



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72219

Entry Year 2022

Acreage: 393

County Crawford

Management Area: Camp Grayling

Revision Date: 2020-03-13

Stand Examiner: Colton Behrmann

Legal Description:

Sections 31 and 32, T27N-R3W, Crawford County

Identified Planning Goals:

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

Military Mgt Objective (for military board lands and long term lease lands):

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

Soil and topography:

The compartment is flat to very gently rolling terrain. There are four major soil type associations within this compartment. They are; Croswell Sand, Grayling sand, Au Gres sand and Tawas-Leafriver Mucks. Croswell Sand is classified as being moderately well drained and is common on outwash plains and stream terraces. Erosion and windthrow possibilities are slight. Grayling sand is classified as being excessively drained and is common on outwash plains. Windthrow is slight and erosion is low. AuGres sand is somewhat poorly drained and is also common on outwash plains and stream terraces. Erosion and windthrow possibilities are slight. Tawas-Leafriver Mucks are classified as being very poorly drained with little erosion hazard and high windthrow hazard depending on exposure to wind.

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

This compartment is broken up by private land throughout. Multiple parcels of state land within the compartment have been disposed over the past twenty years, resulting in the small size compartment we have now. State lands were given to Crawford for the County Fairgrounds and the Animal Shelter. Other lands have been disposed of for private consolidation and development. Part of the compartment is under the Military 10 year lease agreement. The military tank trail does cross through section 31.

-10 Year Management Agreement Lands: State ownership is under the 10 year management agreement with the Michigan National Guard. This agreement allows for camping and maneuvers, but does not allow use of heavy equipment or high intensity live ammunition firing. Tracked vehicles are prohibited on these lands except to cross on designated tank trails. Wheeled vehicles are restricted to existing trails and are not to be driven cross country. MDNR management activities take precedence on these lands, though we try to tailor management activities so they are compatible with National Guard training needs.

A parcel of state land in section 32, located just east of I-75, has no legal access since it was bisected from other state ownership when the freeway was constructed. It was recommended ten years ago this parcel be disposed of via auction as excess. This recommendation is being continued. This land, encompassed by stand 25 is not usable by most public and is recommended for disposal via public auction.

Unique Natural Features:

The East Branch of the AuSable River, A designated natural river, flows through this compartment. There is also a swamp that has groundwater influence and seeps that flow into the East Branch in many locations. Natural River restrictions apply to this watercourse.

Archeological, Historical, and Cultural Features:

No features to report at this time.

Special Management Designations or Considerations:

Natural River designation on the East Branch of the AuSable river.

Watershed and Fisheries Considerations:

The East Branch of the AuSable river provides fishing opportunities within this compartment. Natural River designations apply to this river. Watershed considerations should be carried out with any management activities near the river.

Wildlife Habitat Considerations:

Wildlife habitat is good throughout the compartment. Private land ownership does break up the compartment somewhat however management activities on state owned lands have maintained and improved much of the habitat in this area.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Marshall Sandstone that was previously used as a building stone. The nearest gravel pit is two miles to the north, and gravel potential is limited. There are no current oil and gas leases. The lands in the NE1/4 and SESE of Section 31 are classified as development. The remainder of the compartment is classified as non-development due to wetlands and/or military leases.

Vehicle Access:

Vehicle access to this compartment is mainly from M-93 and Lewiston Grade Rd. Lewiston Grade Rd is a county gravel rd. This road provides access to Roberts rd which also allows access to other portions of the compartment. Forest roads and 2-tracks are not as numerous in this compartment but still provide ample access to state land.

Survey Needs:

No survey needs at this time.

Recreational Facilities and Opportunities:

A designated snowmobile trail #47 and the Shore-to-Shore Riding Hiking trail are located within this compartment. Hunting and fishing also occur within this area throughout the respective seasons and timber management has been carried out to improve each of these activities.

Fire Protection:

Fire protection is of concern in this area and suppression activities are carried out by the State of Michigan wildland fire program.

Additional Compartment Information:

Dump sites are common in the compartment. Recommend closing any new roads that may be used in the future for timber access.

The following reports from the Inventory are attached:

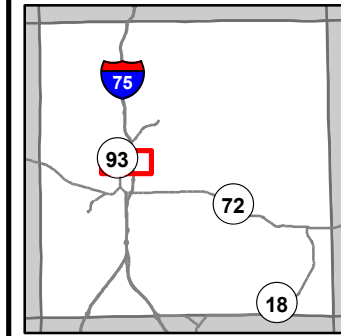
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

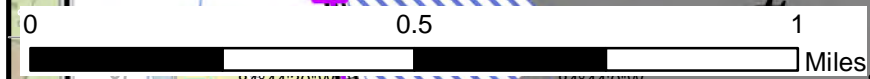
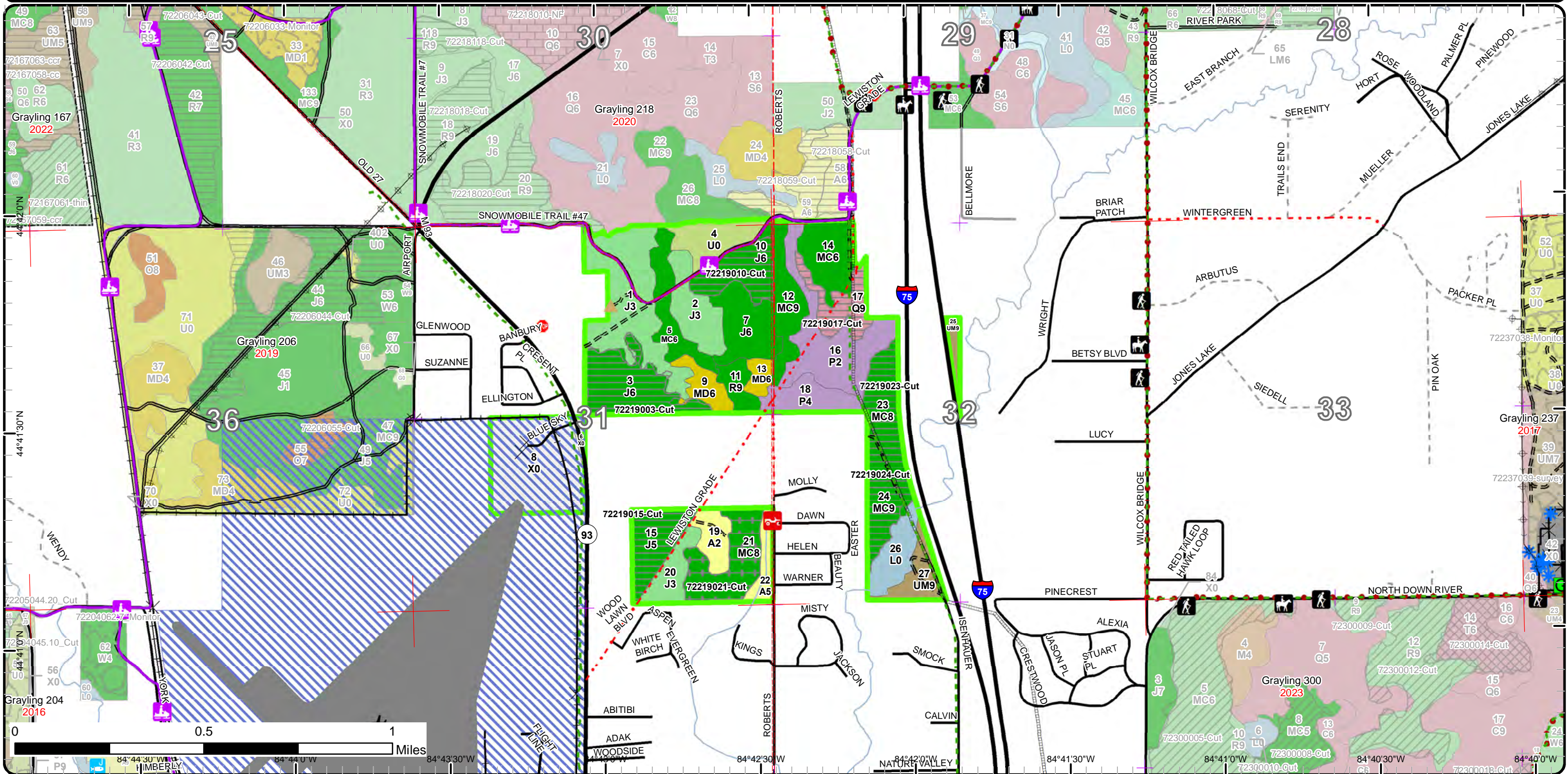
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 219
 T27N, R03W, Sec. 31-32
 County: Crawford
 Unit: Grayling
 Mgmt Area: Camp Grayling
 YOE: 2022
 Acres: 393.4 GIS Calculated
 Examiner: Colton Behrmann
 Map Revised: 5/26/2021
 Map Phase: Post-Review



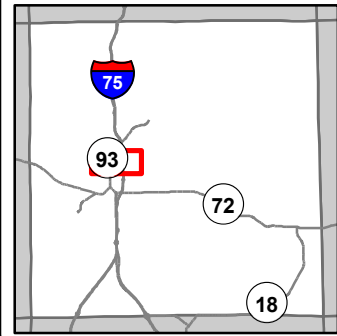
- Miris Corners
- Remonumented Section Corners
- Counties
- == DNR - Secondary Forest Road
- == DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- - - Federal / State - Dirt / Gravel Road
- . - . County - Gravel Road
- - - County - Dirt Road (Seasonal)
- Private - Paved Road
- - - Private - Dirt / Gravel Road
- Active Railroads
- Hiking Trails
- Horse Trails
- ORV Routes
- Snowmobile Trails
- Designated Hiking Trails
- Designated Bicycle Trails
- Designated Equestrian Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Airport
- Berms
- Gate
- Sign
- Perennial River
- Pipeline
- Powerline
- Fence
- Airports
- Compartment Boundary
- Clearcut (w/Reserves)
- Harvest, Overstory Removal
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 121 - Airport
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 790 - Other Bare/Sparingly Vegetated
- Camp Grayling Monitoring Wells
- Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail
- Camp Grayling Airfield



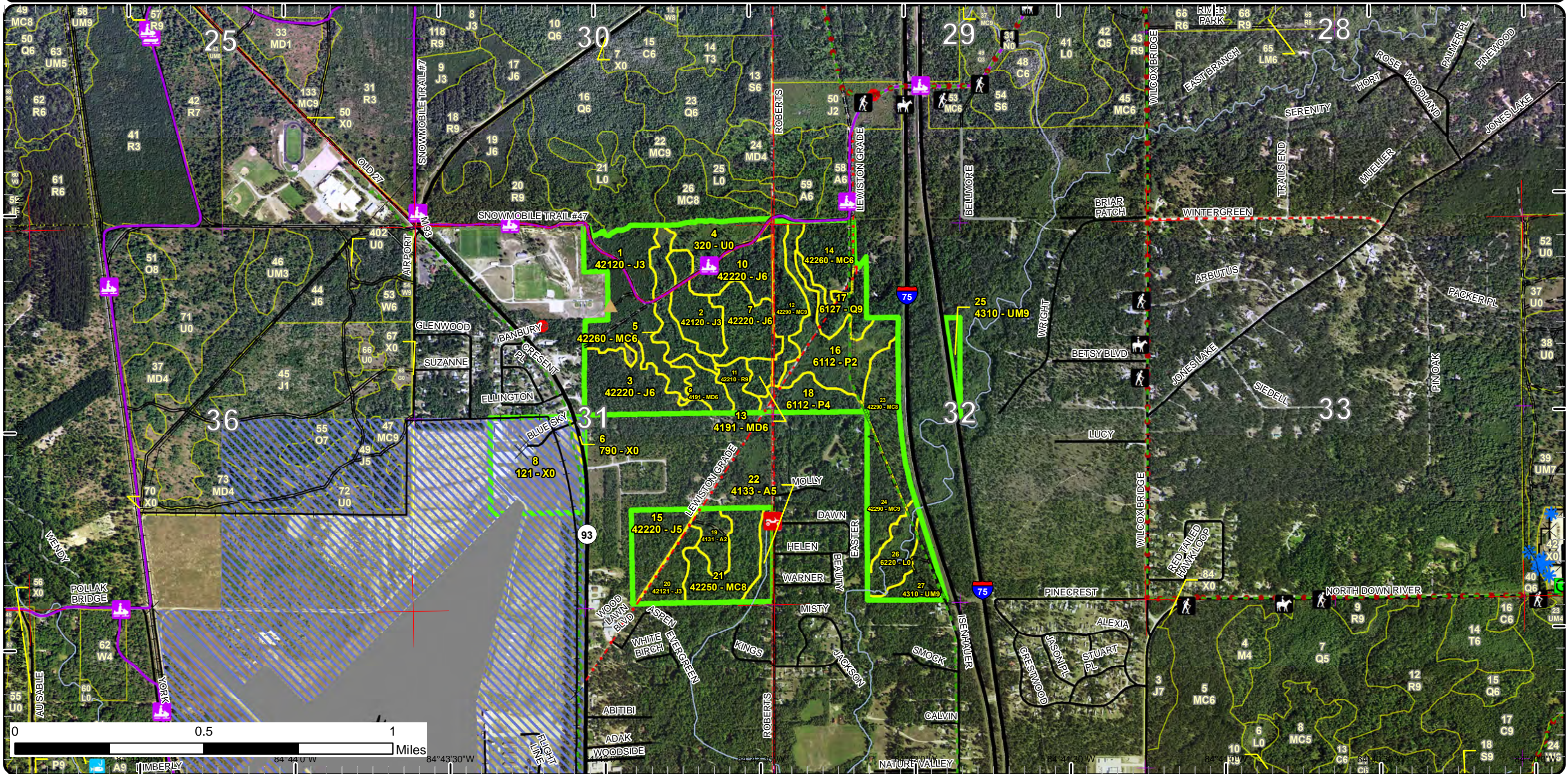
Map coordinates: 44°41'30"N, 84°43'30"W, 84°42'30"W, 84°41'30"W, 84°40'30"W, 84°40'0"W

Stand Boundary Map

Compartment: 219
 T27N, R03W, Sec. 31-32
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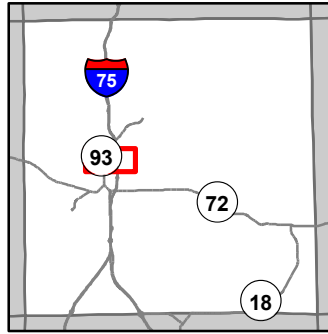


- Miris Corners
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- Counties
- DNR - Secondary Forest Road
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- Federal / State Highway
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Active Railroads
- Hiking Trails
- Horse Trails
- ORV Routes
- Snowmobile Trails
- Designated Hiking Trails
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- Designated Equestrian Trails
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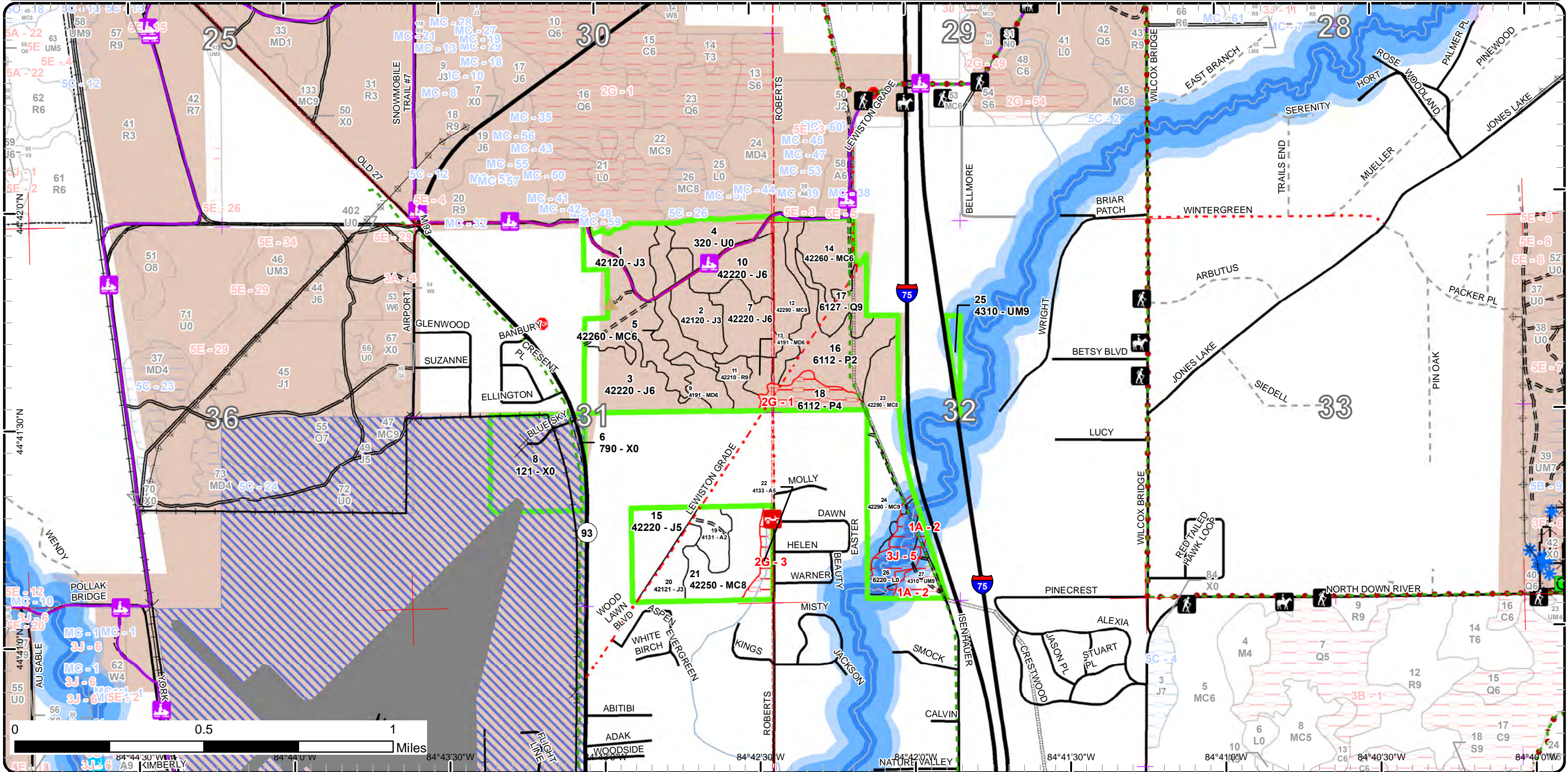


Special Conservation Areas

Compartment: 219
 T27N, R03W, Sec. 31-32
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 Unit: Grayling
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 Map Revised: 5/26/2021
 Map Phase: Post-Review



- Miris Corners
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- Snowmobile Trails
- Designated Hiking Trails
- Designated Bicycle Trails
- Designated Equestrian Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Airport
- Berms
- Gate
- Sign
- Perennial River
- Pipeline
- Powerline
- Fence
- Airports
- Compartment Boundary
- Unavailable
- Stand Boundaries
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands
- Camp Grayling Monitoring Wells
- Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail
- Camp Grayling Airfield



Report 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit

Compartment 219 Year of Entry 2022

Colton Behrmann : Examiner



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	0	14
Bare/Sparsely Vegetated	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Jack Pine	0	0	0	80	0	0	15	39	0	0	0	0	0	0	0	0	0	0	134
Lowland Aspen/Balsam Poplar	0	0	0	29	0	0	0	12	0	0	0	0	0	0	0	0	0	0	41
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12
Lowland Shrub	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Mixed Upland Deciduous	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
Natural Mixed Pines	0	0	0	0	0	16	0	60	0	20	0	0	0	0	0	0	0	0	96
Red Pine	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	4	10	0	0	0	0	0	0	14
Upland Shrub	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Urban	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Total	67	0	0	117	0	27	15	117	6	20	4	10	12	0	0	0	0	0	395



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2022

Acres of Harvest

Compartment 219

Total Compartment Acres: 393

Commercial Harvest - 117
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Jack Pine	54	0	0	0	0	0	0	0	0	54
Lowland Conifers	12	0	0	0	0	0	0	0	0	12
Natural Mixed Pines	31	0	0	0	0	20	0	0	0	51
Total	97	0	0	0	0	20	0	0	0	117

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	117	0	0	0	0	0	0	0	0	117
Next Step	0	122	92	0	0	122	184	0	0	519
Total	117	122	92	0	0	122	184	0	0	636



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

3	72219003-Cut	23.8	42220 - Natural Jack Pine	Poletimber Well	64		Harvest	Clearcut with Retention	42111 - Planted Red Pine, Mixed Deciduous	Even-Aged	No
<p><u>Prescription</u> Treat stand by final harvesting jack pine while protecting oak regeneration. Leave 1-2 islands of representative timber placed to also provide for aesthetic values.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u> Old next step comments: Plant stand to red pine using plantation spacing, plant around pockets of oak regeneration.</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2011</p>											
10	72219010-Cut	14.7	42220 - Natural Jack Pine	Poletimber Well	62	111-140	Harvest	Clearcut with Retention	42221 - Natural Jack Pine, Mixed Deciduous	Even-Aged	No
<p><u>Prescription</u> Final harvest all trees 2 inches and greater in diameter. Follow standard retention guidelines. If regeneration fails plant a fully stocked red pine plantation. Add snowmobile & ORV spec.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Skidder - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);</p> <p><u>Treatments:</u> Monitoring, Artificial Regen(3yr); Monitoring, Natural Regen (Intermediate); Pesticide, Skidder - Rel</p> <p><u>Acceptable Regen:</u> A naturally regenerated stand of jack pine with mixed deciduous meeting minimum stocking standards. If planted to red pine, a fully stocked red pine plantation.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>											
15	72219015-Cut	15.0	42220 - Natural Jack Pine	Poletimber Medium	51	81-110	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	No
<p><u>Prescription</u> Final harvest all trees 2 inches and greater in diameter. Follow standard retention guidelines. Focus retention around oak regen. If regeneration fails plant a fully stocked red pine plantation.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory); SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Skidder - Site Prep; Planting,</p> <p><u>Treatments:</u> Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Pesticide, Skidder - Rel</p> <p><u>Acceptable Regen:</u> Naturally regenerated stand of oak and jack pine meeting minimum stocking levels. If planted to red pine, a fully stocked red pine plantation.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>											



Standard

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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17	72219017-Cut	11.8	6127 - Lowland Pine	Sawtimber Well	113	141-170	Harvest	Clearcut with Retention	6128 - Lowland Coniferous, Mixed Deciduous	Even-Aged	No
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Prescription Final harvest all trees 2 inches and greater in diameter, except for white pine greater than 24 inches in diameter. Focus retention in the southwestern portion of stand around large white pine. Add spec 5.2.22.1.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: A naturally regenerated stand of conifers with mixed deciduous meeting minimum stocking levels.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

21	72219021-Cut	20.2	42250 - Pine, Oak	Sawtimber Medium	89	51-80	Harvest	Overstory Removal	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	No
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Prescription Final harvest all trees greater than 4 inches in diameter. Follow standard retention guidelines. Add oak wilt spec.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: naturally regenerated stand of mixed deciduous with pine meeting minimum stocking levels.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

23	72219023-Cut	17.9	42290 - Natural Mixed Pine	Sawtimber Medium	69	51-80	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
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Prescription Final harvest all trees 2 inches and greater in DBH. Follow standard retention guidelines. Add gas line spec.
Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release; Planting, Initial Plant;
Treatments: Planting, Replant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Regen: Fully stocked red pine plantation.

Other Comment: access will need to come from the north through stand 16

Site Condition

Proposed Start Date: 10/1 /2021



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
24 72219024-Cut	13.3	42290 - Natural Mixed Pine	Sawtimber Well	68	111-140	Harvest	Clearcut with Retention	42110 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Final harvest all trees 2 inches and greater in diameter. Follow standard retention guidelines.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Skidder - Site Prep; Planting, Initial Plant; Pesticide, Skidder - Release;</p> <p><u>Treatments:</u> Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Planting, Replant</p> <p><u>Acceptable</u> Fully stocked red pine plantation.</p> <p><u>Regen:</u></p> <p><u>Other</u> Access/Haul route will need to come from North.</p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>										

Total Treatment Acreage Proposed: 116.7

Report 4 – Site Conditions

Grayling Mgt. Unit
Colton Behrmann : Examiner

Compartment: 219
Year of Entry: 2022

Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available	Dominant Site Conditions		
Acres	Available	With Condition	Not Available	1A	2G	3J
14	8	0	6	Aspen	6	
2	2	0	0	Bare/Sparsely Vegetated		
134	134	0	0	Jack Pine		
41	29	0	12	Lowland Aspen/Balsam Poplar	12	
12	12	0	0	Lowland Conifers		
12	1	0	10	Lowland Shrub		10
11	11	0	0	Mixed Upland Deciduous		
96	95	0	1	Natural Mixed Pines		1
6	6	0	0	Red Pine		
13	4	0	10	Upland Mixed Forest	7	2
14	14	0	0	Upland Shrub		
39	39	0	0	Urban		
393	355		38	Total Forested Acres	7	18
	90%		10%	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.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Open grown aspen with tag alder very common throughout the stand.							
2	Unavailable	1A: Federal/State/Local Law	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Isenhauer road (access rd) is a restricted road.							

Report 4 – Site Conditions

Grayling Mgt. Unit

Compartment: 219

Colton Behrmann : Examiner

Year of Entry: 2022

3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Lowland poor quality aspen stand with tag alder common in the understory.							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Ausable River, Natural River Buffer.							

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
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Comments



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.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																										
1	42120 - Planted Jack Pine	Sapling Well	38.3	25	Immature	N/A	<p>Panted jack pine stand with mixed deciduous present throughout the stand, most notably oak. Typical thick jack pine planting. Growing well, with heavy wildlife use. Some H2O influences on the northern and eastern borders.</p>																																										
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2	42120 - Planted Jack Pine	Sapling Well	14.7	25	Immature	N/A	<p>Typical thick young jack pine plantation. Sporadic red and white pine canopy trees are throughout the stand. Eastern end of stand is less of a plantation look and more of a natural growth, still very thick. Heavy use from wildlife.</p> <p>Jack pine plantation growing well with oak, red maple and occasional white pine present. overall stand is in good shape.</p>																																										
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3	42220 - Natural Jack Pine	Poletimber Well	24.7	64		N/A	<p>jp stand w/ oak present-heavier component in southern portions of stand. very few rp w/in stand. hawthorn dense in places of understory.</p>																																										
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4	320 - Upland Shrub	Nonstocked	13.6	0	Unspecified	42111 - Planted Red Pine, Mixed Deciduous	<p>Jack pine regen has come back in thick patches where there is no red pine canopy. Oak regen is moderate, but noted as low due to heavy browse. Aspen regen is in pockets, and mainly along the eastern edge near the trail.</p> <p>New stand added. red pine stand, all jack pine, aspen, oak and red maple were removed last year of entry, red pine left. low basal area, good regen of red maple, some oak. pockets of aspen regen. this is a new stand, originally part of stand 7, north of snowmobile trail. red pine cored to be 66 years of age, regen 2 years old from cutting record.</p>																																										
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5	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	13.2	62	81-110	N/A	Mixed stand of jack pine, oak, red maple and some large red and white pine. Oak and red maple are pole sized with occasional log sized trees. More deciduous can be found in the southern portion of the stand. There is a drainage that runs N/S through the stand.																																																				
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6	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.9			No	m-93 and ROW on west side of road.
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7	42220 - Natural Jack Pine	Poletimber Well	17.2	25	Immature	N/A	Stand was cut the same time as adjacent stand 2 (western side stand). No planting occurred, and relied on natural regeneration. Overall the stand is filling in well. White pine, jack pine and red maple pole/log trees are scattered. jp plantation growing well with oak, rm and occasional wp present. overall stand is in good shape.																																							
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8	121 - Airport	Nonstocked	38.6			No	edge call, airport
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9	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	7.3	42	81-110	N/A	New stand. Was part of Stand 5(stand on north side). Mixed deciduous stand with jack pine. More pole sized oak, maple and aspen found in this stand. Will need to access stand from the North, through Stand 5 when ready for harvest. Gradual transition into Stand 11 to the East, where more jack pine and red pine begin again.																																																							
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11	42210 - Natural Red Pine	Sawtimber Well	6.4	70	141-170	N/A	Red pine stand with some jack pine and white pine mixed in. Oak and aspen poles are filling in gaps. There is a drainage that runs N/S through the stand filled with tag alder.																																																																
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12	42290 - Natural Mixed Pine	Sawtimber Well	14.7	66	81-110	N/A	mixed pine stand with red maple in low numbers. White, red and jack pine are present with jack pine more prevalent in western/southern portions of stand. Red and white pine are higher density and some are quite large (24"+) in eastern areas of stand. Large red pine cored at 125 y.o. There is a narrow drainage in the southern end of stand running East/West.																																																																
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13	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	3.8	45	51-80	N/A	Very mixed stand of deciduous and jack pine. Jack pine is more prevalent in the northern portion of the stand. Southern portion contains more of the red maple, oak and paper birch. Overall a pole sized stand right now with some red pine canopy trees scattered throughout.																																																																
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14	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	15.9	47	81-110	N/A	Young mixed conifer stand with mixed deciduous filling in. Small openings can be found throughout the stand. Standard poor quality oak and aspen. .																																																																									
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15	42220 - Natural Jack Pine	Poletimber Medium	15.0	51	81-110	N/A	Jack pine and oak stand that is declining in vigor. Dense oak regen has been established in the understory. mixed jp/oak stand w/ occasional aspen and wp pockets. some lowland areas w/in stand. jp/oak are variable in terms of size. oaks are poor quality.																																																																									
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16	6112 - Lowland Aspen	Sapling Medium	29.2	21	Immature	N/A	Sale harvested in November/December of 2010. Lowland aspen stand with a big H2O influence throughout the stand. Tag alder is most dominant in some parts. Areas of old skid trails & landing have come back to tag alder and water. Heavy wildlife use in the stand. Log sized pine can be found along stand 17 (to the north) & along the eastern boundary.																																																																									
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17	6127 - Lowland Pine	Sawtimber Well	11.8	113	141-170	N/A	Mixed lowland conifer stand, not overly wet but adjacent to swamps and definitely w/ h2o influence. Large white pine w/ pockets of red pine. Some of the red & white pine is 24"+DBH in areas. Lots of balsam fir and occasional cedar. Balsam fir regen tends to be patchy. Most cedar can be found on the southeast side of Lewiston Grade Rd. Heavy wildlife use in parts of the stand.																																																																									
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
18	6112 - Lowland Aspen	Poletimber Poor	11.6	66	1-50	N/A	Open grown aspen stand with some black ash and red maple. Stand is lightly stocked with these above mentioned species, the remainder being a tag alder stand with thick cover provided by the alder and low growing shrubs. Very wet.	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
Red Maple		10	Sapling/Pole	5		Tag Alder		
Quaking Aspen		70	Pole/Log	9	66	Quaking Aspen		
Black Ash		10	Sapling/Pole	4		Density		
Black Spruce		10	Pole	8		Avg. Height		
						Size		
19	4131 - Aspen, Oak	Sapling Medium	8.2	27	Immature	N/A	aspen/oak stand that had aspen, cherry and red maple removed during harvest 15-20 years previous. What is left is oak overstory with aspen, red maple, oak and cherry regeneration present. oak is variable sizes with saplings and logs present due to residual that was left after harvest.	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
Red Maple		10	Sapling	3		Hawthorn (spp.)		
Quaking Aspen		40	Sapling/Pole	3	27	Density		
Northern Pin Oak		31	Sapling	4	27	Avg. Height		
Jack Pine		5	Sapling	3		Size		
Black Cherry		5	Sapling	3				
Red Pine		3	Log	12				
White Oak		5	Sapling	3				
Northern Pin Oak		1	Log	14				
20	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	9.5	29	Immature	N/A	Majority of stand had been planted to jack pine. Other portions of stand are coming back naturally to an upland mixed conifer/deciduous. Very mixed regen. As stand matures oak will become more prevalent. Red pine is located along the eastern boundary adjacent to Stand 21. jp plantation w/ aspe, rm and oak regenerating heavily in places as well. some areas of stand were not planted because of natural regen, these areas may be separated next yoe as new stands. this is most notable in northern parts of stand. oak overstory is also more dense in northern portions-approx 5-10BA. overstory rp and oak were left w/in stand boundary.	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
Red Maple		8	Sapling	4				
Quaking Aspen		5	Sapling/Pole	4				
Northern Pin Oak		11	Sapling	3				
Red Pine		2	Log	14				
Jack Pine		65	Sapling	3	29			
Black Cherry		3	Sapling	2				
White Pine		1	Log	12				
Northern Pin Oak		2	Log	15				
White Oak		1	Sapling	3				
21	42250 - Pine, Oak	Sawtimber Medium	20.2	89	51-80	N/A	Mixed pine & oak stand. BA ranges from 30-50 in areas, to 60-80 in other areas. Most of the oak in the overstory are either dead or declining. Canopy trees are log sized with a dense understory from previous harvest. Aspen and red maple are most prevalent, with oak filling in. mixed oak/pine stand with varying dominance by rp, wp and oaks. all aspen and rm were removed last harvest so understory is thick w/ these two species, accompanied by wp as well. hawthorn is thick in places.	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
Northern Pin Oak		30	Log/Pole	12		Red Maple		
White Pine		35	Log/XLog	17	89	Quaking Aspen		
Red Pine		35	Log/Pole/XLog	14	89	White Pine		
						Northern Pin Oak		
						Hawthorn (spp.)		
						Red Pine		
						Jack Pine		



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22	4133 - Aspen, Mixed Pine	Poletimber Medium	6.3	61	51-80	N/A	Lowland aspen stand with a drainage running through. Variable sized canopy and understory. Continued blowdowns are opening up gaps for regen. Most pine can be found along the western boundary.																																																															
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23	42290 - Natural Mixed Pine	Sawtimber Medium	17.9	69	51-80	N/A	Stand harvested in November/December 2010. Looks like red & white pine was left, as well as green-marked trees. Most oak left is dead or declining in the overstory. White pine responded well to the harvest. Stand increases in basal area as you head south. Tough to get an accurate basal area with varying densities. Averaged 20-40 BA in the northern part of stand, and 90-110 BA in the southern half of stand. 50-75% canopy cover currently, expecting that to increase to 75-100% as the jack pine, oak and aspen fill in.																																																															
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24	42290 - Natural Mixed Pine	Sawtimber Well	13.6	68	111-140	N/A	Dense mixed conifer stand with oak. Red pine is most dominant & varies in size, but is mostly log-sized. Cored a pole sized red pine. Suppressed in the understory. Starting to see decline in jack pine and a few of the larger diameter oak. Red maple is pole sized & filling in gaps. White oak is on southern end of stand near river.																																																															
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25	4310 - Pine, Oak Mix	Sawtimber Well	3.6	91	81-110	N/A	No access to stand. Will be recommended for disposal at compartment preruleview.																																																															
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26	6220 - Alder/willow	Nonstocked	11.7			No	Stand contains roughly 2.5 acres of lowland mixed conifer along the southern boundary of the river. The lowland mixed conifer is on a flat and contains balsam fir, spruce, cedar, white, red pine and aspen. Heavy wildlife use.					
								Sub-Canopy Species	Density	Avg. Height	Size	
								Conifers	Trace		Pole	
								White Pine	Low		Log	
								Tag Alder	Full		Tall Shrub	
Northern White Cedar	Medium		Pole									
27	4310 - Pine, Oak Mix	Sawtimber Well	9.8	107	81-110	N/A	Mature log size mixed pine/oak stand. Some x/log red and white pine scattered. Oak and jack pine are declining in vigor. More oak regen in the eastern end of the stand. There is a pocket of aspen in the western end of the stand near the survey corner. Amur Honeysuckle was found around the SW survey corner of the stand.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Northern Pin Oak	35	Log	13	107
								White Pine	35	Log/Pole	11	
								Red Pine	10	Log	13	
								Jack Pine	14	Pole	7	
								Red Maple	1	Pole	8	
								Quaking Aspen	5	Pole/Log	8	
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							mixed oak pine stand with large rp/wp. jp is beginning to drop out, oak is relatively poor-fair quality but declining in places. nice oak/wp regen in areas.					