of here, eventually push to big tree management/ natural stand characteristics due to river proximity.
	Red Maple	35	Pole	8	51						big tree management hatural stand characteristics due to liver proximity.
	Quaking Aspen	30	Pole	8	51						
	White Pine	25	Pole/Sapling	g 7	61						
18	42110 - Pla	nted Red P	ine I	Poletimb	er Well	98.0	60	141-170	N/A		First thinning in 2004. Over Here Red Pine #042-02-1. ready for another
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	thin, approximately 1/4-1/3 volume removal.
	Red Pine	98	Pole/Sapling	g 8	60	R	ed Pine	Low	< 5 feet	Sapling	
	Jack Pine	2	Pole	8		Ja	ack Pine	Low	Variable	Sapling	
19	122 - Road	d/Parking Lo	ot	Nonsto	ocked	7.3		Unspecified	No		county road and road ROW
20	3302 - Low Den	sity Conife	r Trees	Nonsto	ocked	1.0			No		
						Sub-Ca	nopy Speci	es Density	Avg. Height	Size	
						Ja	ack Pine	Medium		Seeding	
21	42110 - Pla	nted Red P	ine I	Poletimb	er Well	66.8	59	81-110	N/A		Thinning completed 01/2014. Sale # 61-088-12. should be ready for a
	Canopy Species	% Cover	Size Class	DBH	l Age						light thin next YOE. not ready yet
	Red Pine	100	Pole/Sap/Log		59						
22	42120 - Plar	nted Jack P	ine	Sapling	y Well	17.0	14	Immature	N/A		some fingers of red pine run throughout stand. south finger of stand more open, north half is pertty thick. north 2/3 of stand was planted or seeded,
	Canopy Species	% Cover	Size Class	DBH	l Age						stand filling in good.
	Jack Pine	75	Sapling	2	14						- ·
	Red Pine	25	Pole	7	56						
23	42110 - Pla	nted Red P	ine I	Poletimb		11.0	59	141-170	N/A		Thinned in 2005. Sale #52-04. stand could hold if needed but thin now and remove rest of the jack pine and thin red pine from below and take
	Canopy Species	% Cover	Size Class		l Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	out high risk and forks.
	Red Pine	90	Pole	8	59	R	ed Pine	Low	Variable	Sapling	
	Jack Pine	10	Pole	8							
24	330 - Low-l	Density Tre	es	Nonsto	ocked	68.8	0		No		there was approximately 10 percent mortality and they were 90 percent free to grow.

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Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments	
25	3205 - Mixed	d Upland Sh	nrub	Nonst	ocked	4.6			No		some is forested but bulk is brushy cherry	
						Sub-Ca	nopy Species	Density	Avg. Height	Size		
						Ja	ck Pine	Low		Sapling		
						Cho	ke Cherry	High		Pole		
26	42110 - Pla	nted Red P	ine	Poletimb	er Well	6.9	56	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBF	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Pine	100	Pole	8	56	Blad	ck Cherry	Low	Variable	Sapling		
27	42110 - Pla	nted Red P	ine	Poletimb	er Well	10.5	56	111-140	N/A		Most of stand is Consumers Lease Land, M-38 till 2013, thinned last	
	Canopy Species	% Cover	Size Class	DBH	I Age						YOE, should be ready for another thin next YOE. stand looks good n healthy	
	Red Pine	100	Pole	8	56							
28	42210 - Na				r Medium	27.9	56	81-110	N/A		Military Board Land. jack pine and aspen and red maple cut out last YOE.mixed red and white pine remained post harvest. patchy, some ove	
	Canopy Species		Size Class		I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	200 ba and some scattered trees. heavy browse, look to maybe cut next	
	Red Pine	75	Log/Pole	12	56	Wh	nite Pine	Medium	10 - 20 feet	Sapling	yoe.	
	White Pine	25	Pole/Log	9	56							
29	6113 - Lo	wland Mapl	e Po	oletimbe	r Medium	27.6	80	1-50	N/A		some flooded water opening and some nicer mixed lowland. most is not	
	Canopy Species	% Cover	Size Class	DBF	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	manageable ground but soem edges may be able to be treated with future harvest in adjacent stands, heavy beaver activity in areas.	
	Red Maple	90	Pole/Log/Sa	p 8	80	Wł	nite Pine	High	Variable	Sapling		
	Paper Birch	3	Pole	8		Ta	ıg Alder	Medium	Variable	Tall Shrub		
	White Pine	7	XLog/Log	20								
30	6113 - Lo	wland Mapl	е	Poletimb	er Well	18.2	86	111-140	N/A		Intermittant streams run through stand. Aspen is found along the creek	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	bed edges where it is slightly more upland. some is pretty nice and some more E5ish.	
	Red Maple	80	Pole	8	86	Re	d Maple	Medium	Variable	Sapling		
	Red Oak	2	Log/Pole	13		WI	nite Oak	Low	10 - 20 feet	Sapling		
	Quaking Aspen	10	Pole	8		Wh	nite Pine	Medium	Variable	Sapling		
	Red Pine	5	Log/Pole	13		Ta	ig Alder	Medium	Variable	Tall Shrub		
	Jack Pine	3	Pole	8								
31	42221 - Natural Dec	Jack Pine, iduous	Mixed	Sapling	g Well	41.2	16 I	mmature	N/A		stand was cut in 2005ish and left to regenerate naturally, filling in nicely to mostly jack and oak.	
	Canopy Species	% Cover	Size Class	DBH	I Age							
	Jack Pine	65	Sapling	2	16							
	Red Oak	25	Sapling	2	16							
	Black Cherry	10	Sapling	2	16							
32	42120 - Pla			Sapling	y Well	103.1	13 I	mmature	N/A		some planted some natural. mostly fully stocked jack pine stand in the high fire risk stage, lots of limbs to the ground.	
	Canopy Species	% Cover	Size Class	DBF	l Age						Thigh the har stage, lots of littles to the ground.	
	Jack Pine	100	Sapling	2	13							

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Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	iite	General Comments
33	42290 - Nati	ural Mixed F	Pine F	Poletimb	er Well	46.6	56	141-170	N/A		Mixed stand with some pockets heavy to red pine/white pine. Other
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	areas heavy to hardwoods with a white pine understory. A small component of oak saplings is coming in. South half of stand is Military
	Red Maple	5	Pole/Log	8		Re	ed Maple	Medium	Variable	Sapling	Board Land. some area with large pine
	Paper Birch	2	Pole	8		WI	hite Pine	High	Variable	Sapling	
	White Pine	43	Pole/Log	8							
	Red Pine	47	Log/Pole	13	56						
	Jack Pine	3	Pole	8							
34	500	- Water		Nonsto	ocked	6.0			No		
35	42220 - Nat	tural Jack P	rine Po	oletimbei	Medium	n 13.5	26	51-80	N/A		
	Canopy Species		Size Class		l Age						
	Red Oak	2	Log	18							
	Jack Pine	94	Pole/Sapling		26						
	Black Cherry	4	Sapling	4							
37	42120 - Pla	nted Jack F	Pine	Sapling	y Well	71.5	26	Immature	N/A		A timber sale was completed in 1994. Stand was roller chopped and seeded with jack pine in 1994 and northeast part of stand was planted to
	Canopy Species	% Cover	Size Class	DBH	l Age						red pine in 1995. So much jack pine was coming in the area that was
	Red Pine	4	Sapling	3							planted to red pine I couldn't distinguish the difference so combined
	Jack Pine	94	Sapling	3	26						stands.
	Black Cherry	2	Sapling	3							
39	6112 - Lo	wland Aspe	n f	Poletimb	er Well	32.4	68	81-110	N/A		Military Board Land. not sure how much of the stand is manageable. I likely dip into stand next YOE when we take the top off stand 28. some
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	will likely be to wet and sparsely stocked for management but some
	Red Maple	50	Pole	8	68	WI	nite Pine	Medium	Variable	Sapling	should be treatable.
	Quaking Aspen	43	Pole/Log	8	41	Ta	ag Alder	High	Variable	Tall Shrub	
	Black Ash	7	Pole	8							
40	6127 - Lo	owland Pine	e 5	Sapling N	Medium	14.1	27	Immature	N/A		Stand was cut in 1993 - Birch Run Sale #010-92. Larger spruce with
	Canopy Species	% Cover	Size Class	DBH	l Age						white pine coming back in.
	Black Spruce	3	Pole/Sapling	j 6							
	White Pine	65	Sapling	3	27						
	Black Cherry	7	Sapling	2							
	Red Maple	25	Sapling	3	27						



Stand	d Level 4 C	over Type	;	Size De	nsity	Acres	Stand Age I	BA Range	Managed S	ite	General Comments
41	6127 - Lo	owland Pine	e S	Sawtimb	er Well	64.4	76	141-170	N/A		mostly lowland but some upland present too. mixed big red n white pine
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	over smaller diameter white pine, some spruce pockets as well looks to be manageable ground, maybe look to treat in 10 to 20 years with seed
	Red Maple	3	Pole	8		Re	ed Maple	Low	Variable	Sapling	tree harvest?
	Black Spruce	10	Pole	8	56	Blac	ck Spruce	High	Variable	Sapling	
	White Pine	32	Log/XLog	17	76	WI	nite Pine	High	Variable	Sapling	
	Red Pine	40	Log/Pole	12	76						
	Jack Pine	15	Pole	8	56						
42	42110 - Pla	anted Red F	Pine P	oletimb	er Well	110.0	56	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Maple	2	Pole	8							
	Red Pine	98	Pole	8	56						
44	6113 - Lo	wland Map	le P	oletimb	er Well	25.9	86 l	Jnspecified	N/A		Military Board Land. Stand is somewhat wet. Red maple dominate the stand with scattered large red and white pines. A fair amount of black
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	spruce has developed in the stand also.
	Red Maple	80	Pole	8	86	Re	ed Maple	High	Variable	Sapling	· ·
	Black Spruce	10	Pole	8		Blac	ck Spruce	Medium	Variable	Sapling	
	White Pine	4	Log	16		WI	nite Pine	High	Variable	Sapling	
	Red Pine	4	Log	14							
	Jack Pine	2	Pole	8							
45	3302 - Low Der	nsity Conife	r Trees	Nonsto	ocked	9.5	0 ι	Jnspecified	4222 - Natural J	lack Pine	stand in process of filling in looks liek alot of jack pine coming so should be pretty full stocked stand eventually, calling U type for now but will have a forested objective.
46	42290 - Nat	ural Mixed I	Pine S	awtimb	er Poor	36.1	94	51-80	N/A		Military Board Land. cut all but red and white pine last yoe, some thick,
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	some scattered, sheltering along red maple and white pine, look to maybe treat next yoe, some bracken ferns and some leatherleaf ground.
	White Pine	35	Log/XLog/Pole	e 14		Blac	ck Spruce	High	Variable	Sapling	east half more spruce pine mix, saved smaller spruce, filling in
	Red Pine	55	Log/Pole	12	94	WI	nite Pine	Low	Variable	Sapling	
	Black Spruce	10	Pole/Sapling	7	56	Blad	ck Cherry	Low	Variable	Sapling	
47	110 - Low I	ntensity Url	ban	Nonsto	cked	0.9			No		
48	42220 - Na	tural Jack F	Pine Pol	letimber	Medium	n 12.9	41	81-110	N/A		Military Board Land. Stand is semi open in areas other places it is well
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stocked. Lots of jack pine most places. Cherry is found in more open areas. SW end of stand more mature jackprobably manage stand with
	Jack Pine	98	Pole/Sapling	6	41	Ja	ick Pine	Medium	Variable	Sapling	stand to south due to it's small size
	Black Cherry	2	Pole	6		Blac	ck Cherry	Medium	Variable	Sapling	

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Stand	d Level 4 C	over Type	,	Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
49	42220 - Na	tural Jack P	ine P	oletimb	er Well	114.5	36	1-50	N/A		Military Board Land. Harvested in 1983, the East half of the stand was
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	not clean cut. There is residual jack pine remaining, somewhat older than the main stand.
	White Oak	2	Log	14		Ja	ick Pine	High	Variable	Sapling	tidit die main stand.
	Jack Pine	96	Pole/Sapling	6	36	Blac	ck Cherry	High	Variable	Sapling	
	Black Cherry	2	Sapling	4							-
50	42200 - Nat	ural White F	Pine S	awtimb	er Well	4.8	107	171-200	N/A		Military Board Land. Very nice white pine logs are developing. some red
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	pine mixed in as well thin stand from below. taking poor formed and understory pine. ok to spec red maple, jack and trees under 6" to save
	Red Maple	2	Pole	8		Blac	ck Spruce	Low	Variable	Sapling	marking time. leatherleaf in much of the stand so looks to have some well
	White Pine	90	Log/Pole	13	107						areas. stand is in pretty good shape so decided to hold stand for now. wil
	Red Pine	5	Log	12							treat when adjacent stand is cut, likely next YOE.
	Jack Pine	3	Pole	8							
51	42220 - Na	tural Jack P	ine P	oletimb	er Well	94.0	46	1-50	N/A		Military Board Land. Cut in 1974. high density, doesnt look to be merchantable for another 10-20 years, small diameters and short, some
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	is a bit nice but not quite ready for treatment
	Red Maple	3	Pole	6		Ja	ick Pine	Low	Variable	Sapling	
	Jack Pine	95	Pole/Sapling	6	46	Cho	ke Cherry	Low	Variable	Sapling	
	Black Cherry	2	Pole	6							
52	6126 - Low	land Jack P	ine S	apling I	Medium	9.0	42		N/A		Military Board Land. leatherleaf present here, wetter than the bulk of the surrounding stand, likely unable to trench and plant
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species		Avg. Height	Size	
	Jack Pine	98	Sapling	3	42	Ja	ick Pine	Medium	< 5 feet	Sapling	
	Black Cherry	2	Sapling	3							
53	42221 - Natural Dec	Jack Pine, iduous	Mixed Pol	etimbe	r Mediun	n 10.5	36	1-50	N/A		soem open some jack pine, calling a J5, J3 converting to J5 J6 in areas.
	Canopy Species	% Cover	Size Class	DBH	I Age						
	Jack Pine	70	Sapling/Pole	4	36						
	Black Cherry	30	Sapling	4							
55	42220 - Na	tural Jack P	ine	Saplino	g Well	95.0	36		N/A		Military Board Land. Some pockets of red and white pine were left as residual. some areas of leatherleaf @ SW end of stand around stand 52.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	some might need to be naturally regenerated.
	White Pine	2	Log	14		Ja	ick Pine	Medium	Variable	Sapling	
	Red Pine	2	Log	16							
	Jack Pine	96	Sapling/Pole	4	36						
56	42120 - Pla	nted Jack P	ine	Saplino	g Well	62.9	14	Immature	N/A		Cearcut in winter of 2005. Jack Pine Airstrip Sale #044-02. Planted in
	Canopy Species	% Cover	Size Class		I Age						2007. filling in nicely
	Jack Pine	95	Sapling	2	14						
	Red Pine	5	Log/Pole	10	56						

Traverse City Mgt. Unit



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
58	330 - Low-	Density Tre	es	Nonsto	ocked	38.4	0	Unspecified	4211 - Planted	Red Pine	few scattered red pine left, competition looks pretty minimal. north of king road was left for retention, falling over jack pine. Military Board Land. there was approximately 10 percent mortality and they were 90 percent free to grow. - 3 year regen survey shows 25% mortality, 76 FTG for a final TPA 690. Primary competition is cherry with some jack pine.
59	42220 - Nat	ural Jack P	ine F	oletimb	er Poor	46.6	26	1-50	N/A		pockets of jack pine intermixed with grass opening called U type last
	Canopy Species	% Cover	Size Class	DBH	l Age						YOE calling it a J4ish open stand now as there appears to be over 25% in jack pine pockets. let fill in naturally or ok to try to keep it more open in
	Jack Pine	100	Pole/Sapling	5	26						wildlife so chooses.
60	42220 - Nat	ural Jack P	ine	Sapling	y Well	419.4	33	Immature	N/A		Military Board Land. A 600 acre forest fire ran N-NE'ly about a mile on
	Canopy Species	% Cover	Size Class	DBH	l Age						6/18/87. Some scattered residual timber remains. Jack pine has regenerated naturally. Part of the stand was treated with a HydroAxe by
	Jack Pine	98	Sapling/Pole		33						the Military in an attempt to discourage Kirtland's Warbler Habitat from
	Black Cherry	2	Sapling	2							developing. It didn't work. Some areas of the stand are on the lower end of well-stocked and there are some semi-open pockets. Warblers do occupy the stand and Military use of this area is now limited to non-nesting months.
61	6120 - Lo	wland Ceda	ar F	Poletimb	er Well	23.5	105	Unspecified	N/A		land locked and all within natural river buffer mix of cedar maple and aspen, remote call
62	42220 - Nat	ural Jack P	ine S	Sapling I	Medium	62.4	31	Immature	N/A		Jack Pine Corner #040-02. Stand was cut in winter of 2004 with a spec
	Canopy Species	% Cover			l Age		nopy Speci		Avg. Height	Size	pine.
	Red Oak	4	Log/Pole	12	0.4	Já	ack Pine	Medium	< 5 feet	Sapling	
	Jack Pine	94	Sapling/Pole Pole	6	31						
	Black Cherry	2	Pole	O							
64	4191 - Mixed Upla Co	and Decidu onifer	ous with	Sapling	Poor	75.0	5	Immature	N/A		stand filling in to nice jack pine and oak mix. some mature oak scattered throughout.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Oak	45	Sapling/Pole		5						
	Red Maple	20	Sapling	1	5						
	Jack Pine	35	Sapling	1	5						
66	710 - \$	Sand, Soil		Nonsto	ocked	1.2			No		
68	3205 - Mixed	d Upland St	nrub	Nonsto	ocked	3.7		Unspecified	No		open with pockets of jack pine.
					Γ	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	
							ck Cherry	High		Sapling	
						Já	ack Pine	Low		Pole	



Stand	Level 4 C	over Type	S	ize De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
69	42220 - Nat	tural Jack F	rine Po	oletimb	er Well	11.2	41		N/A		Military Board Land. Radio Hill Oak Sale 092-04. Completed 11/06. is Part of stand 84 that was not treated. bulk of stand is on a decent if few aspen throughout. could final harvest except save some or all pir not much here. Military Board Land. King Road Jack Sale #038-02. Cut in the winte 2003-04. All 4" and under timber was left. A lot of jack pine seedling stand. I found no record of any seeding or planting so it must be nate manage for understory jack that started ~2004 so changed stand age some might be treatable however much of the stand will need to be to out due to bmp concerns, check with fisheries for set back requiremes se end more jack, main body more spruce. looks like we may need survey for west end if cut Part of stand is Military Board Land. Creek bisects stand.tricky stand few creeks that go below ground. ne end more spruce and cedar, sor tag areas and some nice red maple log. think the amount of hydrolog
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	
	Jack Pine	100	Pole/Sapling	6	41	Black/Re	d (Hybrid) Oak	Medium	Variable	Sapling	
70	4123 -	Red Oak	Sa	awtimb	er Well	26.5	97	81-110	N/A		Military Board Land. Radio Hill Oak Sale 092-04. Completed 11/06. this
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Oak	85	Log/Pole	12	97	Wh	nite Pine	Low	5 - 10 feet	Sapling	
	Red Pine	2	Pole/Sapling	7	56	Re	d Maple	Medium	10 - 20 feet	Sapling	
	White Pine	10	Pole/Sapling	7	56						•
	White Oak	3	Pole	7	66						
71	42220 - Nat	tural Jack F	ine :	Sapling	y Well	89.1	16	Immature	N/A		Military Board Land. King Road Jack Sale #038-02. Cut in the winter of
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Jack Pine	98	Sapling/Pole	3	16	Ja	ck Pine	High	< 5 feet	Sapling	manage for understory jack that started ~2004 so changed stand age
	Black Cherry	2	Pole	8		Blac	ck Cherry	Low	Variable	Sapling	
72	6122 - B	lack Spruce	e Po	oletimb	er Well	24.0	78	141-170	N/A		some might be treatable however much of the stand will need to be taken
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	5	Pole	8			d Maple	High	Variable	Sapling	
	Black Spruce	65	Pole	8	78	Blac	ck Spruce	Low	Variable	Sapling	
	Jack Pine	30	Pole	8						-	
73	6113 - Lo	wland Mapl	e Po	oletimb	er Well	62.1	78	141-170	N/A		Part of stand is Military Board Land. Creek bisects stand.tricky stand.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	73	Pole/Log	8	78	Re	d Maple	Low	Variable	Sapling	the stand will prohibit treatments, hard to tell with snow but doesnt look
	Paper Birch	3	Pole	6		Blac	ck Spruce	Low	Variable	Sapling	doable.
	Quaking Aspen	2	Pole	8		Wh	nite Pine	Low	Variable	Sapling	
	Black Spruce	8	Pole	8		Ta	ag Alder	High	Variable	Tall Shrub	
	White Pine	7	XLog/Log/Pole	18	76						•
	Balsam Fir	7	Pole	7	66						
74	42220 - Nat	tural Jack F	rine Sa	apling I	Medium	8.5	50 U	nspecified	N/A		Military Board Land.
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	100	Sapling	3	50						
75	110 - Low I	ntensity Urb	oan	Nonsto	cked	24.8			No		Sharon Refuge Truck Trail/Howe Road



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
76	4126 - White, E	Black, N. Pi	n Oak	Poletimb	er Well	28.9	97	51-80	N/A		look like they cut out short lived, sheltering along oak n pine, will hold 10 good, maybe seed tree next yoe. Military Board Land. Sharon Truck Oak
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Sale #64-04 - completed 5/07. TCR isin Compt. 133.
	White Oak	20	Pole/Log	8		Black/Red	d (Hybrid) Oak	Low	Variable	Sapling	
Blac	k/Red (Hybrid) Oak	70	Pole/Log	8	97	Re	ed Pine	Medium	Variable	Sapling	
	White Pine	5	Pole	8		Jac	ck Pine	Low	Variable	Sapling	
	Red Pine	5	Pole	7							
77	42220 - Nati	ural Jack P	ine	Poletimb	er Well	347.1	46	51-80	N/A		originated from fire? looks younger than 50 or stand was way to thick for
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	good growth, doesnt look merchantable for the most part, maybe cut next YOE. north end a bit nicer, some areas seem to be older, most is smaller
	Red Oak	2	Log	16		Blac	k Cherry	Low	Variable	Sapling	2-3 sticks stuff. could cut now if needed or will should fine 10
	Jack Pine	98	Pole/Saplin	g 5	46					'	
78	4126 - White, E	Black, N. Pi	n Oak	Sawtimb	er Poor	29.4	101	1-50	N/A		stand filling in nicely, take top off in 10 years maybe. this stand is part of the Truck Trail Jack Pine Sale 039-02. All jack pine over 4 DBH were
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	cut. No oak, cherry or other pine were cut. This part of the sale has
	White Oak	35	Log	14		Wh	ite Oak	Medium	Variable	Sapling	more large oak that were left.
Blac	k/Red (Hybrid) Oak	65	Log/Pole	13	101	Black/Red	d (Hybrid) Oak	Medium	Variable	Sapling	
						Jac	ck Pine	Medium	Variable	Sapling	
79	42220 - Natu	ural Jack P	ine	Sapling N	Medium	57.3	31	Immature	N/A		This stand is part of the Truck Trail Jack Pine Sale 039-02. All jack pine over 4 DBH were cut. No oak, cherry or other pine were cut. some open
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	some thick
	White Oak	3	Pole/Log	8		Black/Red	d (Hybrid) Oak	Medium	Variable	Sapling	
Blac	k/Red (Hybrid) Oak	5	Log/Pole	12		Jac	ck Pine	Medium	Variable	Sapling	
	Jack Pine	92	Sapling	4	31						
80	4131 - A	spen, Oak		Sapling	y Well	45.4	34	51-80	N/A		Military Board Land. Stand was clearcut in 1986. Sale #024-84-01. nice
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	mix of aspen, maple and oak.
	Red Oak	50	Sapling	3	34	Blac	k Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	40	Sapling	3	34						-
	Red Maple	10	Sapling/Pol	e 3	34						
81	4191 - Mixed Upla Co	and Decidu	ous with	Sapling	Poor	59.2	6	Immature	N/A		clearcut last YOE, some white oak left after harvest, stand is in process of regenerating, looks like it will fill in to a fully stocked jack pine, oak and
	Canopy Species	% Cover	Size Class	DBH	Age						maple stand.
	Jack Pine	25	Sapling	1	6						
	Red Oak	50	Sapling	1	6						
82	3205 - Mixed	Upland Sh	nrub	Nonsto	cked	3.4	L	Inspecified	No		open area with some pockets of jack pine as well

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Stand	Level 4 Co	over Type	S	Size De	ensity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
84		Red Oak			Medium	41.7	6	Immature	N/A		Filling in pretty good expect the bulk of the stand to be fully stocked, might be a few lighter pockets but overall looks good.
	Canopy Species		Size Class		I Age						
	Red Maple	25	Sapling	1	6						Military Board Land. Radio Hill Oak Sale 092-04. Completed 11 of 2006.
	Quaking Aspen	15	Sapling	1	6						Unit 2 of Quercus Maximus, 616711601, cut 32017. Cut all trees 2 except
	Red Oak	60	Sapling	1	6						red and white pine. Oak salvage or pre-salvage due to oak decline and heavy gypsy moth defoliation.
85	42220 - Nati	ural Jack P	ine P	oletimb	er Well	25.9	51	51-80	N/A		Military Board Land. Stand regenerated from a fire incident. could cut or
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	hold as needed, leaning towards holding as diameters are pretty small yet, tank trail in stand?
	Red Oak	2	Pole/Sapling	6		R	ed Oak	Low	Variable	Sapling	, you, aline that it is obtained.
	Jack Pine	98	Pole/Sapling	6	51						-
86	4125 - Blac	k, N. Pin O	ak S	awtimb	er Poor	57.9	101	1-50	N/A		some oak mortality, stand has filled in nicely. take top regen off now. some O3 and some O7 O8. not the greatest oak but ok quality. final
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	harvest but save regen. could save all pine as there isn't much here.
Blad	ck/Red (Hybrid) Oak	98	Log/Pole	13	101	Bigto	oth Aspen	Low	Variable	Sapling	probably 25ish % of the stand is overstory and 75% regen, should be a
	Red Pine	2	Log/Pole	13		Black/Re	d (Hybrid) Oal	k High	Variable	Sapling	fully stocked oak and jack pine regen stand post harvest and open areas
						Re	ed Pine	Low	Variable	Sapling	will fill in with a simular species mix. Maybe save all red and white pine as there isnt much here. Sale 058-04 was harvested in the winter of 04 05. All species 4" were cut except oak.
						Ja	ck Pine	Medium	Variable	Sapling	
87	4130	- Aspen		Sapling	g Well	5.9	31	1-50	N/A		Military Board Land. north finger added to this stand as it's mostly aspen
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	under O5-O7 scattered oak, manage for aspen here.
	Bigtooth Aspen	90	Sapling/Pole	4	31	Bigto	oth Aspen	Low	Variable	Sapling	
	Red Pine	2	Log/Pole	12		Blac	ck Cherry	Low	Variable	Sapling	
	Red Oak	5	Pole/Log	8	66						
	Red Maple	3	Sapling	3	31						
88	310 - Herbac	eous Open	land	Nonsto	ocked	49.3	0 ι	Jnspecified	No		2018 Stand was final harvest. Timber sale was Wild Wasp Red Pine (61-
						Sub-Ca	nopy Species	Density	Avg. Height	Size	stand was trenched in 2019.
						Blac	k Cherry	Low	< 5 feet	Sapling	
						Ja	ck Pine	Low	< 5 feet	Sapling	2016 Comments - Split this stand where red pine was the heaviest. North
											Part of stand was split off that is to planted to jack pine. Sale# 61-082-12. 2010 Comments - South half of stand is Military Board Land. The red pine that is in this stand has been planted. Mainly concentrated in the central portion of stand. Take out jack and leave red pine. Replant North half.
89	42220 - Nati				er Well	6.9	73	81-110	N/A		This stand was left as retention and now could be a bud worm risk
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	red pine. forest health concern.
	Jack Pine	100	Pole/Sap/Log	8	73	Pir	Cherry	Low	Variable	Sapling	
		I/Parking L									

Traverse City Mgt. Unit Report 7 - Stands



Managed Site General Comments	Managed S	A Range	Stand Age B	Acres	nsity	Size De		over Type	Level 4 C	Stand		
N/A Intermittant streams run through stand. Aspen is found along the cre			N/A		13.3 86 111-140		Poletimber Well		е	wland Mapl	6113 - Lo	95
Avg. Height Size bed edges where it is slightly more upland. some is pretty nice and s more E5ish.	Avg. Height	Density	anopy Species	Sub-Ca	Age	DBH	Size Class	% Cover	Canopy Species			
Variable Sapling	Variable	Medium	ed Maple	Re	86	8	Pole	80	Red Maple			
10 - 20 feet Sapling	10 - 20 feet	Low	/hite Oak	W		13	Log/Pole	2	Red Oak			
Variable Sapling	Variable	Medium	hite Pine	W		8	Pole	10	Quaking Aspen			
Variable Tall Shrub	Variable	Medium	ag Alder	Ta		13	Log/Pole	5	Red Pine			
						8	Pole	3	Jack Pine			
No	No	nspecified	U	1.6	ocked	8 Nonsto	Pole	- Water		98		