



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72290

Entry Year 2024

Acreage: 2,065

County Crawford

Management Area: Kirtland's Warbler

Stand Examiner: Scott McClarren

Legal Description:

T28N R1W Sections 22, 23, 24, 27. Lovells Township – Northeast Part

Identified Planning Goals:

To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management. In addition, to maintain a healthy habitat for the endangered species *Dendroica kirtlandii* (Kirtland's warbler), taking into account warbler management plan directives, species diversity, and visual management.

Soil and topography:

The compartment's terrain is primarily outwash plains on Grayling Sands. The swamps and drainages are on organic soils such as Tawas-Leafriver muck.

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

The compartment is part of the Lovells Kirtland's Warbler Management Unit, blocks 55 & 56. The lands adjacent to the compartment are almost entirely in State ownership except for private property interface along the compartment's southwest edge. An acquired parcel in the northwest of section 22 has two cabins that are scheduled for removal.

Unique Natural Features:

In addition to the Kirtland's warbler habitat, the Middle Branch of Big Creek flows through the compartment. There is the potential for rare dry prairie plants and insects to occur in upland grassy openings and pine barrens.

Archeological, Historical, and Cultural Features:

None have been identified.

Special Management Designations or Considerations:

The compartment is part of the Lovells Kirtland's Warbler Management Unit, a High Conservation Value Area (HCVA). The Middle Branch of Big Creek is also an HCVA, part of the AuSable's Natural Rivers designation.

Watershed and Fisheries Considerations:

This compartment contains a portion of the Middle Branch Big Creek and a portion of Big Creek Impoundment. Big Creek Impoundment is owned and maintained by Fisheries Division to provide recreational fishing opportunities and is periodically stocked with walleye. The dam associated with this impoundment was repaired in 2016. Access to the impoundment for anglers should be retained. A portion of Pickerel Lake, which drains into Big Creek Impoundment, is also in this compartment.

Wildlife Habitat Considerations:

Management per the Kirtland's warbler plan not only benefits the warbler, but also provides habitat for other opening-dependent songbirds, hare and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial metallic mineral production in this part of the state. The nearest known active sand/gravel pits are three miles west and southwest. There appears to be some good potential for sand & gravel within the compartment. The compartment sits at the southern end of the current extent of the Antrim Shale gas play. There may be potential for Antrim gas beneath the compartment, but wells this far south may have marginal production and could be uneconomical. There has been no recent well permitting activity in the area. Some parcels in Sec 24 are currently leased and are being held by producing wells farther north. Potential for oil & gas development within the compartment is considered low at this time.

Vehicle Access:

Walsh Road is the only county road within the compartment. The snowmobile trail system and two-track roads provide additional access.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Two designated snowmobile trails (#4 & #409) run through the compartment, along with the Midland to Mackinac hiking trail and the Shore to Shore horse/hiking trail. The compartment's main forms of dispersed recreation are hunting, fishing, camping and bird watching.

Fire Protection:

The compartment has jack pine in rotation for Kirtland's warbler habitat. Several mature jack pine stands are proposed for harvest. Vehicle access is adequate along existing roads, and the Creek, Impoundment and lowland types serve as fuelbreaks. The Creek and Impoundment are potential water sources.

Additional Compartment Information:

None.

The following reports from the Inventory are attached:

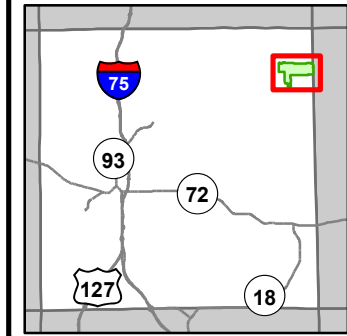
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

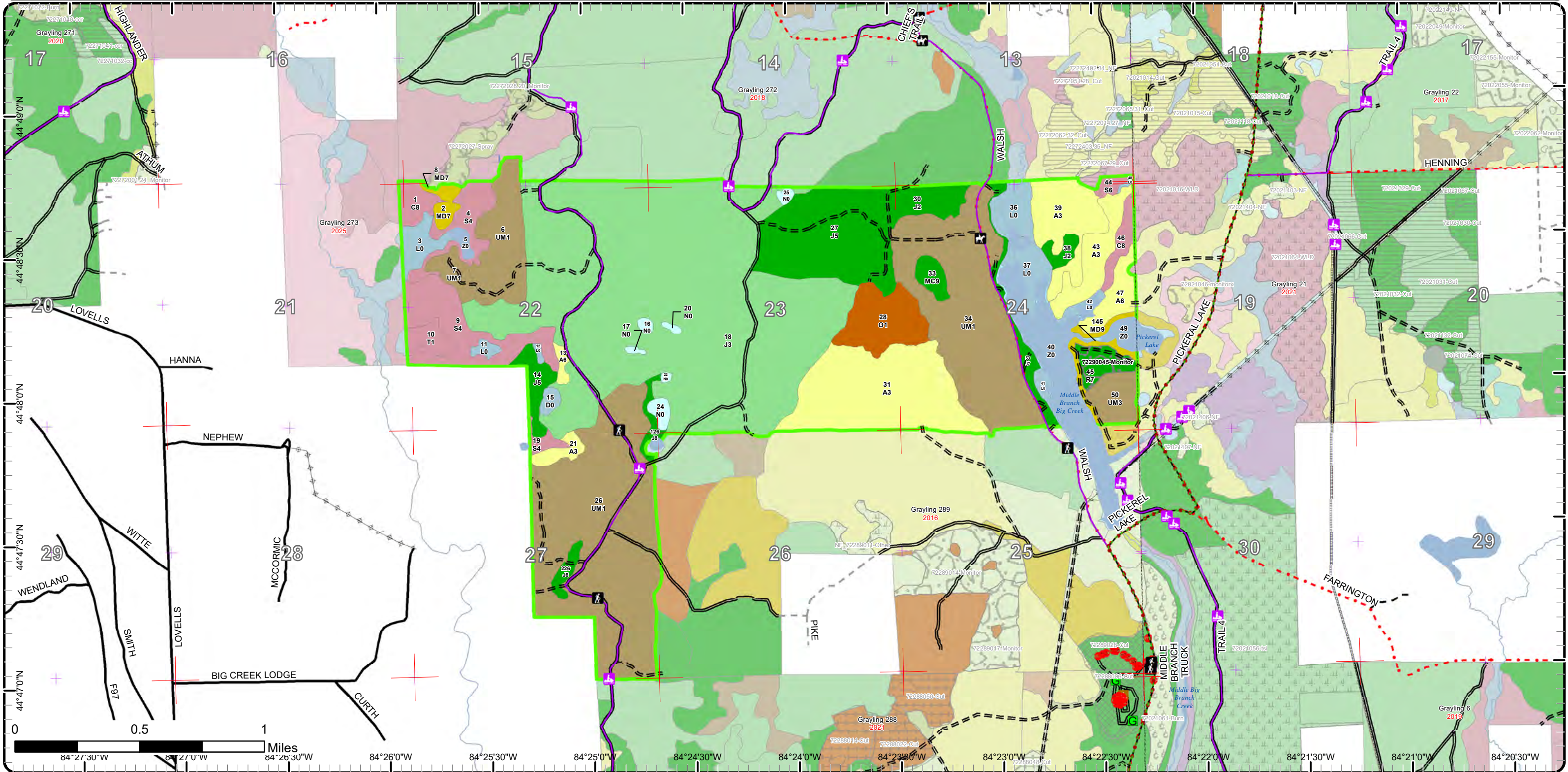
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 290
 T28N, R01W, Sec. 15, 22-24, 27
 County: Crawford
 Unit: Grayling
 Mgmt Area: Kirtland's Warbler
 YOE: 2024
 Acres: 2065.3 GIS Calculated
 Examiner: Scott McClarren
 Map Revised: 12/27/2022
 Map Phase: Post-Review

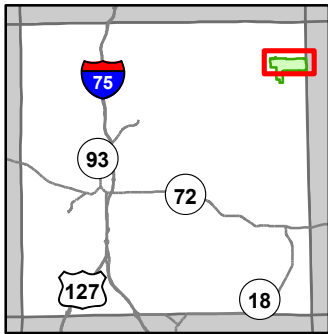


- Miris Corners
- + Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- Private - Dirt / Gravel Road
- Hiking Trails
- Horse Trails
- Snowmobile Trails
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- Sign
- Intermittent Pond
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- Lake/Pond
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- Lakes and Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Regeneration Survey
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

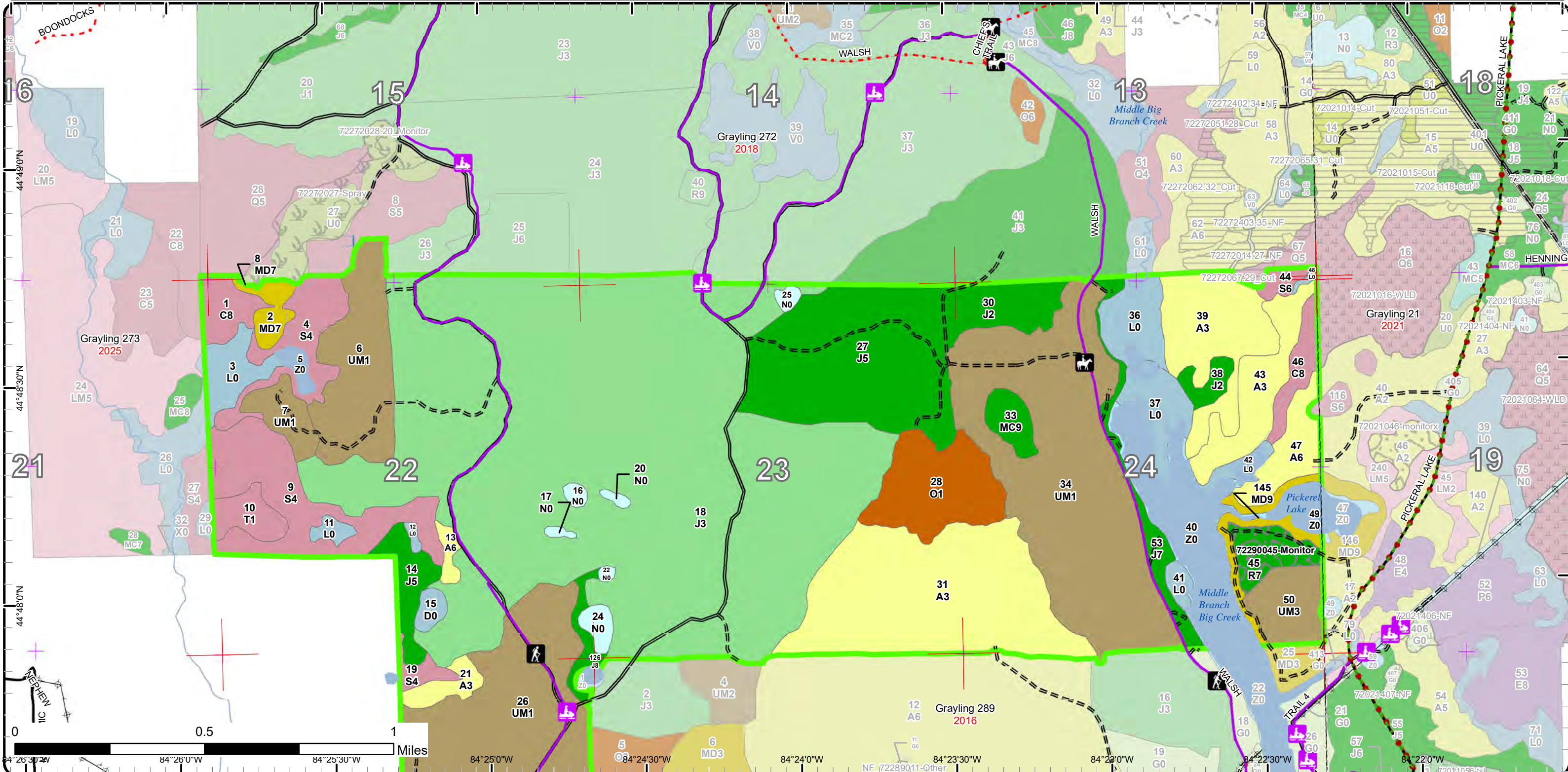


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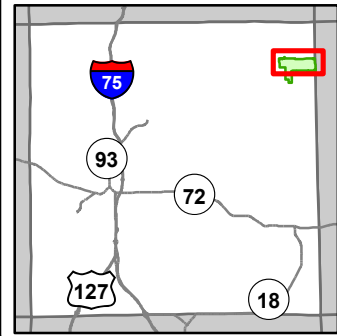


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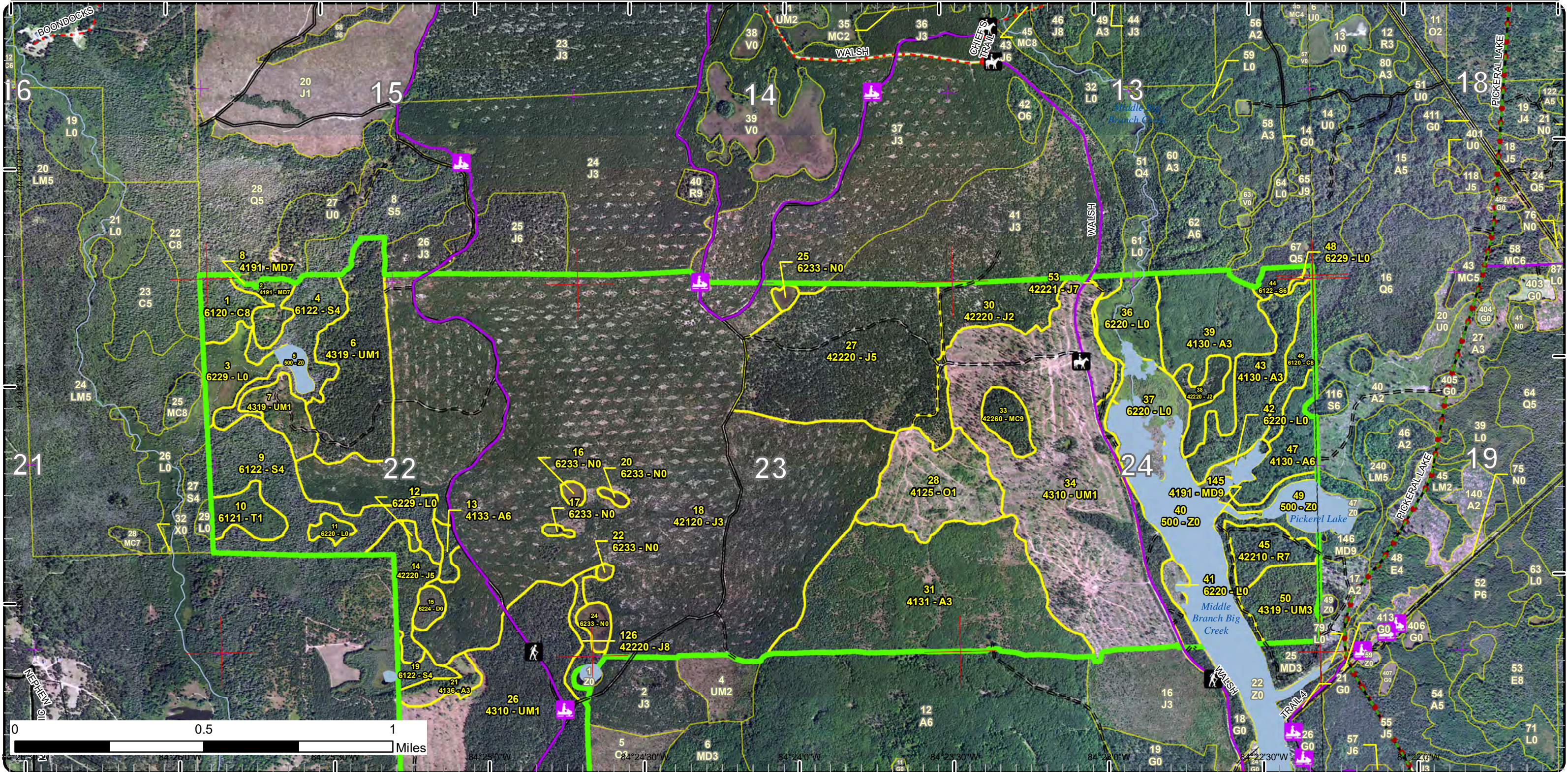


Stand Boundary Map

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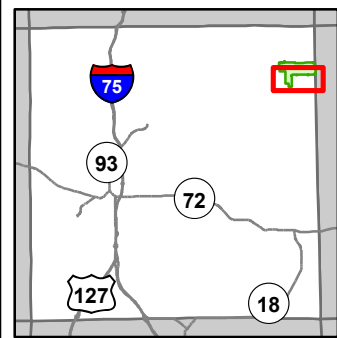


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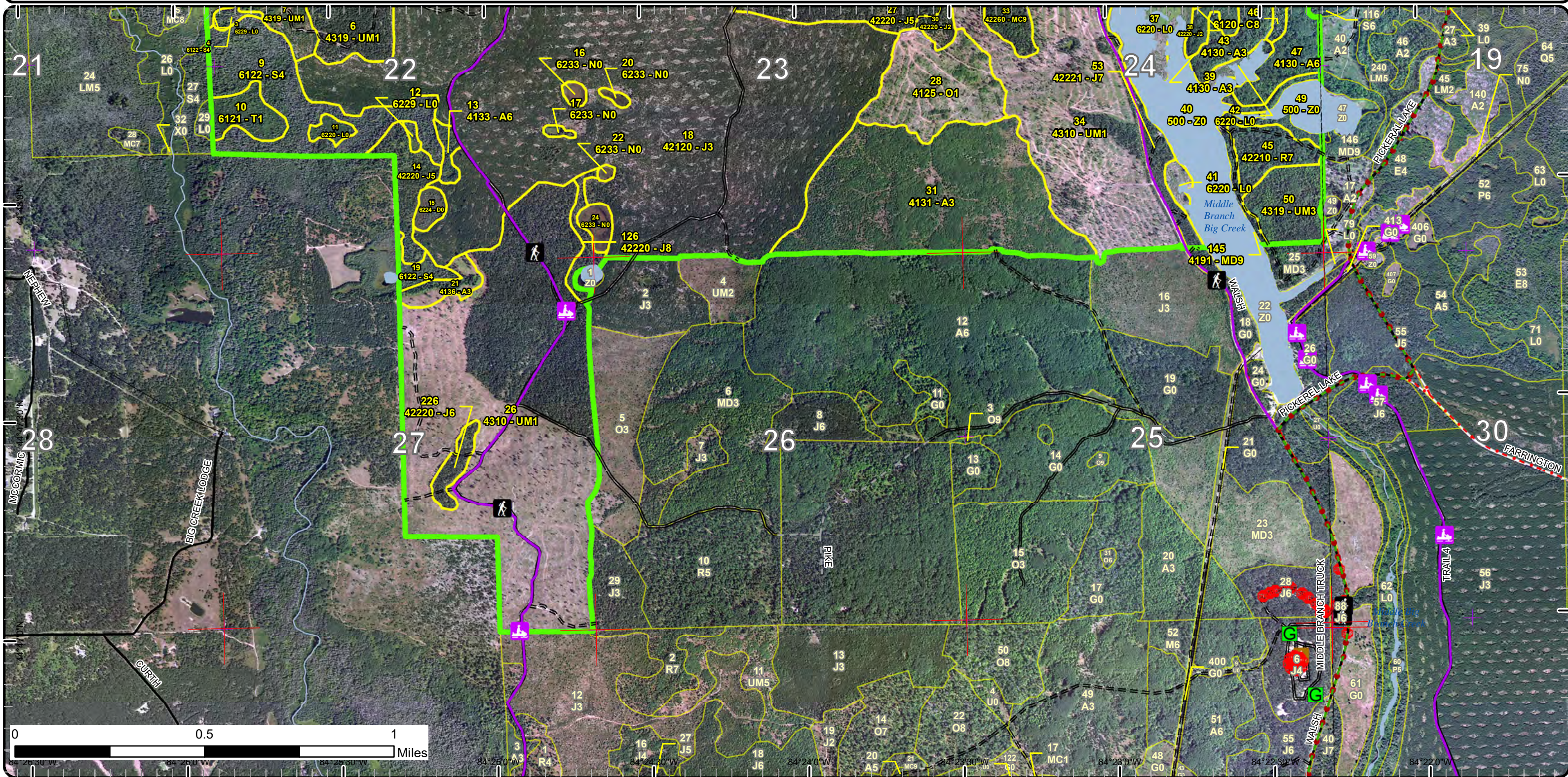


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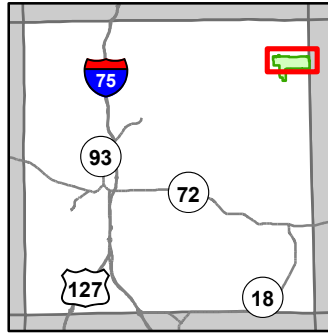


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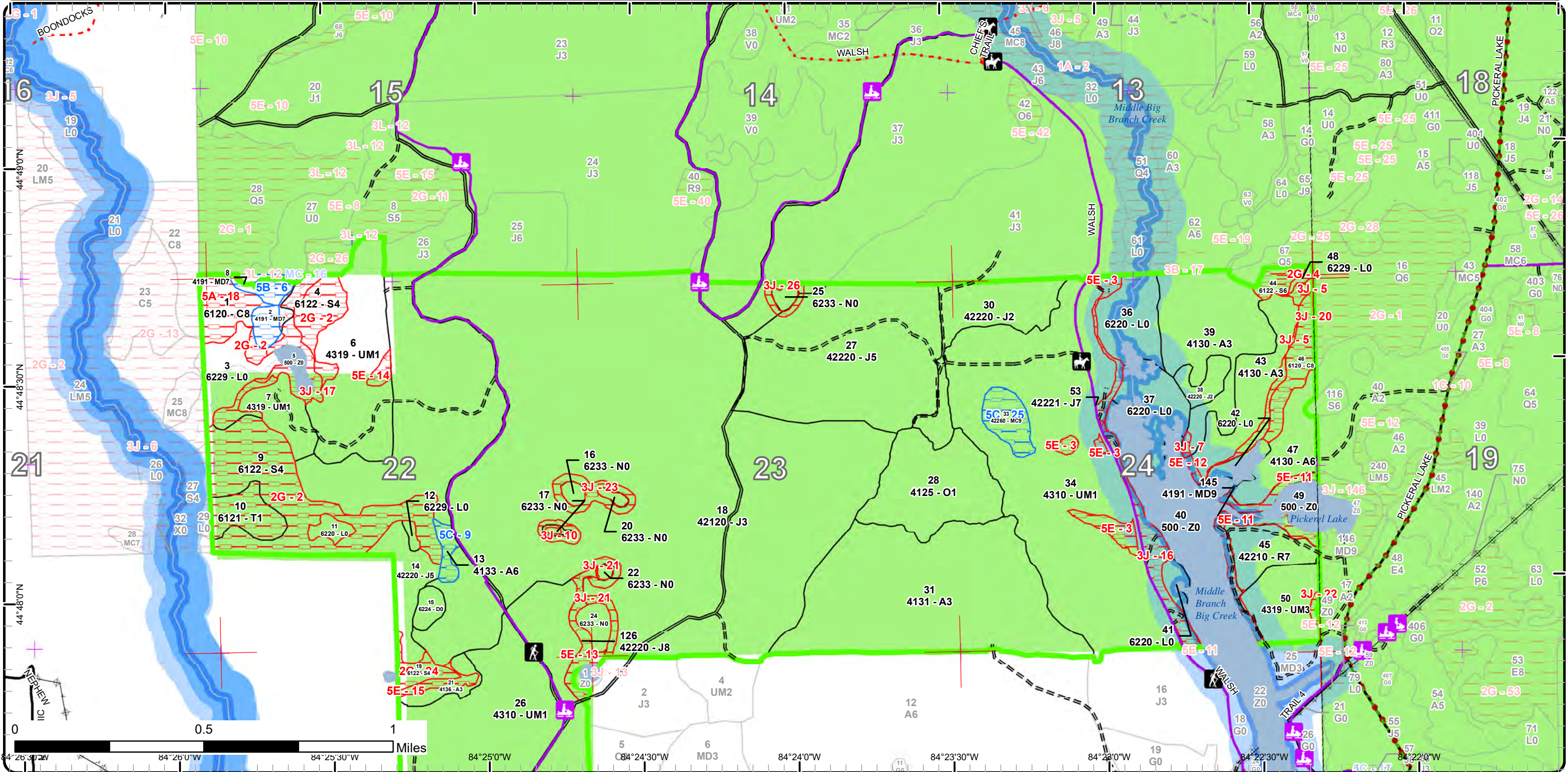


Special Conservation Areas

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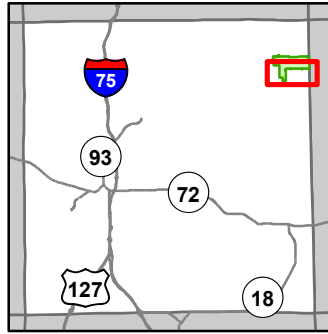


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- Compartment Boundary
- Available w/ Constraints
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5A: Not able to obtain desirable regeneration
- 5E: Long-Term Retention
- Stand Boundaries
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Kirtland Warbler Habitat
- Cold Water Streams
- High Priority Trout Stream Buffer

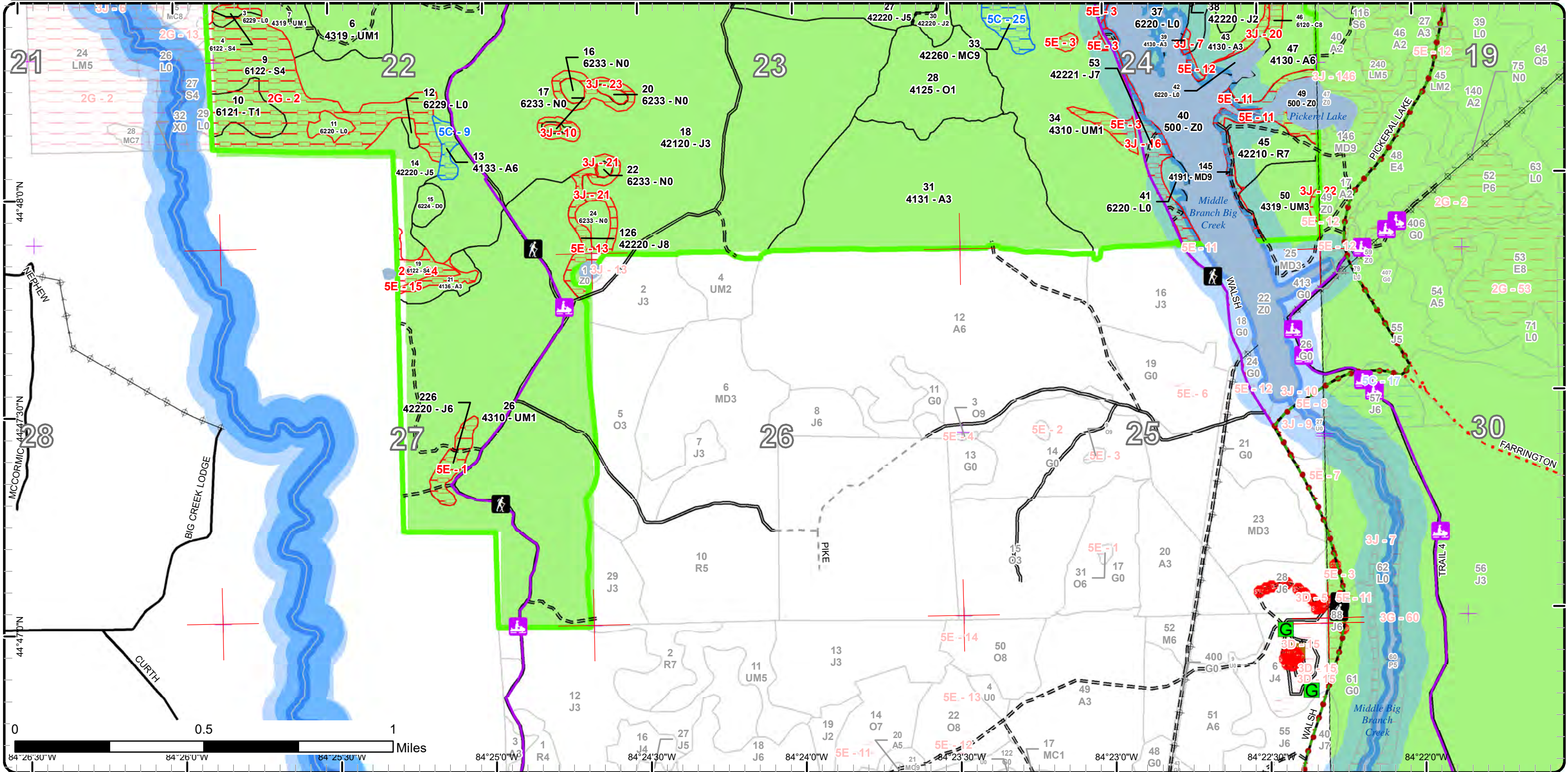


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Report 1 – Total Acres by Cover Type and Age Class



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	42	136	72	0	0	4	0	0	0	0	0	0	0	0	0	0	0	254
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	14	0	26
Jack Pine	0	0	0	715	111	0	7	8	0	18	0	0	0	0	0	0	0	0	859
Lowland Shrub	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77
Lowland Spruce/Fir	0	0	0	0	0	0	60	28	0	5	0	6	0	0	0	0	0	0	99
Marsh	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	24
Natural Mixed Pines	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Oak	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Red Pine	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	16
Tamarack	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Treed Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Mixed Forest	0	519	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	556
Water	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
Total	163	561	183	837	111	0	71	62	0	23	0	30	0	12	0	0	14	0	2067



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 290
Total Compartment Acres: 2,065

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

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	0	0	0	0	0	0	16	0	0	16
Total	0	0	0	0	0	0	16	0	0	16



S t a n d	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:

45	72290045- Monitor	16.0	42210 - Natural Red Pine	Sawtimber Poor	65	1-50	Monitoring	Natural Regen (Re-Inventory)	4199 - Other Mixed Upland Deciduous	Two-Aged	No
<p><u>Prescription</u> Check regen. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Mixed Upland Deciduous with minimum 10% oak. Aspen, maple, pine are all acceptable species as well. <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/1 /2023</p>											

Total Treatment 16
Acreage Proposed:

Report 4 – Site Conditions

Grayling Mgt. Unit
Scott McClarren : Examiner

Compartment: 290
Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	Acres Available With Condition	Acres Not Available
254	239	4	11

Dominant Site Conditions

	Total Acres	Acres Available	Acres Available With Condition	Acres Not Available	Dominant Site Conditions							
					5B	5C	2G	3J	5A	5E	ed	
254	239	4	11	Aspen		4		3		8		
26	0	0	26	Cedar				12	13	0		
858	810	0	49	Jack Pine				29		20		
77	77	0	0	Lowland Shrub				0		0		
99	0	0	99	Lowland Spruce/Fir			89	10				0
13	12	0	1	Marsh				1		0		
23	0	9	14	Mixed Upland Deciduous	9			1		13		
10	0	10	0	Natural Mixed Pines		10						
47	47	0	0	Oak								
16	16	0	0	Red Pine						0		
13	0	0	13	Tamarack			13					
5	5	0	0	Treed Bog								
557	546	0	10	Upland Mixed Forest				1		9		
68	68	0	0	Water				0		0		
2,065	1,820	23	222	Total Forested Acres	9	15	101	57	13	51	0	
	88%	1%	11%	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	5E: Long-Term Retention	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Vortex retention left for West 290 KW sale 72-030-14-01.							
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	91	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Scott McClarren : Examiner

Compartment: 290
Year of Entry: 2024

3	Unavailable	5E: Long-Term Retention	12	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Designated retention for stand 34's harvest (#038-14). Some of the polys buffer wetlands, exclude steep slopes &/or Natural Rivers zones.							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: This portion of stand 43 was excluded from harvest #042-14 because the ground was too wet at time of sale prep.							
6	Available	5B: Maintain for regeneration purposes	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100 foot buffer along Big Creek Impoundment and Pickerel Lake.							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Only about 2 acres of timber that meet silvicultural criteria and no other treatments in vicinity.							

Report 4 – Site Conditions

Grayling Mgt. Unit
 Scott McClarren : Examiner

Compartment: 290
 Year of Entry: 2024

10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	5E: Long-Term Retention	14	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: 100 foot buffer along Big Creek Impoundment, Pickerel Lake & associated pond. Left as designated retention for stand 45's harvest 72-042-14-01.							
12	Unavailable	5E: Long-Term Retention	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: 100 foot buffer along Big Creek Impoundment & associated intermittent stream. Left as designated retention for stand 43's harvest 72-042-14-01.							
13	Unavailable	5E: Long-Term Retention	8	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Retention left for West 290 KW sale 72-030-14-01, steep slideslopes down to wetlands/ponds.							
14	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Vortex retention left for West 290 KW sale 72-030-14-01, stands 6 & 8.							
15	Unavailable	5E: Long-Term Retention	4	2F: Too steep	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments: Retention left in 72-030-14-01 due to steep sideslope and perched wetland/ephemeral drainage.							

Report 4 – Site Conditions

Grayling Mgt. Unit
 Scott McClarren : Examiner

Compartment: 290
 Year of Entry: 2024

16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: 100 foot buffer along Big Creek Impoundment and Pickerel Lake.</p>							
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
18	Unavailable	5A: Not able to obtain desirable regeneration	14	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
<p>Comments: Cedar regen is not existent. Most of stand is too wet to operate.</p>							
19	Unspecified	Unspecified	0				
<p>Comments:</p>							
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified
<p>Comments: Stream with feeders flows the length of the stand.</p>							
21	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: RMZs around open water wetlands</p>							

Report 4 – Site Conditions

Grayling Mgt. Unit
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22	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: RMZ around pond							
23	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: RMZs for open water wetlands.							
24	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
25	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
26	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: RMZ for open water wetland.							

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	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	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
1	6120 - Lowland Cedar	Sawtimber Medium	13.5	170	51-80	N/A	Old comments- Northern white cedar with lesser components of spruce, fir, tamarack & aspen. On the stand's slightly drier ground in the SE half, the cedar cover is larger diameter, healthier and more widely scattered. It's park-like and open below, with grass/rubus/fern groundcover. On the wetter ground to the N & W, the cedar cover is denser, smaller diameter and less vigorous, with patches of wind-throw. Balsam fir is starting to fill in below. Most of the overstory tamarack & black spruce are concentrated in the stand's NE, and there's mortality in the sapling black spruce there. The quaking aspen and balsam poplar are mostly on the east side near the uplands.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Tamarack		20	Pole/Log	9		Balsam Fir		Low	5 - 10 feet	Sapling	
Northern White Cedar		50	Log/Pole	10	170	Black Spruce		Low	Variable	Sapling	
Quaking Aspen		2	Log/Pole	10		Tag Alder		Low	Variable	Tall Shrub	
Balsam Poplar		3	Log/Pole	10							
Balsam Fir		15	Pole	7							
Black Spruce		10	Pole/Log	8							
2	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Poor	9.9	104	1-50	N/A	Old comments-Stand occupies two steep knobs of dry ground surrounded by swamp. A small stream cuts through the east edge. The stand is within a parcel of land purchased from private in 2010. The cover is patchy & variable, with U/G inclusions. The red maple & oak (concentrated on the highest ground) are in their 90's, likely sprouted post-fire. Heavily burnt pine stumps throughout. The JP ranges from immature to overmature, with median poles in their 50's. Aspen and black spruce are concentrated along the swamp margins. Large RP are scattered throughout, with a few WP & white oak. The deciduous component is marginal quality, with cull and decadence common. WP, balsam fir, JP & RP have been seeding in. South OFS point is an abandoned forage plot with rigging in a tree. NW OFS point is a small dump site. There are also several abandoned ground blinds.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		40	Pole/Log	9	104	White Pine		Low	5 - 10 feet	Sapling	
White Pine		2	Log/XLog	16		Jack Pine		Low	Variable	Sapling	
Quaking Aspen		10	Log/Pole	11		Black Cherry		Low	Variable	Tall Shrub	
Bigtooth Aspen		3	Log/XLog	16		Balsam Fir		Low	Variable	Sapling	
Northern Pin Oak		10	Log	14	103						
Red Pine		18	XLog/Log	18							
Jack Pine		10	Pole/Log	8	62						
Black Cherry		2	Pole/Log	9							
3	6229 - Mixed lowland shrub	Nonstocked	16.2			No	It looks like stand was ponded up at one time. Old beaver lodge near creek in middle/west side. Old comments- Swamp birch, tag alder, spiraea, salix & leatherleaf over tussock sedge, with scattered black spruce & tamarack colonizing from edges. Increase in beaver activity on stream; lowland brush dying out in flooded areas. OFS points are beaver dam				
4	6122 - Black Spruce	Poletimber Poor	28.0	68	1-50	N/A	Assessed stand in middle of February following weeks where temps were below freezing and still found mucky areas.Old comments- Swamp stand that includes the transition zone to the uplands. The swamp's core lowland type is spindly black spruce on saturated muck soils with sphagnum groundcover. Balsam fir, tamarack (more to NE), aspen & a trace of cedar are mixed in. The black spruce has a wide range of ages. Most of the poles are in the 50's & 60's (ave 1st age), with a minority 80+ years old (2nd age). Black spruce & balsam fir have been filling in below, but there's been significant mortality in that subcanopy layer. Spruce budworm present at time of inventory, but most of the mortality occurred prior to this year. The tamarack is healthy. The swamp has small islands of slightly dryer ground with RP, overmature JP, & RM along with the spruce. The best growth & densest cover is on the sideslope transition ground bordering the uplands (OFS pts there are two former pvt cabins). Small stream flows through the stand. Beaver felling the aspen & flooding the stand around their pond. BS SI 40.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		2	Pole/Sapling	6		Tag Alder		Medium	5 - 10 feet	Tall Shrub	
Quaking Aspen		3	Pole/Log/Sap	7		Tamarack		Low	Variable	Sapling	
Red Pine		2	Log/XLog	16		Balsam Fir		Medium	Variable	Sapling	
Black Spruce		63	Pole	7	68	Black Spruce		Medium	Variable	Sapling	
Balsam Poplar		5	Pole/Log/Sap	7							
Tamarack		13	Pole/Log	9	95						
Jack Pine		2	Log/Pole	12							
Balsam Fir		10	Pole	6							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																																	
5	500 - Water	Nonstocked	3.8			No	Old comments- Beaver pond, recent expansion has flooded into the adjacent swamp and uplands. Conifers rusting up & lowland shrub cover also dying under the higher water. OFS points are the beaver dam, an abandoned concrete water control structure, and cabins.																																																																																	
6	4319 - Mixed Upland Forest	Sapling Poor	58.9	3	Immature	N/A	JP is looking healthy, fair amount of cherry competition in places but, meets planting objective. Old comments- Was final harvested by Feb 2017 (#030-14), cutting stems 2"+ DBH except RP-WP-WO. The harvest boundary picked up a portion of the adjacent swamp stand's operable transition ground. That zone had rabbitat left and will be excluded from the planting. The north half of the stand was purchased in 2010 and had several ground blinds scattered across it. Was trenched by 2018 (W72-835), planted with PRT JP in 2019. Yr 1 regen survey Sept 2020 found 718 JP & 718 BC-O TPA.																																																																																	
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7	4319 - Mixed Upland Forest	Sapling Poor	14.3	27	Immature	N/A	Changed stand from non forested to forested. There's enough open grown jack pine and cherry to meet forested criteria. Old comments- Was part of a larger area cut 2" DBH & up in 1995 under 72-013-94-01. The rest of the harvest area was planted to JP for KW habitat in 1998. This portion of the harvest was excluded from the planting and allowed to naturally regenerate to a pine barrens type. JP sapling cover varies from dense patches to scattered open-grown individuals. U/G inclusions common. Residual JP poles occur mostly along the stand's perimeter, along with black spruce, balsam fir, aspen & RP. Black cherry in shrub form occurs throughout. OFS point is a chain gate associated with the former private property. A sub-acre patch of JP on the east side by the beaver pond is being flood-killed.																																																																																	
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
9	6122 - Black Spruce	Poletimber Poor	60.2	57	1-50	N/A	Stand is difficult to navigate most places. Tag alder throughout with decent pockets of recruiting tamarack. Walked west half of stand to stands 10 and 11 and confirmed previous inventory stand data. Old comments- Spindly black spruce, with tamarack, balsam fir & northern white cedar, on saturated muck soils. Sphagnum groundcover with standing water in holes in the root mat. The spruce has been progressively colonizing a large lowland brush type over the last century. Spruce cored in the 6" diameter class had a wide range of ages (32, 40, 68 & 106 years). One spruce saw cored was 83 years old. The stand's 1st & 2nd ages represent averages for the below 70 & the 80+ cores, but averaging such a wide range down to two ages doesn't capture this stand's complexity. Tag alder, balsam fir & black spruce occupy the subcanopy, with decreasing conifer coverage due to heavy defoliation. Small islands of drier ground within the swamp have overmature JP & quaking aspen. The tamarack & NWC cover is heaviest in the stand's west, switching to predominantly black spruce in the south & east. The densest & healthiest spruce cover is on the transition zone to the uplands. BS SI 42.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Balsam Fir		13	Pole	6		Balsam Fir		Medium	Variable	Sapling	
Black Spruce		50	Pole	7	57	Black Spruce		Medium	Variable	Sapling	
Tamarack		20	Pole	9		Tag Alder		High	5 - 10 feet	Tall Shrub	
Jack Pine		2	Log/Pole	10		Tamarack		Medium	10 - 20 feet	Sapling	
Northern White Cedar		12	Pole/Log	9	105						
Quaking Aspen		3	Log/Pole	12							
10	6121 - Tamarack	Sapling Poor	12.6	25	Immature	N/A	Changed stand from open to forested. Stand is still open but, tamarack is about 20-40' tall and has enough to call stand forested. There are a few scattered log size cedar mixed in as well. Cattail and tag alder throughout as well. Noted during boundary verification. Tag alder with scattered Q and pockets of cattail.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Northern White Cedar		4	Pole/Sapling	5		Cattail spp.		Medium	Unspecified	Non-Wood	
Balsam Fir		2	Sapling/Pole	4		Alder		Medium	5 - 10 feet	Tall Shrub	
Black Spruce		2	Sapling/Pole	4							
Tamarack		92	Sapling	3	25						
11	6220 - Alder/willow	Nonstocked	3.7			No	Stand looks like it has 10-15% canopy closure with full density tag alder. Some dogwood observed as well. Old comments- Tag alder, with scattered black spruce & tamarack poles, being colonized by black spruce regen along the margins.				
12	6229 - Mixed lowland shrub	Nonstocked	1.3			No	Old comments- Lowland brush swale with swamp birch, tag alder, labrador tea, leatherleaf & scattered tamarack & black spruce.				
13	4133 - Aspen, Mixed Pine	Poletimber Well	4.2	53	81-110	N/A	Most of white pine is concentrated in south around low spot. Changed from 2 aged to even aged. Small narrow stand between the upland JP & the swamp. The aspen is mostly represented by mid-40's poles, but there are also breaking-up cull saw stems mixed in to the north, and saplings from the 1993 tornado salvage in the south. JP & a trace of NPO saw are present, and black spruce is concentrated along the swamp edge. OFS point is a small wetland. Most of the stand's WP borders that wetland.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Black Spruce		10	Pole	8		Black Cherry		Medium	Variable	Tall Shrub	
Jack Pine		10	Pole/Log	9		Black Spruce		Low	Variable	Sapling	
White Pine		20	Pole/Log	8							
Quaking Aspen		60	Log/Pole	10	53						



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14	42220 - Natural Jack Pine	Poletimber Medium	16.8	29	1-50	N/A	<p>Changed from 2-aged to even aged due to mifi canopy rules. Previous inventory had 8% 94 yo jp. Some died off but, most is surprisingly healthy. Old comments- Damaged/uprooted trees were salvage cut in 1993 under 72-028-93-02 after a windstorm. The majority JP sapling cover regenerated after the salvage. Low-density residual from the harvest (pole-sized JP, WP, RP, balsam fir, black spruce, RM, aspen & oak) are scattered throughout. The stand has the variable stocking & growth habit of a pine barrens. The stand's NW edge against the swamp has a 2-acre inclusion of overmature root-tipping JP (2nd age) that was't part of the tornado salvage.</p>																																																		
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15	6224 - Treed Bog	Nonstocked	4.6			No	Old commets- Leatherleaf over a deep sphagnum mat, with spindly top-dying tamarack, black spruce & the occasional JP & WP. The bog is rimmed with swamp birch & a little tag alder.																																																		
16	6233 - Wet Meadow	Nonstocked	2.1			No	Kettlehole wetland. Marsh grass/sedge cover with a patch of treed bog in the middle (tamarack & black spruce saps over leatherleaf).																																																		
17	6233 - Wet Meadow	Nonstocked	1.2			No	Two small kettlehole wetlands separated by a shallow ridge. Marsh grass & sedge, rimmed with an uncut buffer of JP & RP.																																																		
18	42120 - Planted Jack Pine	Sapling Well	658.6	24	Immature	N/A	<p>About 12 acres of stand in east burned in the Pickeral Lake Fire summer 2021. The fire also burned into stand 27.</p> <p>The stand was planted to JP for KW habitat in 1998. Five harvests and one burn (120 acres in the SE) were completed between 1986 and 1997 in preparation for the KW planting entry. JP sapling cover mainly 6-10' tall with scattered oak & black cherry stump sprouts above them. Trace of aspen mixed in along the stand margins.</p>																																																		
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19	6122 - Black Spruce	Poletimber Poor	5.7	105	1-50	N/A	<p>Changed stand from open to forested. Trees turn more sapling size further west. Old comments- Spindly black spruce poles with tamarack & NWC scattered over sphagnum hummocks, labrador tea, marsh grass, tag alder, et al. Standing water between hummocks. Stand gets wetter to the west. The sparse overstory is dying out, but as the spruce & tamarack regen recruits, the stand will move into the forested category, with the sapling cover comprising the main canopy.</p>																																																		
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20	6233 - Wet Meadow	Nonstocked	1.4			No	Kettlehole wetland. Marsh grass & sedge with a little open water.																																																		



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21	4136 - Aspen, Mixed Conifer	Sapling Well	9.0	6	1-50	N/A	Roughly 5 acres of aspen regen not planted through following harvest in 2016. Stand also contains boundary excluded retention consisting of aspen, red pin, spruce, and maple mostly on a slope. Seep originates in east side of this stand and drains into adjacent lowland (SM). Old comments: Aspen-oak stand was final harvested with retention by Feb 2016 (#030-14), cutting stems 2"+ DBH except RP-WP-WO. The boundary-excluded retention is now stand 121. This aspen stand expanded into the adjacent JP type post-harvest and passed the regen check at time of sale closure, with canopy data roughed-in from the treatment report. Original stand 21 comments: Mixed aspen stand on the sideslope down to the lowlands. Associates include red maple, black spruce, oak, paper birch, JP & RP. The east side has quaking aspen, the south side has bigtooth. The south edge drops steeply down to the wetland, where the black spruce is concentrated. The BTA, JP & most of the QA are overmature. OFS point is a perched wetland with an intermittent drain that flows west.																																							
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22	6233 - Wet Meadow	Nonstocked	1.0			No	Small marsh with grass/sedge cover, rimmed with spiraea.																																							
24	6233 - Wet Meadow	Nonstocked	5.2			No	Marsh grass/sedge cover with patches of leatherleaf, open water in the middle.																																							
25	6233 - Wet Meadow	Nonstocked	2.2			No	Old comments- Small marsh, ground saturated but with little standing water. Grass/sedge cover rimmed with leatherleaf, salix & spiraea.																																							
26	4310 - Pine, Oak Mix	Sapling Poor	273.2	3	Immature	N/A	JP looks healthy. Oak is main competitor. Was final harvested in 2017 (#030-14), except RP-WP-WO (less than 4 sq. ft. total) & island retention. Trenched in 2018 (W72-835) & PRT JP planted in 2019. Yr 1 regen survey Sept 2020 found 1230 JP & 1244 O TPA. Oct 2021 Yr 3 survey: 1015 TPA. NPO is primary competitor, BC secondary. FTP is complete.																																							
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27	42220 - Natural Jack Pine	Poletimber Medium	111.1	36	51-80	N/A	I changed age from 47 to 36. There are residual older trees as mentioned in previous comments but, majority is younger regen that established following harvest. About 8 acres of stand burned in 2021 in Pickeral Lake Fire that originated in stand 18. Most of it stayed on the ground but, there's a couple acres where it made a run through the crown. NW corner looks to be lower site index and 25-50% canopy closure. Old comments- Was part of a larger area cut merch & up by 1986 under 72-005-85-01, with heavy slash & residual noted. This stand had conrtol lines plowed in, but was excluded when the rest of the sale (adjacent stand to south) was burned for slash reduction & then planted to JP for KW. This portion of the sale was excluded from both treatments & natural regen was relied on. Most of the stand's current cover established pre-harvest: that small pole/large sapling JP ranges from 30-40 years old. The JP that established post-harvest is sapling sized and intermediate in the canopy (second age). The stand also contains lower density pine barrens inclusions. The stand is predominantly sapling sized, but just enough is transitioned into the pole class to meet the 30% benchmark.																																							
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28	4125 - Black, N. Pin Oak	Sapling Poor	46.8	17	Immature	N/A	Stand is fully stocked with oak and aspen. Inter-planted jack pine in Eastern portion of stand is healthy but, has some oak/aspen competition. Old comments- Was final harvested with retention by August 2016 (#38-14), cutting merch stems except RP & green-marked (widely-scattered wolf oak), cruised residual less than 1 sq. ft. The previous harvest in 2005 had removed merch RM, aspen, JP & RP (#017-04), leaving 50 BA oak. 2019 update: approximately 10 acres in the middle were supplemental planted to JP in association with the adjacent KW FTP W72-807. All red maple, jack pine, and aspen were removed from stand in 2005 under (Volcano Oak #017-04).																																							
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30	42220 - Natural Jack Pine	Sapling Medium	32.3	29	1-50	N/A	Stand has some pole size areas but, overall sapling size still. Old comments- Damaged/uprooted trees were salvage cut in the stand's north polygon in 1993 under 72-030-93-01 after a windstorm, leaving widely scattered residual. That residual is now small pole JP & stocky pole-log RP. The regen from the cut (limby JP sapling cover) is the featured canopy layer. The canopy cover varies across the stand from open to full, resembling a pine barrens. The stand's south polygon was cut by 1986 under 72-005-85-01 and later Rx burned, resulting in the same cover type characteristics & age profile, with the exception of more oak stump sprout representation toward the south end.																																							
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31	4131 - Aspen, Oak	Sapling Well	135.8	17	Immature	N/A	Good aspen growth. About 35 acres in west are oak dominated. Was cut 2" DBH & up in 2005 under 72-017-04-01. Vigorously regenerating sprout-origin aspen, oak & RM, with localized seeding in of JP, RP & WP. Most of the oak stump sprouts are 8-12' tall. The oak seedlings are being browsed. Small amount of lecanium scale (mostly in the seedling oak) & cicada egg-laying damage. Cover varies across the stand from majority aspen to majority oak, with all gradations in between, and averages toward the high end of 50-75% canopy closure. Stand's NE has a small frost pocket where the deciduous regen is sparse but JP is surviving.																																							
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33	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	10.4	63	111-140	N/A	I changed from 2 aged to even aged. Most red pine is around 64 years old. There is some red pine in south about 20 years older than rest of stand but, is too small to split into new stand. Scattered legacy pines throughout. Old comments- Stand on a knob of higher ground, surrounded by jack pine. Supercanopy RP seeded in the majority log-pole cover. Associates include poor-quality breaking up NPO, cull BTA, and overmature JP. The RP is densest on the east side. Canopy closure averages toward the low end of the 75-100% category. The first and second ages are both from the majority small saw RP cover, reflecting the stand's progressive establishment over a fairly wide period of time. RP SI 64, 53 (younger, older).																																																			
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34	4310 - Pine, Oak Mix	Sapling Poor	187.2	3	1-50	N/A	Lot of residual red pine left after harvest. Jack pine is healthy and about knee high in most places. Oak and jack inevitably cover pretty even but, jp will likely fill more canopy position in the next 10 years. South west has a pocket of red pine with high oak oak sub-canopy left unplanted. Old comments- Was final harvested by 2016 (#038-14), cutting 2"+ DBH except RP-WP-WO and retention islands. Trenched by 2018 (W72-807) and planted with PRT JP in April 2019. Yr 1 regen survey found 1124 JP & 1308 O-BC TPA. Oct 2021 Yr 3 survey: 1178 TPA. NPO is primary competitor. FTP is complete.																																																			
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36	6220 - Alder/willow	Nonstocked	21.0			Managed Opening	Old comments- Tag alder, salix & spiraea over tussock sedge and marsh grass. Widely-scattered JP, tamarack, WP & spruce, with a denser Q inclusion (BF, WP & NWC) in the far NE corner. OFS point is a beaver lodge on Big Creek.																																																			
37	6220 - Alder/willow	Nonstocked	24.1			No	Old comments- Area of inundated salix shrub cover. No marsh grass below and the shrub cover is receding due to the higher water levels.																																																			
38	42220 - Natural Jack Pine	Sapling Medium	7.0	26	Immature	N/A	Old comments- Was cut 3" DBH & up in 1996 under 72-041-94-01. TCR notes FTP submitted, but found no record of completion. Two furrows cross through the stand but are just part of the pair that lap the Impoundment. Swaths of dense JP regen have the appearance of being broadcast seeded, but could also just be skid-trail regen. The stand varies from low to excessive JP stocking, with QA mixing in along the edges and small grassy opening inclusions.																																																			
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39	4130 - Aspen	Sapling Well	51.5	26	1-50	N/A	<p>Still overall sapling size but, contains pockets getting pole size. Small lowland inclusion in northeast. Old comments- A closed road segment identified for hunter walking trail (HWT) maintenance through the 2018 YOE Comp 272 review process ends within this stand. The Comp 272 stand 14 Rx polygon could not pick up the entire road though, because of a GIS boundary-crossing rule. The HWT FTP (W72-855) does reflect maintenance of the entire identified road segment. 2012 comments: Was cut 3"+ DBH in 1996 (#041-94). Mostly quaking aspen sapling cover with JP regen mixed in & BTA clones in the S end. Black canker & hypoxylon present. Recent beaver cutting w/in a chain of the Impoundment. OFS point in NE is a small wetland inclusion. There's a sub-acre inclusion of RP & WP in the stand's NW corner, with mainly old fire-scarred supercanopy stems, also OFS point.</p>																																																													
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40	500 - Water	Nonstocked	56.6			No	Big Creek Impoundment. Earthen dam & water control structure are in comp 289 to the south. Water level was near its maximum level.																																																													
41	6220 - Alder/willow	Nonstocked	4.4			No	<p>Old comments- Inundated lowland brush bordering the Big Creek Impoundment. Salix shrub cover over standing water with a perimeter of jack pine pole/sapling trees. Snags common and continued flood-killing of the perimeter JP.</p>																																																													
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42	6220 - Alder/willow	Nonstocked	5.4			No	Lowland brush type on the Impoundment. Mostly salix, with tag alder & spiraea. Currently inundated.																																																													
43	4130 - Aspen	Sapling Well	32.5	5	Immature	N/A	<p>Excellent aspen regen response following harvest. Aspen is fully stocked and red/white pine residuals provide some vertical structure.</p> <p>Previous comments- final harvested by Feb 2017 (#042-14), cutting 2"+ DBH except RP-WP-O-NWC, and boundary excluded RMZ's and low ground. Regen passed at time of sale closure. Previous comments: Aspen stand with lowland interface on three sides. Mostly large pole quaking aspen, with a low-density overmature component that's breaking up. Main associates are RP, red maple, BTA & mixed oak. Balsam fir, black spruce & the red maple are concentrated along the lowland edge, as is the conifer regen. The stand's far NE is close to the water table and heavier to red maple, overmature QA, & balsam fir, with a trace of northern white cedar along the lowland brush stand. There's a small upland opening inclusion in the stand's NW.</p>																																																													
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44	6122 - Black Spruce	Poletimber Well	4.8	88	51-80	N/A	<p>Changed from 2-aged to even age. There are some younger white pine present but, not enough for me to call stand 2-aged. Stand contains some legacy trees. Black spruce bog with a WP component. The saturated ground has a deep sphagnum mat with leatherleaf & labrador tea cover. Standing water in cradle knolls. On a small island of slightly higher ground, there's a pocket of struggling RP, stressed by the high water table. Stand is at the low end of 50-75% canopy cover. Black spruce & WP are filling in the canopy gaps. Older small saw black spruce are scattered across the stand. BS SI 40.</p>																																																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
45	42210 - Natural Red Pine	Sawtimber Poor	16.0	65	1-50	N/A	<p>Changed stand to 2 aged but, also contains numerous super canopy red pine cored at 135 years old. Most of residuals are 65 year old red pine and white oak. Residuals are impeding growth where BA was left higher in east. Primarily maple and aspen in sub-canopy. Some oak stump sprouts as well. Pockets of heavy browse on seedlings.</p> <p>Old comments-Was shelterwood harvested by Dec 2016 (#042-14), cutting all except RP-WP-WO, cruised residual 45 sq. ft. Rough adjustments made to the canopy data; will refine through regen survey. Previous comments: Dry upland oak-pine-aspen stand bordering the Big Creek Impoundment & Pickerel Lake. The stand is variable, with no single species comprising a majority of the cover. The main canopy layer is made up of hybridized northern pin/black oak, white oak, RP, RM, WP & JP. Above that are supercanopy stature RP. The NPO, aspen & JP are largely overmature & declining, with the exception of some younger BTA near the Impoundment. WP & red maple are filling in below. Branch flagging is starting in the WP saplings near the lakes. The north polygon was left as a buffer for the adjacent harvest & contains most of the supercanopy WP. NPO SI 53. RP SI 63.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Oak	23	Pole/Log	9		White Pine	Low		Variable	Sapling
White Pine	2	XLog	26		Northern Pin Oak	Low		Variable	Sapling
Red Pine	75	Log/Pole/XLog	14	65	Quaking Aspen	Medium		10 - 20 feet	Sapling
					Red Maple	High	Variable	Sapling	
46	6120 - Lowland Cedar	Sawtimber Medium	12.1	126	51-80	N/A	<p>Pretty significant blow down in north west adjacent to clearcut providing good horizontal cover. Cedar is struggling in places. Mortality pockets have full fir underneath. Stand has a lot of variability in it. Narrow drainage stand containing a stream (2-6' wide) that flows from the adjacent comp 21 swamp and empties into the Impoundment. A feeder stream branches in from the NE. The stand alternates between cedar & lowland hardwood cover (ash, aspen, elm & red maple), on saturated muck soils. The spindly black ash has largely died out. Decadence & mortality is common in the older components across all species. The cedar is dying back where there's a combination of high stem densities on very low ground. The cedar is healthiest along the stream & on the slightly higher ground in the N end. The only component that is increasing is the balsam fir, dog-hair thick in places.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Fir	20	Pole/Sapling	5		Balsam Poplar	Low		Variable	Sapling
Northern White Cedar	65	Log/Pole	10	126	Black Spruce	Low		Variable	Sapling
Black Spruce	2	Pole	7		White Pine	Low		5 - 10 feet	Sapling
Paper Birch	3	Pole/Sap/Log	6		Balsam Fir	High		Variable	Sapling
Quaking Aspen	5	Log/Pole	10		Tag Alder	Low		10 - 20 feet	Tall Shrub
Red Maple	5	Pole/Sap/Log	5						
47	4130 - Aspen	Poletimber Well	20.8	26	1-50	N/A	<p>Stand met criteria to classify as overall pole size but, there are still large portions still sapling size (mostly in south half of stand). Super-canopy red and white pine throughout. Lowland inclusion has a fair amount of white pine pole/saplings that had to be put in sub-canopy for mifi canopy rules.</p> <p>Old comments- Was cut 4" DBH & up, except RP & WP, in 1996 under 72-042-94-01. Sapling regen & small pole residual from the cut is the featured canopy, comprised mostly of QA, with WP, balsam fir & RM. The log/xlog RP & WP that were left form a low-density supercanopy layer. Some beaver cutting near the Z types. OFS points mark wetland inclusions.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Fir	3	Pole/Sapling	6		Black Cherry	Low		5 - 10 feet	Tall Shrub
White Pine	4	Log/XLog	16		Red Maple	High		Variable	Sapling
Red Pine	3	XLog/Log	20		White Pine	Low		>20 feet	Pole
Black Cherry	2	Sapling	2	26					
Quaking Aspen	75	Pole/Sapling	5	26					
Red Maple	5	Sapling	4						
Bigtooth Aspen	8	Pole/Sapling	6						
48	6229 - Mixed lowland shrub	Nonstocked	1.0			No	<p>Narrow swale wetland with variable lowland brush cover: tag alder, leatherleaf, salix, spiraea, & a small patch of sedge, cattail & open water. Currently inundated.</p>		
49	500 - Water	Nonstocked	8.0			No	<p>Old comments- West half of Pickerel Lake; the rest is in Oscoda County. The only thing separating the lake from the Big Creek Impoundment is a sketchy beaver dam (low-profile, lacking recent maintenance).</p>		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																					
50	4319 - Mixed Upland Forest	Sapling Well	23.0	25	Immature	N/A	Diverse stand, looks healthy. See old comments.Old comments- Was cut 2" DBH and up in 1996 under 72-043-94-01. Sigma seeded in 1997 under C72-388. Stand has roughly equal parts artificial and natural regen. The artificial regen includes JP & RP. The natural regen is largely sprout-origin deciduous (oak, red maple, aspen & cherry). The furrow-seeding resulted in variable stocking densities, and the species mix shifts across the stand, with more JP on the perimeter and more RP toward the interior. The JP is growing better than the RP. Less than half of the RP have reached the break-out growth stage. Stand's east side picks up the edge of a small pond (OFS point).																																																					
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53	42221 - Natural Jack Pine, Mixed Deciduous	Sawtimber Poor	17.6	82	51-80	N/A																																																						
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126	42220 - Natural Jack Pine	Sawtimber Medium	7.6	65	51-80	N/A																																																						
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
226	42220 - Natural Jack Pine	Poletimber Well	7.3	56	51-80	N/A	Long term retention island.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Jack Pine	97	Pole/Log	9	56	Jack Pine	Trace	5 - 10 feet	Sapling
Northern Pin Oak	3	Log	12		Northern Pin Oak	Low	Variable	Sapling

Parent Stand 26 comments: Was final harvested in 2017 (#030-14), except RP-WP-WO (less than sq. ft. total) & island retention. Trenched in 2018 (W72-835) & PRT JP planted in 2019. Yr 1 regen survey Sept 2020 found 1230 JP & 1244 O TPA. Oct 2021 Yr 3 survey: 1015 TPA. NPO is primary competitor, BC secondary. FTP is complete.