



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72294

Entry Year 2026

Acreage: 1,442

County Crawford

Management Area: High Sand Plains

Stand Examiner: Scott McClarren

Legal Description:

T25N R2W Sections 5, 6 & 7 and T26N R2W Section 32 West part of South Branch Township and Southeast Grayling Township, Crawford Co.

Identified Planning Goals:

Compartment 294 is part of the Kirtland's Warbler Management Area. Kirtland's warbler management is guided by two documents: Kirtland's Warbler Breeding Range Conservation Plan and Operational Plan for Kirtland's Warbler Habitat Management on Michigan State Forests. Most of this compartment is designated as essential habitat and will be managed in accordance with the above mentioned documents. Management on the portions that are not classified as essential habitat will emphasize balancing the age classes and regenerating the aging oak resource.

Soil and topography:

The soils are well-drained Grayling and Roscommon sands. Topography is mainly flat to rolling, with a few steeper hills in Sections 6 and 7.

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

This compartment consists of fairly solid State ownership intermixed with several federally-owned parcels managed by the U.S. Fish and Wildlife Service for the Kirtland's Warbler. There are some privately-owned parcels in the compartment.

Unique Natural Features:

Kirtland's Warbler (*Dendroica kirtlandii*), and Henry's Elfin (*Incisalia henrici*)- last observed 1932.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Most of this compartment is designated for Kirtland's Warbler Management within the Pere Cheney Kirtland's Warbler Unit.

Watershed and Fisheries Considerations:

No streams or lakes occur within the compartment.

Wildlife Habitat Considerations:

Maintenance of Kirtland's Warbler habitat, a featured species, is the primary management goal. Other featured species include; Pileated woodpecker, Ruffed grouse, Snowshoe hare, Wild turkey, and White-tailed deer. Management for these species outside of designated essential habitat will include the maintenance of young forest; large open grassland complexes and marsh/grassland complexes; the retention of large, over-mature trees and snags and the maintenance and expansion of hard mast and mesic conifer components.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial metallic mineral production in this part of the state. The closest known active sand/gravel operations are more than two miles west and southwest. There is some good potential for sand and gravel within the compartment, but surface mining may be restricted due to Kirtland Warbler habitat. The closest oil & gas production, past or present, is several miles away. Only sparse oil & gas test drilling has occurred in and around the compartment, no well permits have been issued recently in the area, and no current leasing activity involving State-owned minerals exists within the compartment. Potential for future production of hydrocarbons from beneath the compartment is considered low at this time.

Vehicle Access:

County Roads include Stephan Bridge Road, Four Mile Road and Pere Cheney Road. Sandy Trail, Darrow Trail and other un-named trails across State land are currently the primary access for adjacent seasonal residences.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

One designated trail, the Shore-To-Shore Horse Trail, runs through Section 5. The compartment does support dispersed recreation in the form of hunting, as evidenced by the abundant tree stands located throughout the compartment.

Fire Protection:

Access throughout the compartment is adequate. Stephan Bridge, Four Mile and Pere Cheney Roads are well-maintained. In addition, several trail roads provide good access throughout the rest of the compartment. In addition there is a maintained fuel break, stand 3, which runs for a half mile along the west side of Stephan Bridge Rd. in Section 6. There is no natural water source within the compartment that can be used to re-supply fire units. The best source would be the Beaver Creek Fire Station, located at the corner of Old 76 and Seven Mile Road.

Additional Compartment Information:

The following reports from the Inventory are attached:

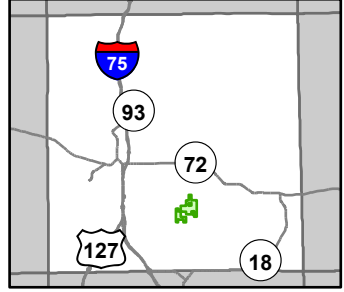
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

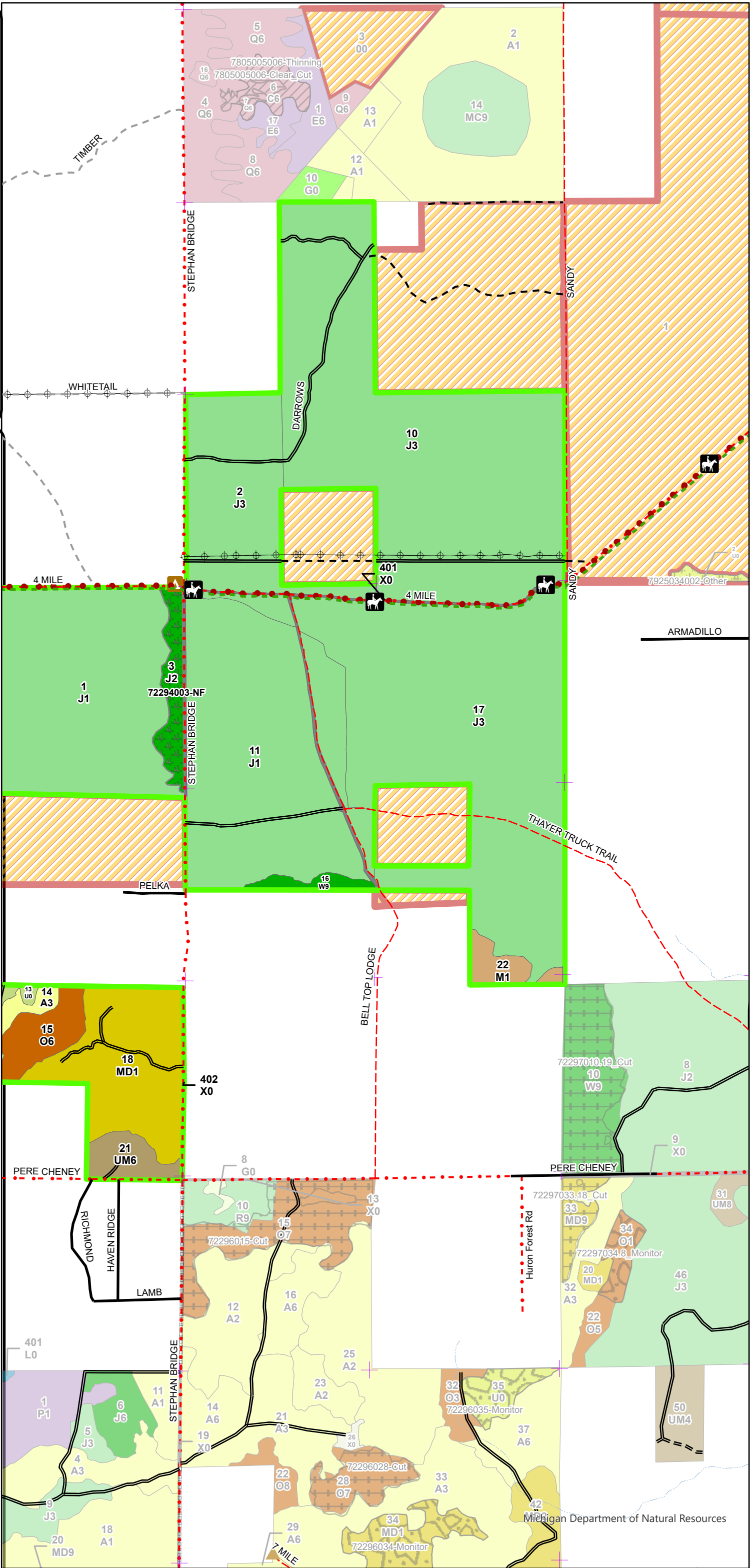
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 72294
 T25N, R2W, Sec: 5-7
 County: Crawford
 Unit: Grayling
 Mgmt Area: High Sand Plains
 YOE: 2026
 Acres: 1442 GIS Calculated
 Examiner: Scott McClarren
 Map Revised: 07/11/2024
 Map Phase: Web-Post

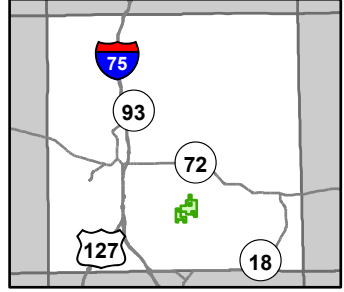


- Hiking Trails
- Horse Trails
- Designated Equestrian Trails
- Remunemented Section Corners
- Counties
- Berms
- Campground
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Intermittent Stream
- Pipeline
- Powerline
- Compartment Boundary
- Other Treatment - See Comments
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 122 - Roads/Parking Lot
- 320 - Upland Shrub

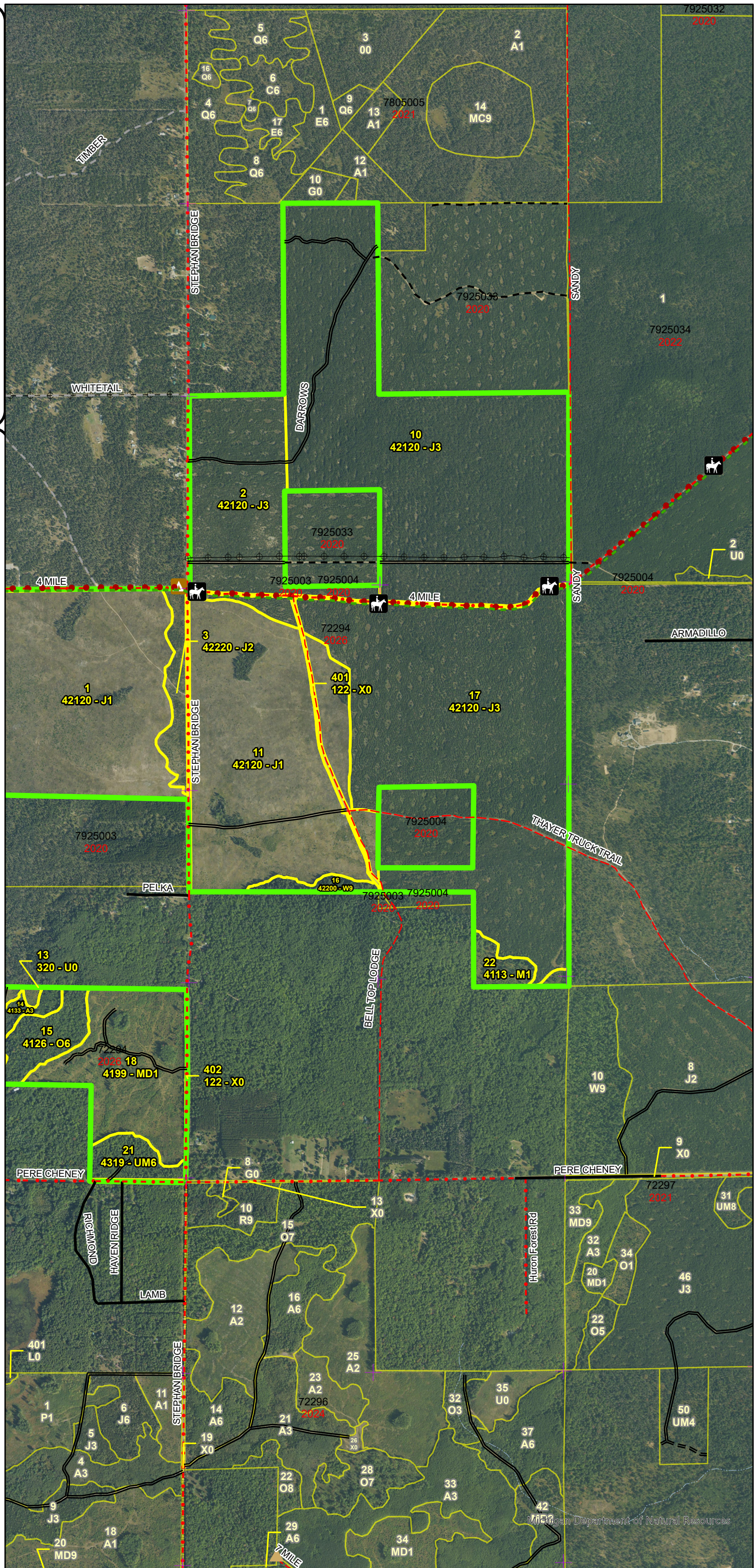


Stand Boundary Map

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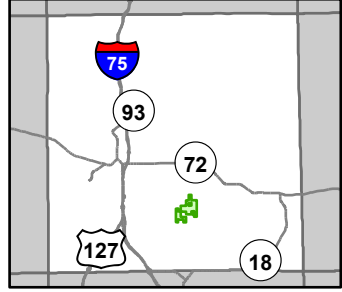


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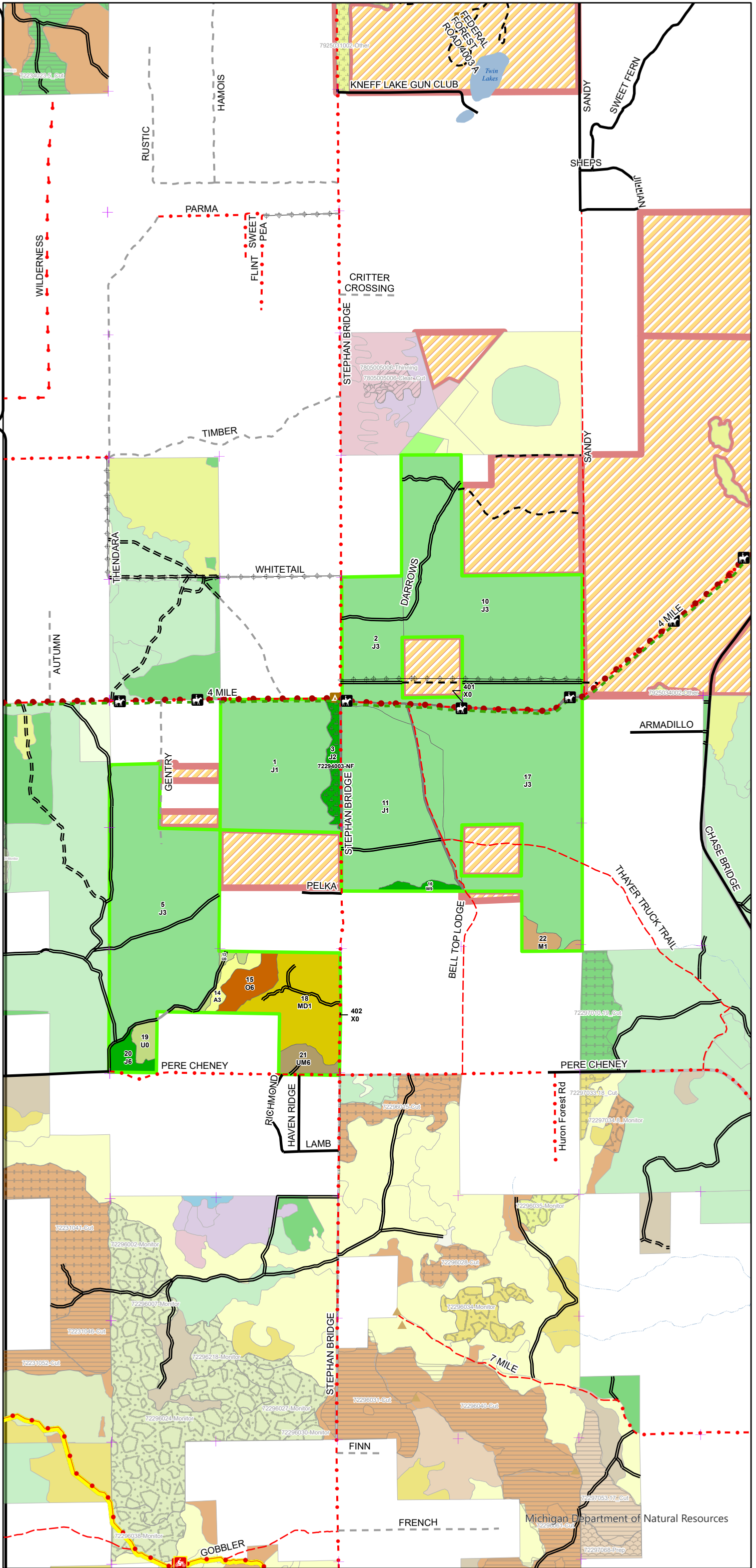


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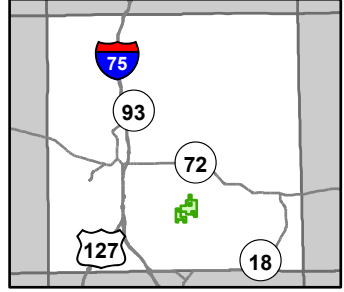


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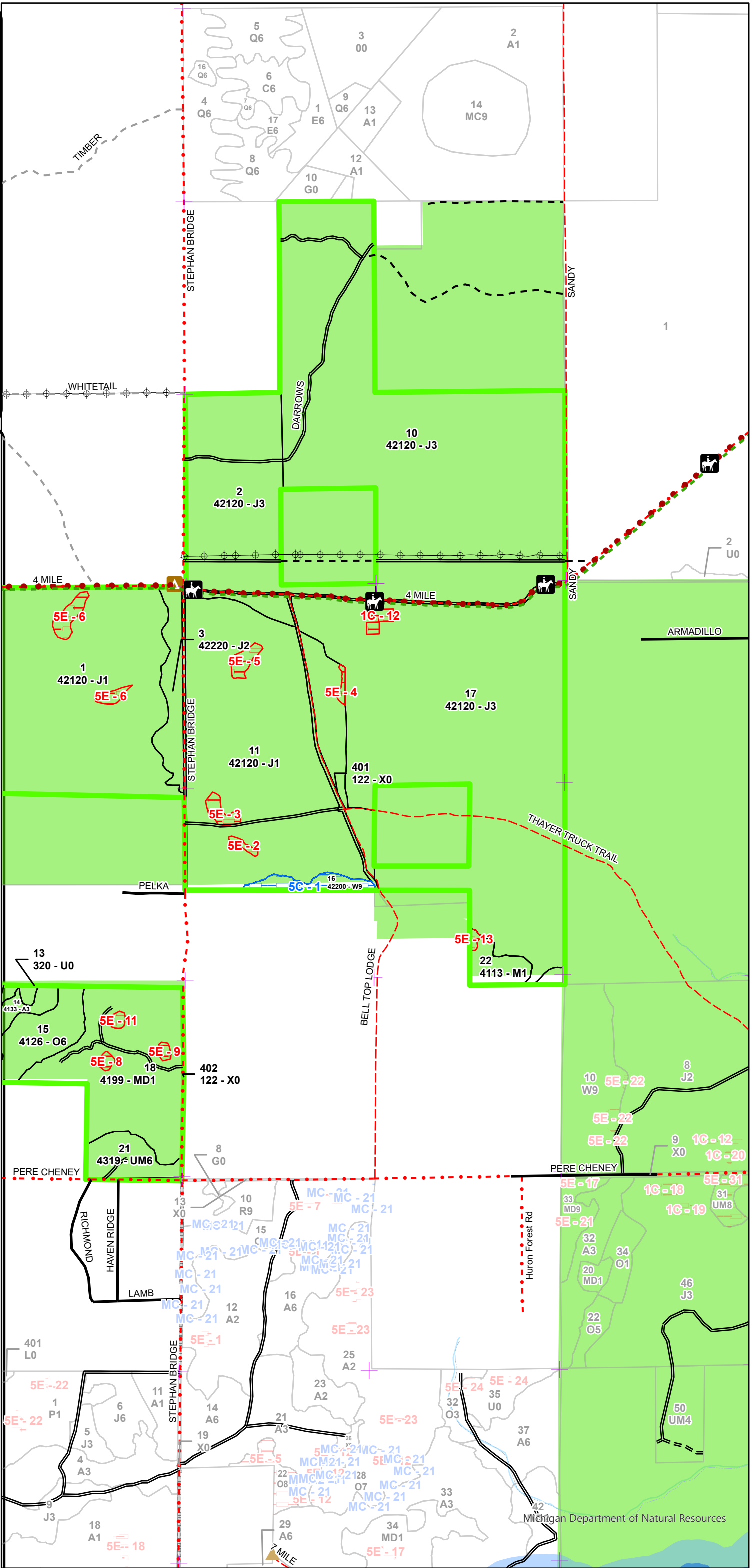


Special Conservation Areas & Site Conditions Map

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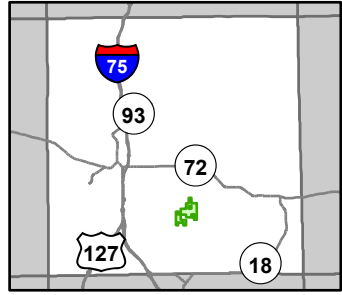


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 - SCA
 - Available w/ Constraints
 - Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site
 1C: Other dept or div proc/practices
 5E: Long-Term Retention
- Stand Boundaries
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Kirtland Warbler Habitat
 - Cold Water Streams
 - Contiguous Resource Area

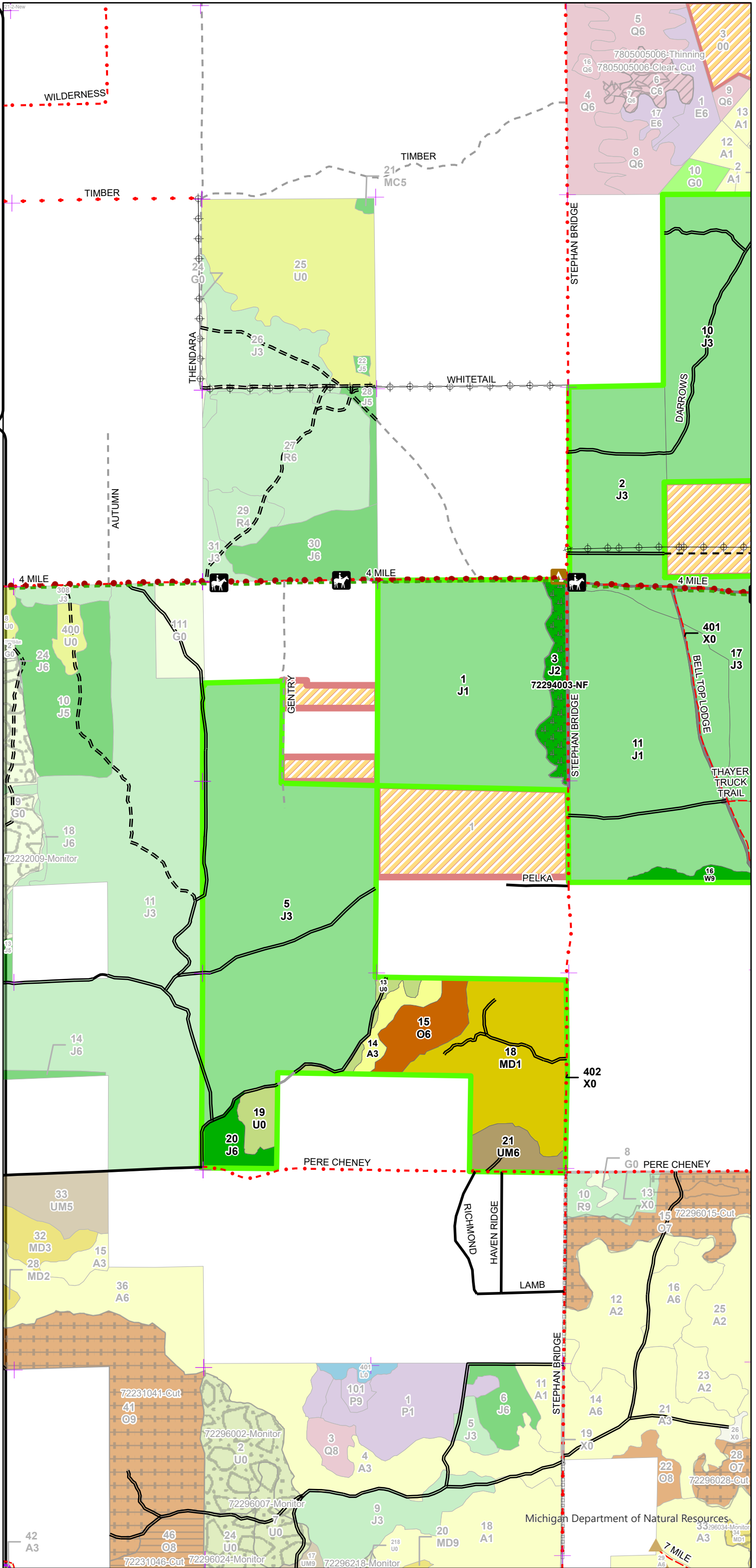


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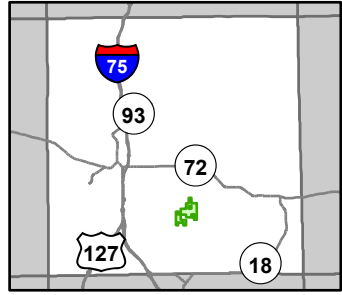


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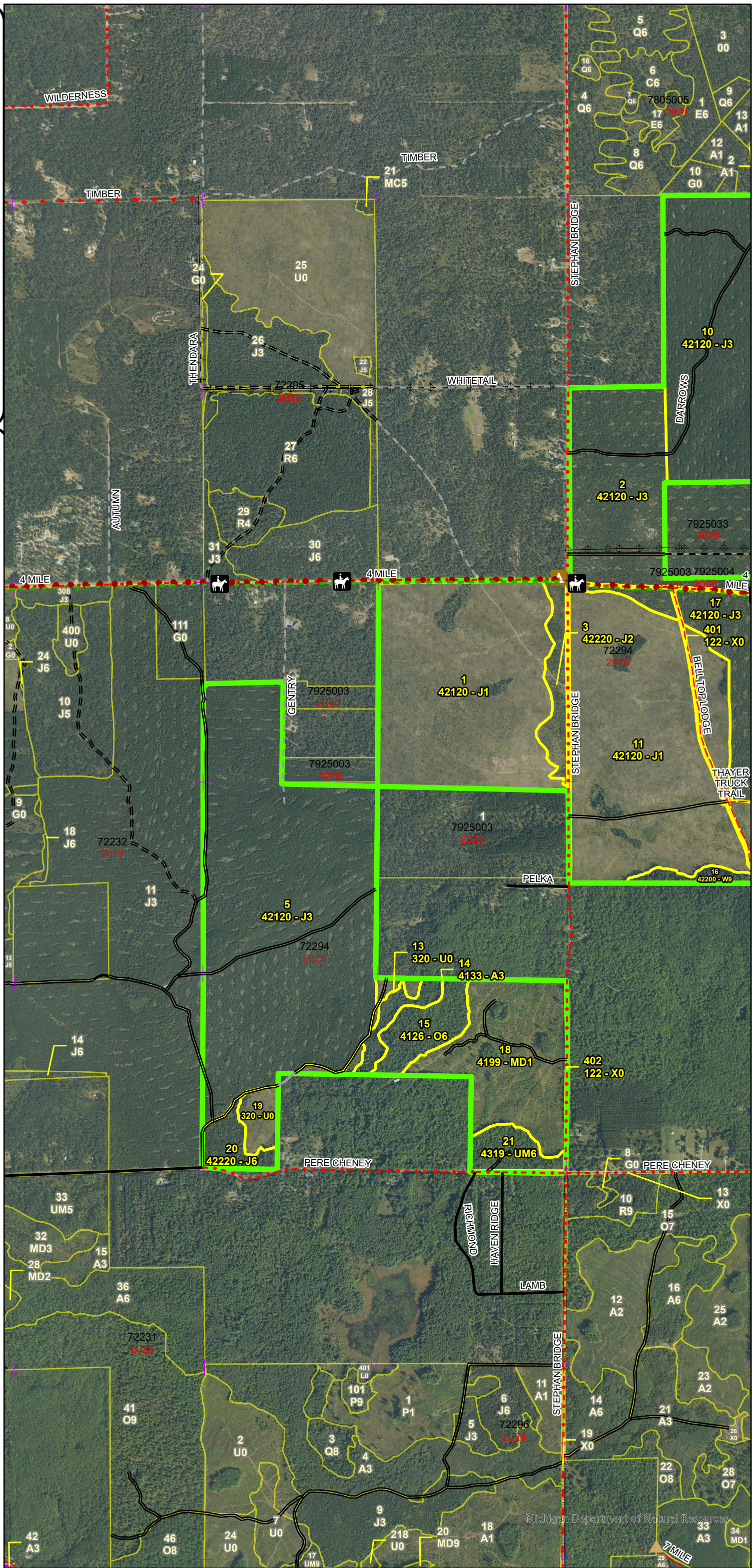


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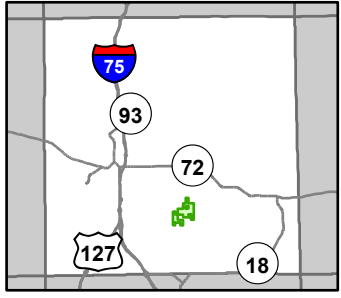


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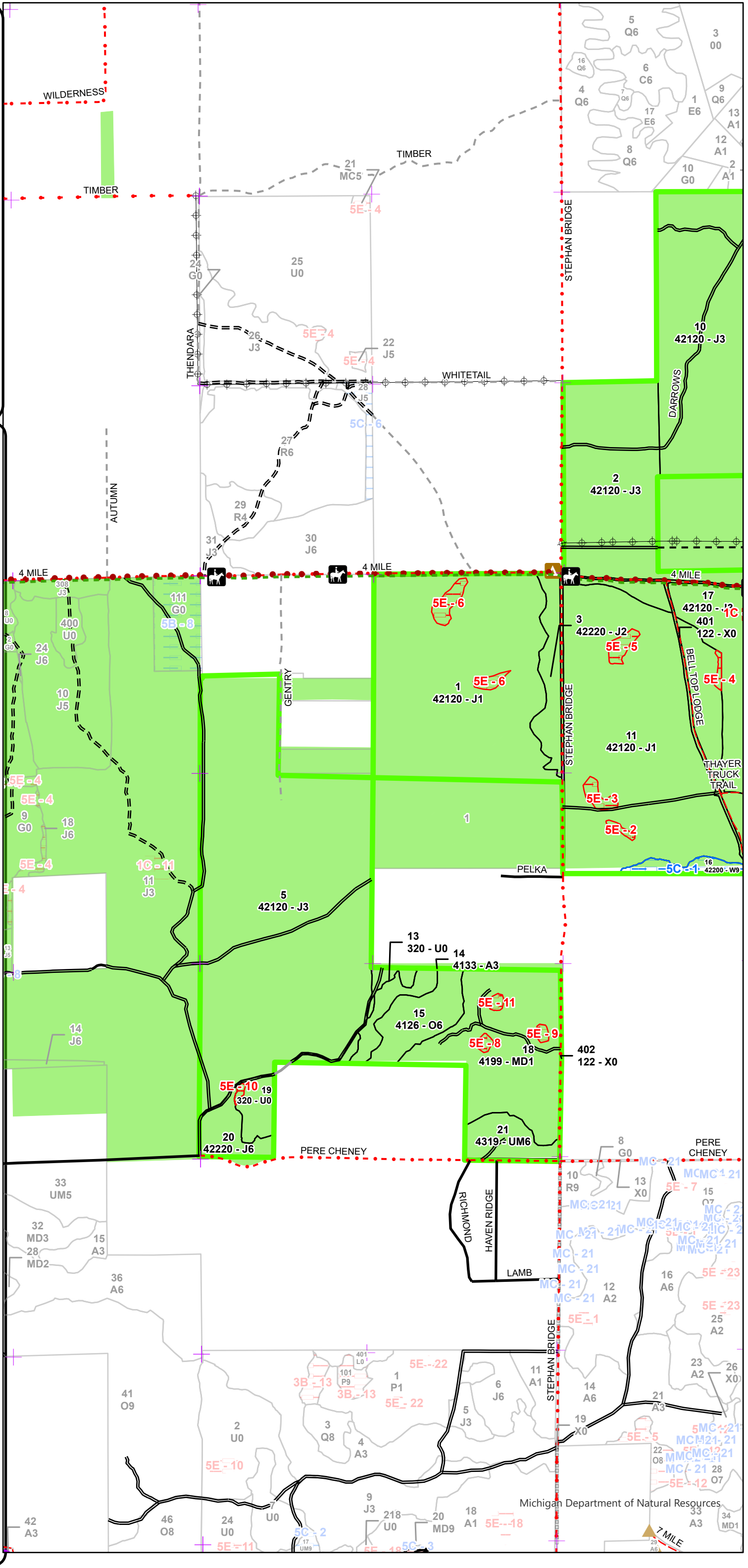


Special Conservation Areas & Site Conditions Map

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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	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Jack Pine	0	341	16	632	287	0	0	0	0	0	0	0	0	0	0	0	0	0	1275
Mixed Upland Deciduous	0	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
Northern Hardwood	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Oak	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	21
Upland Mixed Forest	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Upland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Urban	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
White Pine	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
Total	30	426	26	646	287	0	0	21	0	0	0	7	0	0	0	0	0	0	1442



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2026

Acres of Harvest

Compartment 294

Total Compartment Acres: 1,442

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	0	0	16	16
Total	0	0	0	0	0	0	0	0	16	16



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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
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Proposed Treatments:

3	72294003-NF	16.4	42220 - Natural Jack Pine	Sapling Medium	16	Immature	NonForestMgt	Other - Specify	310 - Herbaceous Openland	No
<p><u>Prescription</u> Periodic fuelbreak maintenance as needed to reduce woody vegetation along Stephan Bridge Rd. This may be achieved through prescribed burning or mechanical means depending on funding and equipment availability.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u></p> <p><u>Regen:</u></p> <p><u>Other</u></p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>										

Total Treatment Acreage Proposed: 16.4

Report 4 – Site Conditions

Grayling Mgt. Unit
Scott McClarren : Examiner

Compartment: 294
Year of Entry: 2026

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5C	1C	5E
		With Condition	Not Available				
10	10	0	0	Aspen			
1129	1120	0	9	Jack Pine		2	7
74	71	0	3	Mixed Upland Deciduous			3
11	11	0	1	Northern Hardwood			1
21	21	0	0	Oak			
14	14	0	0	Upland Mixed Forest			
16	15	0	1	Upland Shrub			1
14	14	0	0	Urban			
7	0	7	0	White Pine	7		
1,295	1,276	7	13	Total Forested Acres	7	2	11
	99%	1%	1%	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	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Holding stand to allow young white pine cohort to recruit. Stand also provides some diversity among surrounding KW habitat. Assess health of stand and white pine recruitment progress next entry.							
2	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Retention left when stand 12 was harvested in 2019.							
3	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Retention left around kettlehole wetlands in stand 6 when harvested in 2019.							

Report 4 – Site Conditions

Grayling Mgt. Unit
Scott McClarren : Examiner

Compartment: 294
Year of Entry: 2026

4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Retention left for former stand 8's 2019 harvest.</p>							
5	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Retention island left when stand 7 was harvested in 2019.</p>							
6	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Approved Rx indicated no retention due to small stand size. Comments don't correspond with stand characteristics. Tsale prep left two islands and designated them as long-term retention.</p>							
8	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
9	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
10	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Retention island left in stand 19's 2019 harvest.</p>							
11	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Large Kettle Hole</p>							

Report 4 – Site Conditions

Grayling Mgt. Unit

Compartment: 294

Scott McClarren : Examiner

Year of Entry: 2026

12	Unavailable	1C: Other dept or div proc/practices	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Roth 2017 thinning plots - MSU stand 7							
13	Unavailable	5E: Long-Term Retention	1	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
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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
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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
1	42120 - Planted Jack Pine	Sapling Poor	153.0	3	Immature	N/A	Young KW plantation with rolling topography.Old comments- Overmature JP & declining NPO was final harvested with retention by 2019 (#036-16), along with 13 acres of planted RP in the SE (former stand 4). W72-877 submitted for KW habitat planting. Contract trenched 2020. Planted 1147 TPA PRT JP in April 2021. Oct 2021 Yr 1 survey: 1127 TPA. NPO-BC are the main competitors. Oct 2023 Yr 3 Survey: 1130 TPA planted JP, 313 TPA volunteer O-JP-BC. FTP complete.	
Canopy Species		% Cover	Size Class	DBH	Age			
Black Cherry		5	Sapling	1				
Jack Pine		85	Sapling	1	3			
Northern Pin Oak		10	Sapling	1				
2	42120 - Planted Jack Pine	Sapling Well	87.2	28	Immature	N/A	Old comments- Harvested under contract # 72-010-97-01, Kirtlandii Hideout in 1997. old stands 19,21,4,24	
Canopy Species		% Cover	Size Class	DBH	Age			
Jack Pine		90	Sapling	3	28			
Northern Pin Oak		10	Sapling	3				
3	42220 - Natural Jack Pine	Sapling Medium	16.4	16	Immature	N/A	Young natural jp adjacent to planted KW. Old comments-Stand update triggered by adjacent sale closure. Stand is filling in with JP. Pre-burn evaluation determined that the JP would need to be mechanically reduced in order to facilitate controlled burning. Previous comments: Fuel break along Stephan Bridge Road. Harvested under contract # 72-010-06-01, Fire Break Jack Aspen in 2008.	
Canopy Species		% Cover	Size Class	DBH	Age			
Northern Pin Oak		5	Sapling	2	16			
Jack Pine		95	Sapling	2	16			
5	42120 - Planted Jack Pine	Sapling Well	256.6	26	1-50	N/A	Old comments- Harvested under contract # 72-010-97-01, Kirtlandii Hideout in 1997. YOE 2026. K Warbler Block 5. old stands 19,21,4,24	
Canopy Species		% Cover	Size Class	DBH	Age			
Northern Pin Oak		10	Sapling	3				
Jack Pine		85	Sapling	3	26			
Black Cherry		5	Sapling	3				
10	42120 - Planted Jack Pine	Sapling Well	287.4	35	1-50	N/A	Overall stand is sapling size but, some jp getting pole sized.Old comments- Scattered older oak and red pine throughout.	
Canopy Species		% Cover	Size Class	DBH	Age			
Red Pine		2	Log	12				
Northern Pin Oak		10	Pole/Sapling	5				
Jack Pine		88	Sapling/Pole	4	35			
		Sub-Canopy Species		Density	Avg. Height	Size		
		Northern Pin Oak		Low	< 5 feet	Sapling		
11	42120 - Planted Jack Pine	Sapling Poor	187.5	3	Immature	N/A	Young KW plantation with rolling topography.Old comments- JP with areas of planted RP was final harvested with retention in 2019 (#036-16). W72-877 submitted for KW habitat planting. Contract trenched in 2020. Planted 1105 TPA PRT JP in April 2021. Oct 2021 Yr 1 survey: 1036 TPA. NPO-BC are the main competitors. Oct 2023 Yr 3 Survey: 1042 TPA planted JP, 1117 TPA volunteer O-BC-JP. FTP complete.	
Canopy Species		% Cover	Size Class	DBH	Age			
Black Cherry		5	Sapling	1				
Jack Pine		86	Sapling	1	3			
Quaking Aspen		2	Sapling	1				
Northern Pin Oak		7	Sapling	1				
13	320 - Upland Shrub	Nonstocked	6.0	0	Immature	4191 - Mixed Upland Deciduous with Conifer	Open cherry following harvest. 1 pocket of aspen seen and a few scattered jack pine seedlings in the north. Overmature JP was final harvested without retention by 2019 (#036-16).	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																		
14	4133 - Aspen, Mixed Pine	Sapling Well	9.8	17	1-50	N/A	Serves as a fuel break. Stand is filling in with thick regeneration. Harvested under contract # 72-010-06-01, Fire Break Jack Aspen in 2008. Old stand 14. Passes regeneration survey.																																																		
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15	4126 - White, Black, N. Pin Oak	Poletimber Well	20.8	64	81-110	N/A	Variable oak with pockets of aspen. Aspen is starting to decline but oak still looks healthy. Some scattered legacy pine as well. Old comments- Final harvest in 1960. Left scattered white oak, pine, and aspen. Oak has a small diameter for its age. Possibly because of late recruitment into the canopy. Stand growing well now.																																																		
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16	42200 - Natural White Pine	Sawtimber Well	6.7	102	141-170	N/A	Changed stand from even aged to 2-aged due to white pine cohort in sub-canopy. Estimated sub canopy age. Old comments- Single tree mortality in parts of stand. Has been occurring for some time. Advanced regeneration occupying gaps nicely. Understory white pine is thickest along north edge. Good advanced regeneration throughout.																																																		
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17	42120 - Planted Jack Pine	Sapling Well	275.6	28	Immature	N/A	Old comments- Pere Cheney KW Block 4. Cut in 1996 (#001-96). Containerized JP planted June 1998 (W72-371). Pocket of aspen in center of stand. Portion north of Thayer Creek Rd was third-row thinned by contractor as part of research project by April 2020. Block south of Thayer Creek Rd will be thinned in 2021. The SE 54 acres were pre-commercially thinned in March 2021 as part of a variance-approved MSU research project.																																																		
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18	4199 - Other Mixed Upland Deciduous	Sapling Poor	73.7	7	Immature	N/A	Good oak regen following harvest but heavily browsed oak between maple and aspen. I anticipate oak to recruit above browse height in the next 10 years and take up higher percentage of canopy cover. Stand harvested 2017, Stephan Bridge Oak #72-037-16. Old comments- Mature oak stand with a good portion made up of white oak. Dense white pine understory throughout. Scattered large diameter white pine. Ground cover is predominantly oak under 3 ft. 1 - 2 large kettle holes in the stand. No water observed in the bottom.																																																		
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19	320 - Upland Shrub	Nonstocked	9.6	0	Unspecified	42260 - Natural Pine, Mixed Deciduous	Open stand of black cherry. Apple tree in SE. Old comments- Was final harvested with a half-acre retention island (in the NW) by 2019 (#036-16). Previous comments: Deep ravine runs north and south through the middle of the stand. Small portion cut in SW corner along private. Area in and along ravine was left. Area of the ravine farthest south contains water during wettest times of the year. SW corner harvested under contract # 72-008-96-01, KW 5 Jack Block in April 1996. Removed jack pine greater than 5 inches DBH. Ravine is deepest towards the south but is operable if wood is skidded out the north.																																		
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20	42220 - Natural Jack Pine	Poletimber Well	12.4	28	1-50	N/A	Pole and sap size jp with some scattered log size trees. Older log size aspen/jack pine in steep seasonally wet depression in southeast finger. Old comments- Good mix of species. Stand is on the lower of the canopy closure range. Harvested under contract # 72-008-96-01, KW 5 Jack Block in April 1996. Removed jack pine greater than 5 inches DBH. Decided not to re-plant due to high residual.																																		
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21	4319 - Mixed Upland Forest	Poletimber Well	13.9	27	111-140	N/A	Aspen, oak, and maple are declining and a lot of the sub-canopy white pine has recruited into intermediate/co-dominant canopy position. Changed stand age from 2-aged with 1919 and 1960 origins to 1960 and 1997 (following salvage). Some 1919 origin trees scattered throughout stand, but not enough for a 3rd age class. Old comments- White pine understory varies from sub-canopy to seedling. Previous salvage promoted dense white pine pockets and released suppressed individuals. Oak and aspen appear healthy still. Dropped from treatment list last YO. Salvaged approximately 150 cords from this stand in late summer of 1997 under contract # 72-031-94-01, Pere Cheney Salvage. White pine growing well. Allow 10 - 20 years before thinning.																																		
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22	4113 - R.Maple, Conifer	Sapling Poor	11.4	7	1-50	N/A	Stand looks two aged in places but, decided to call stand even aged with super canopy trees following harvest. Shade from residual white pine, small stand size, and heavy browse is keeping the oak from recruiting. Old comments- Heavy browse. Oak regeneration under 2', primarily white oak. WP RM understory dominates. Stand harvested in 2017, Stephan Bridge Oak #72-037-16.																																		
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