

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32093 Entry Year 2018 Acreage: 2,461 County Alger Management Area: Dead Horse Moraines

Revision Date: 2016-08-11

Stand Examiner: Robert Tylka

Legal Description:

T45N R22W Section 36, and T44N R22W Sections 10,14,23,26,27,34,35 and 36

Identified Planning Goals:

Maintain winter deer habitat, and protect fisheries values associated with Werner and McAfee Creeks.

Soil and topography:

Most of the terrain in this compartment is low, flat & wet, featuring a variety of bottomland soils ranging from silt loams to organic mucks, and poor drainage is common. Some areas feature gently rolling terrain, where the soils are generally fine sandy to silt loams with better drainage. These areas, including upland inclusions in the lowland stands, are significantly more productive for timber.

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

This compartment consists of several blocks of state land of varying sizes, with parcels of private land surrounding them. One landlocked forty of private land is included within the compartment boundaries.

Unique Natural Features:

Werner Creek and the West Branch of the Whitefish River flow through this compartment, along with numerous drainages that flow into them.

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

This compartment lies within a deer wintering complex, and the lowland timber types(especially cedar) found here are important for that use.

Watershed and Fisheries Considerations:

: This compartment contains Werners Creek and McAfee Creek which are both designated Type 1 trout streams less than 50' wide. McAfee Creek is a tributary to Werner Creek, which then serves as tributary to the West Branch of the Whitefish River. Werner Creek contains Brook Stickleback, Rainbow Trout, Lake Sturgeon, Slimy Sculpin, and various Darter species. No fisheries data are available for McAfee Creek. A 300' buffer is recommended for Werners Creek in riparian areas adjacent to stands which include Aspen. For all other riparian areas, including McAfee Creek, Best Management Practices should be followed to reduce erosion into water bodies.

Wildlife Habitat Considerations:

Compartment 93 is found within the Dead Horse Moraines Management Area; on Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include Northern Hardwood, Aspen, and Mixed Lowland Conifer. This management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area. The most significant wildlife management issues in the management area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); course woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraines Management Area: black bear, pileated woodpecker, ruffed grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured till. Glacial drift thickness is typically less than 30 feet across the area. The Ordovician Trenton and Black River formations subcrop below the glacial drift. Both units have been quarried for stone in the UP. A gravel pit is located in Section 28 (T45N R22W) and there is some evidence of additional former pits in the area.

There may be some sand and gravel potential in the compartment on drumlins and other uplands, but shallow bedrock would limit production. There is no history of commercial mining or mineral leasing in this area. There has been no economic oil and gas production in the UP.

Vehicle Access:

Vehicle access to the interior of this compartment is very difficult, as the lowland soils simply cannot support anything other than winter roads. The many unmapped drainages also make road building extremely difficult.

Survey Needs:

If access is obtained to execute proposed treatments in stands 13 & 14, then survey corners/property lines must be established along the section line between sections 23 and 26; in addition the same will be needed in the NENE of section 26.

Recreational Facilities and Opportunities:

There are currently no developed recreational facilities in the compartment, but an old state forest campground was located on the west side of US-41 in section 10.

Fire Protection:

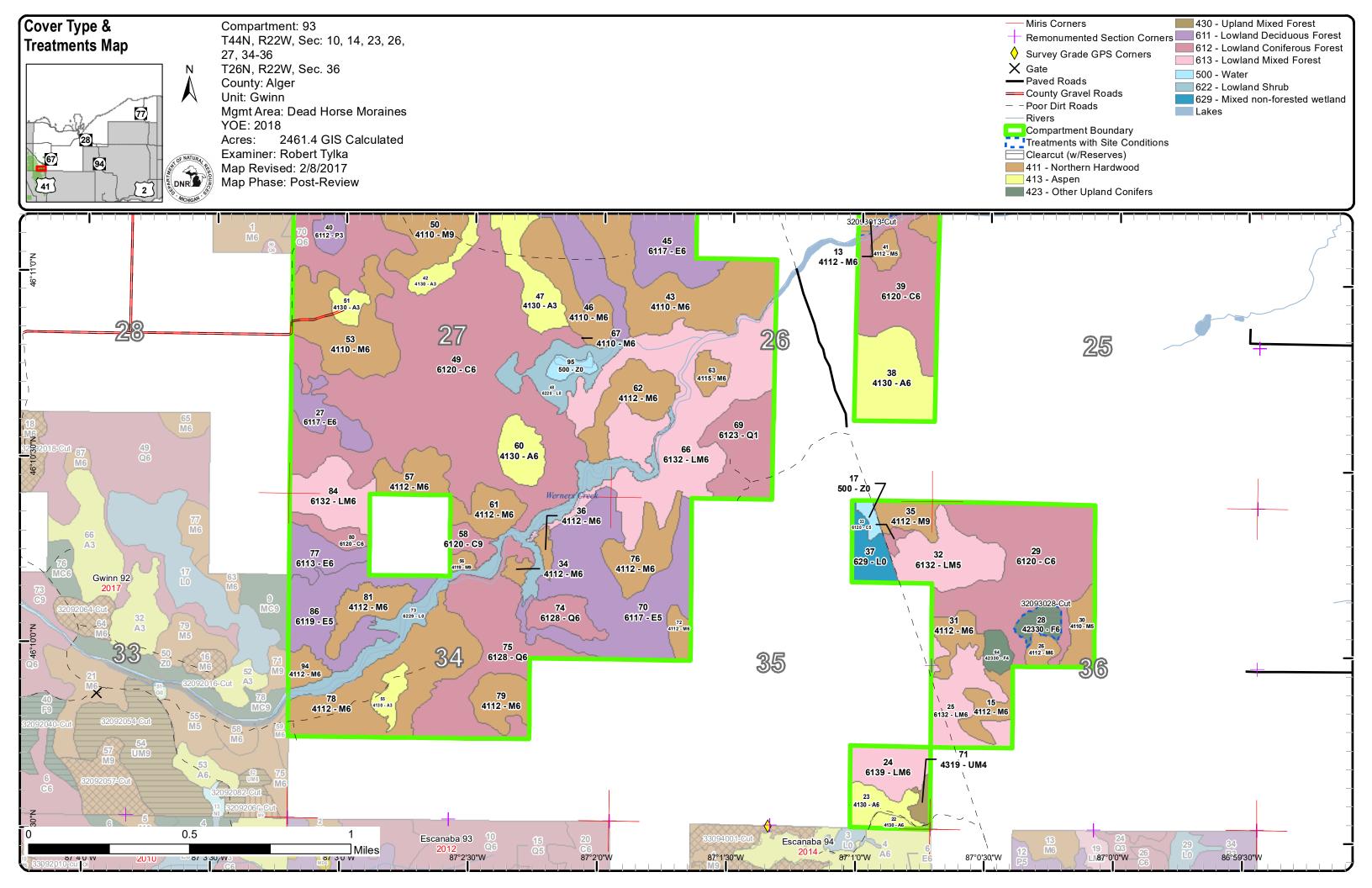
This compartment does not feature a lot of high-risk fuels, though the lowland conifers can certainly become problematic in drought years. The main concern for fire management would be the access issues.

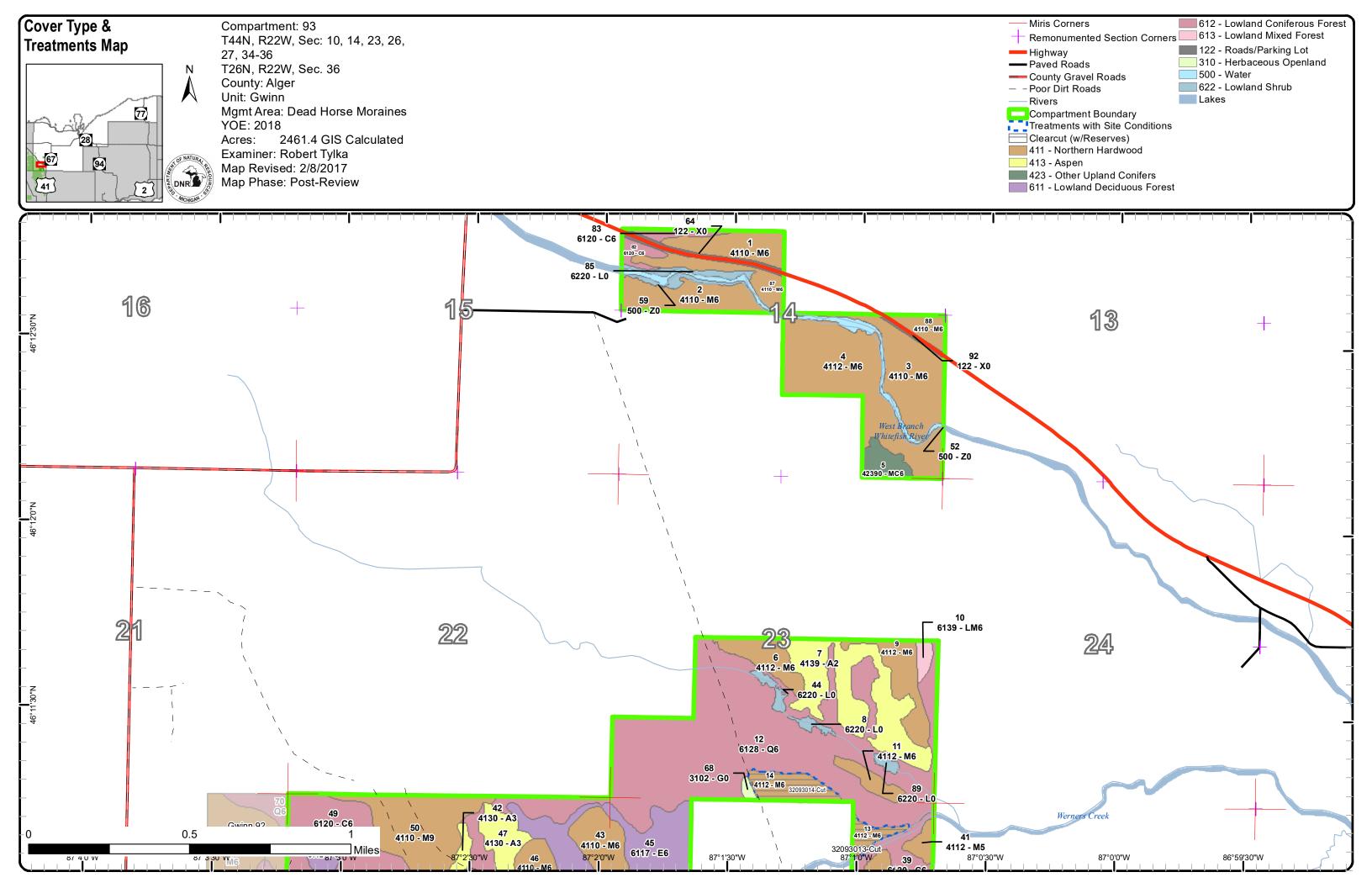
Additional Compartment Information:

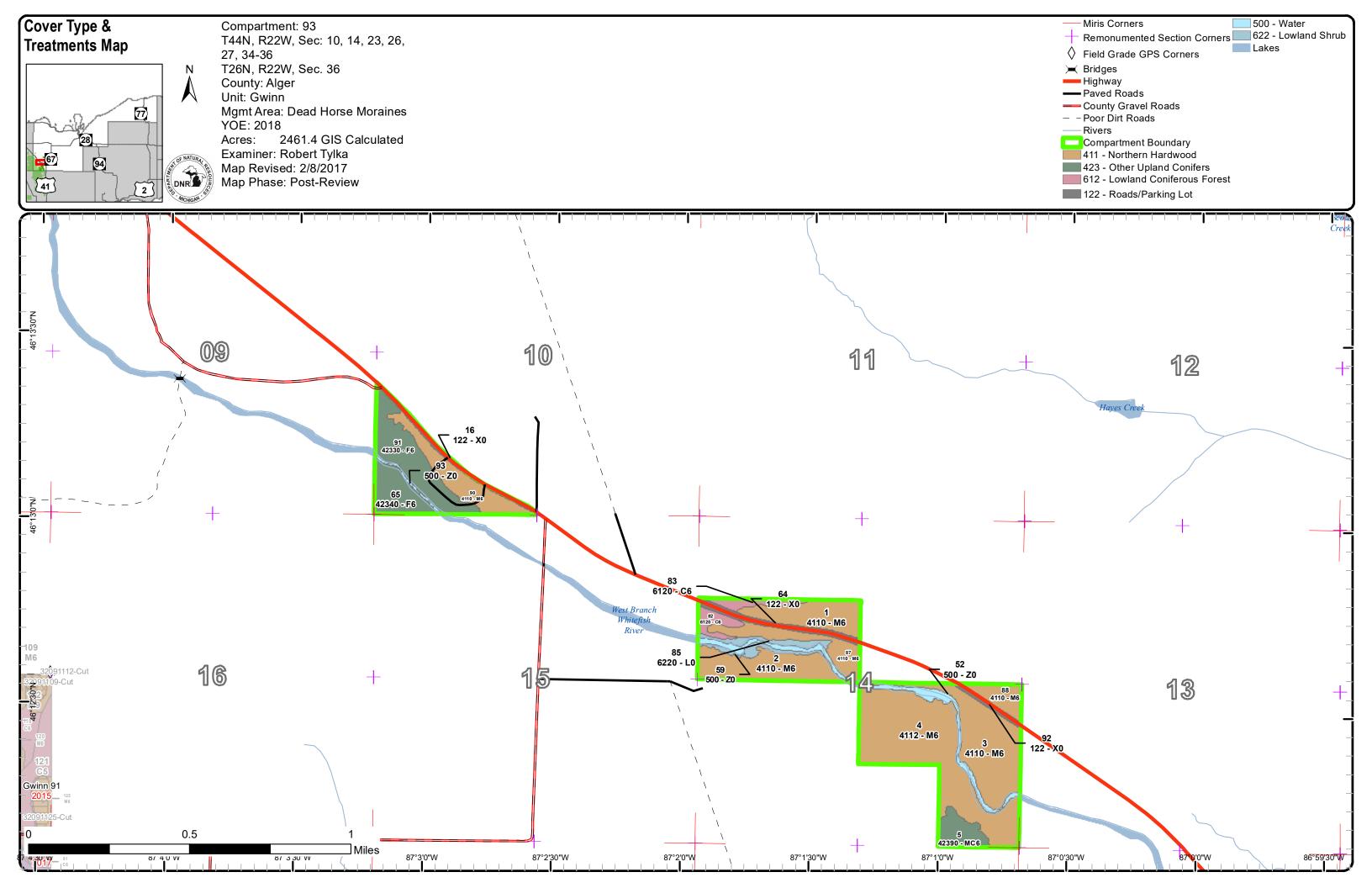
The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class

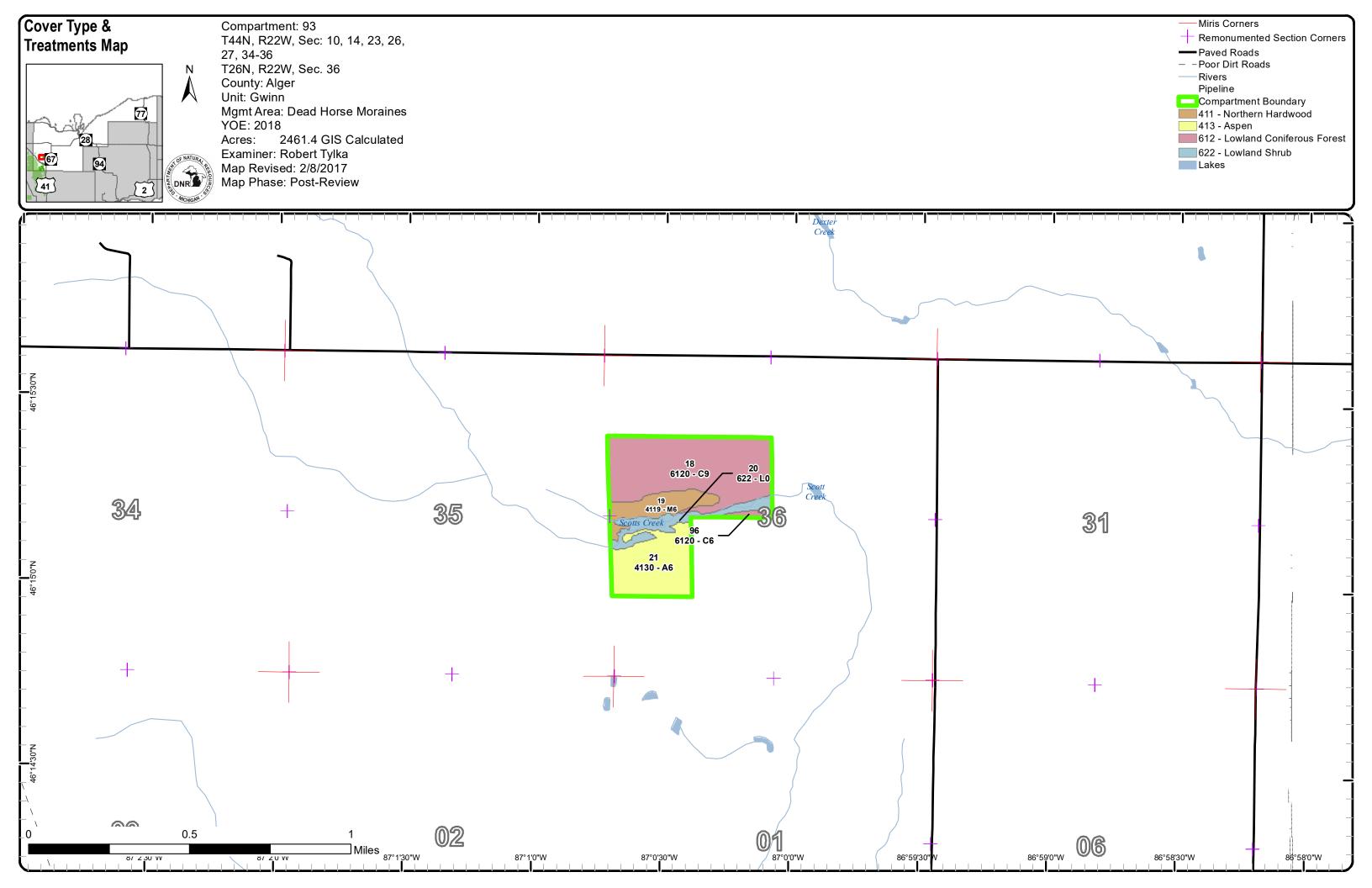
Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

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









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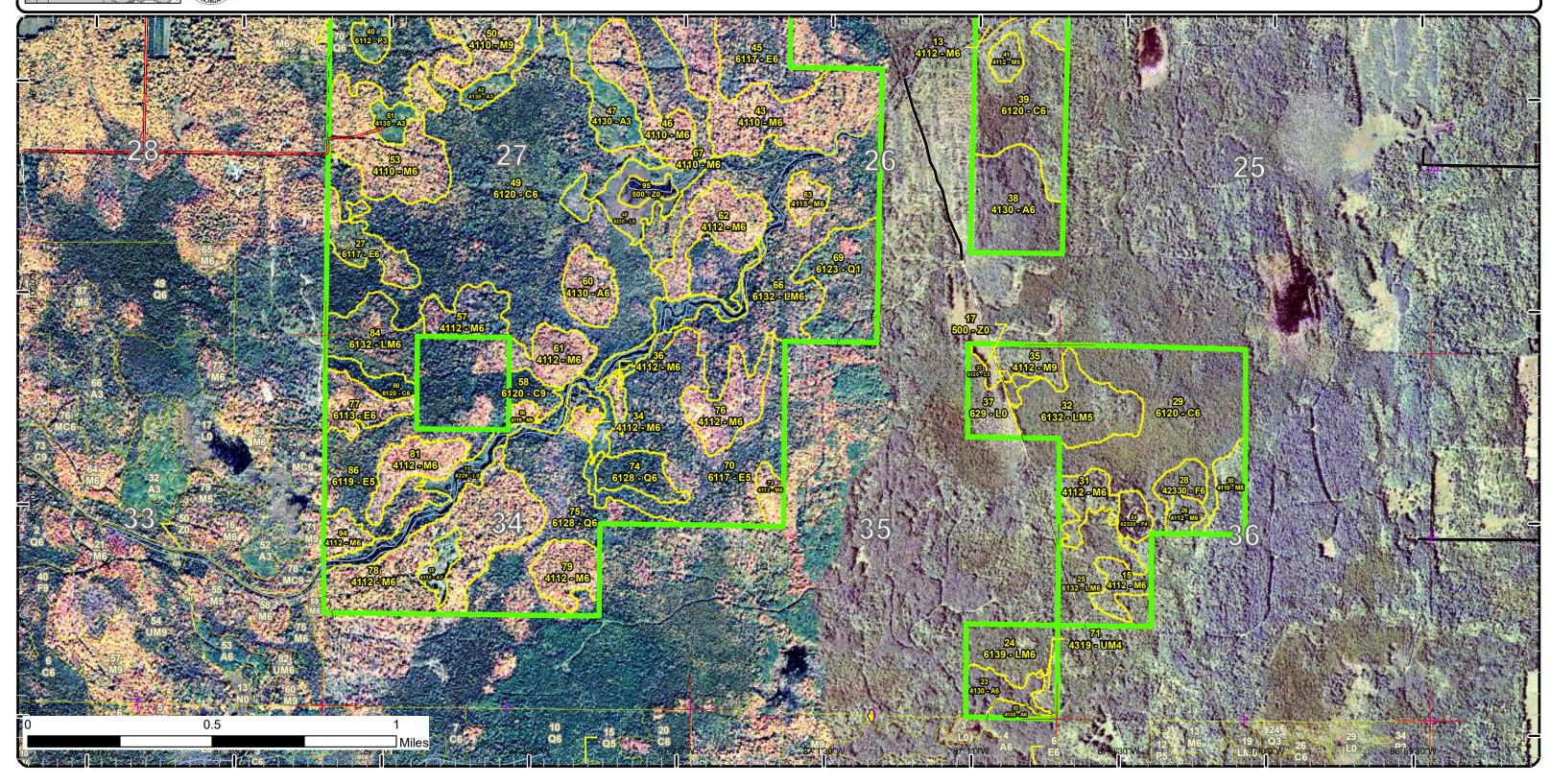
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Compartment: 93 T44N, R22W, Sec: 10, 14, 23, 26, 27, 34-36 T26N, R22W, Sec. 36 County: Alger Unit: Gwinn Mgmt Area: Dead Horse Moraines YOE: 2018 Acres: 2461.4 GIS Calculated Examiner: Robert Tylka Map Revised: 2/8/2017 Map Phase: Post-Review



Miris Corners

- Remonumented Section Corners
- Survey Grade GPS Corners X Gate
- ----- Paved Roads
- County Gravel Roads - Poor Dirt Roads

 - Rivers
- Compartment Boundary Stand Boundaries 411 Northern Hardwood
 - 413 Aspen
 - 423 Other Upland Conifers 430 Upland Mixed Forest

- 611 Lowland Deciduous Forest 612 Lowland Coniferous Forest 613 Lowland Mixed Forest
- 500 Water
- 622 Lowland Shrub
- 629 Mixed non-forested wetland

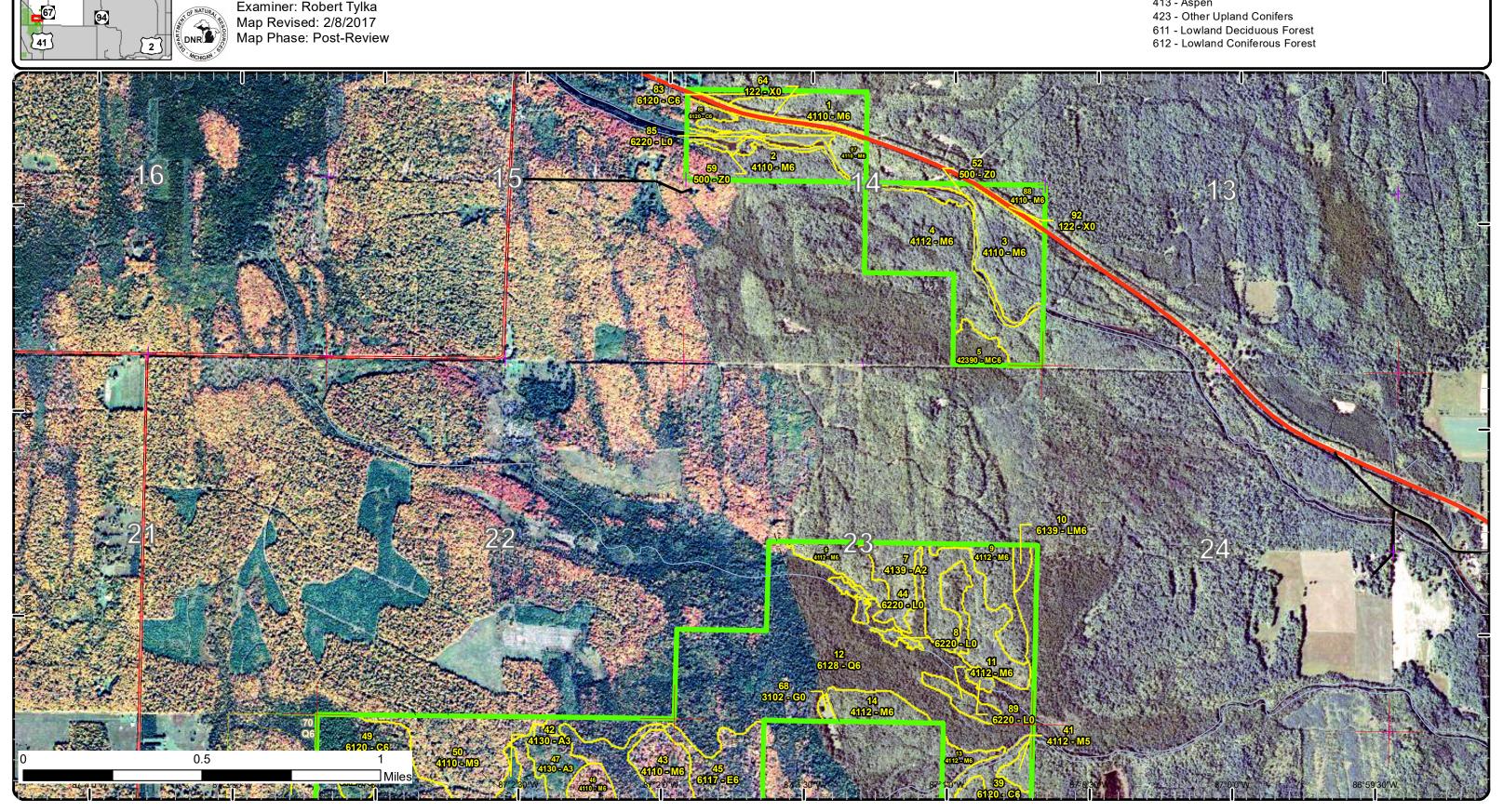
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- Miris Corners
- Remonumented Section Corners
- Highway Paved Roads
- County Gravel Roads
- Rivers
- Compartment Boundary

 - 411 Northern Hardwood
 - 413 Aspen
 - 423 Other Upland Conifers
 - 611 Lowland Deciduous Forest 612 Lowland Coniferous Forest

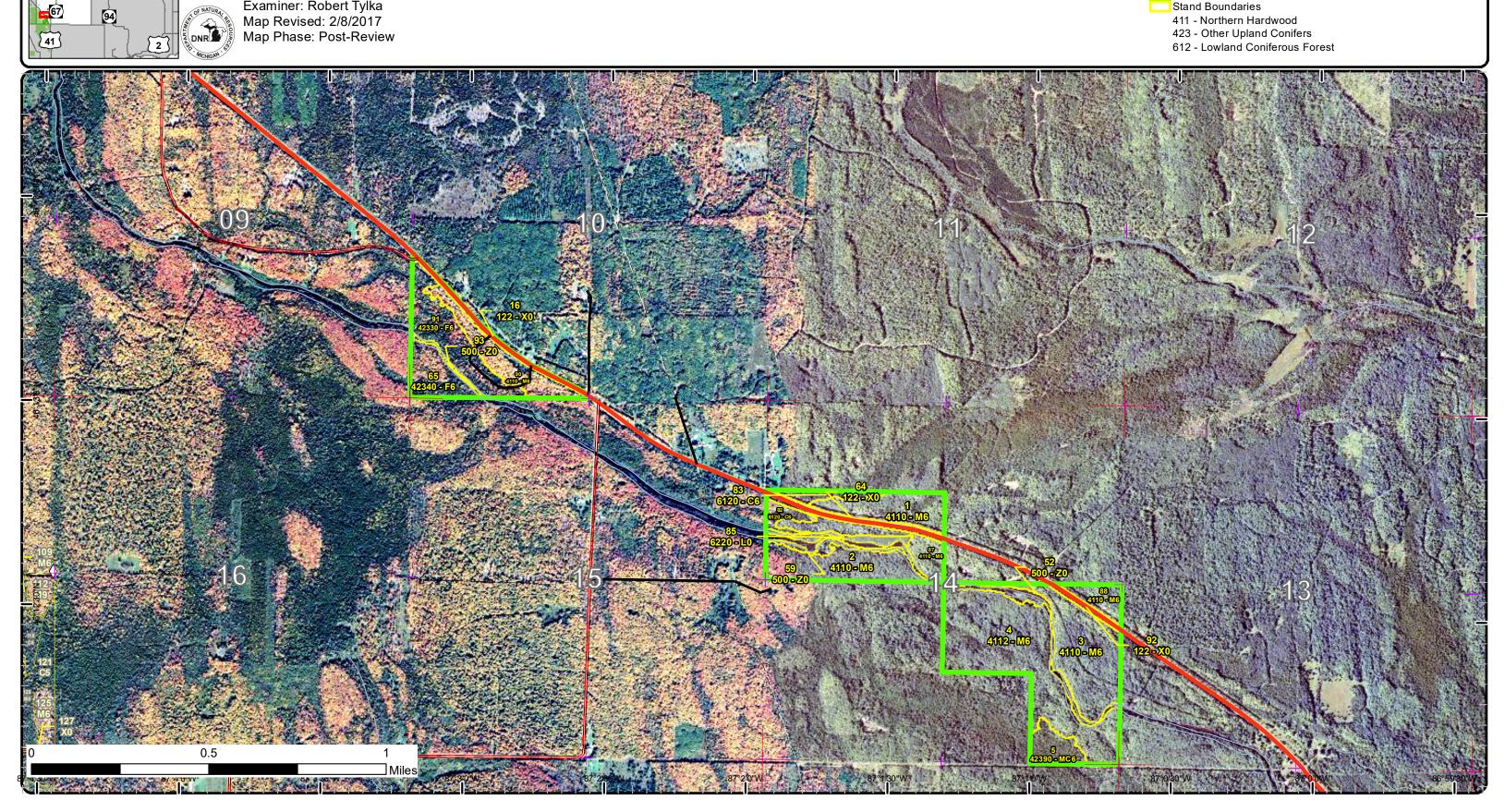
- 613 Lowland Mixed Forest
- 122 Roads/Parking Lot 310 Herbaceous Openland 500 Water
- 622 Lowland Shrub

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122 - Roads/Parking Lot 500 - Water 622 - Lowland Shrub

- Miris Corners Remonumented Section Corners

♦ Field Grade GPS Corners

- 🛏 Bridges
- Highway ---- Paved Roads
- County Gravel Roads Poor Dirt Roads
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 Compartment Boundary
 Stand Boundaries

 - 411 Northern Hardwood 423 Other Upland Conifers 612 Lowland Coniferous Forest

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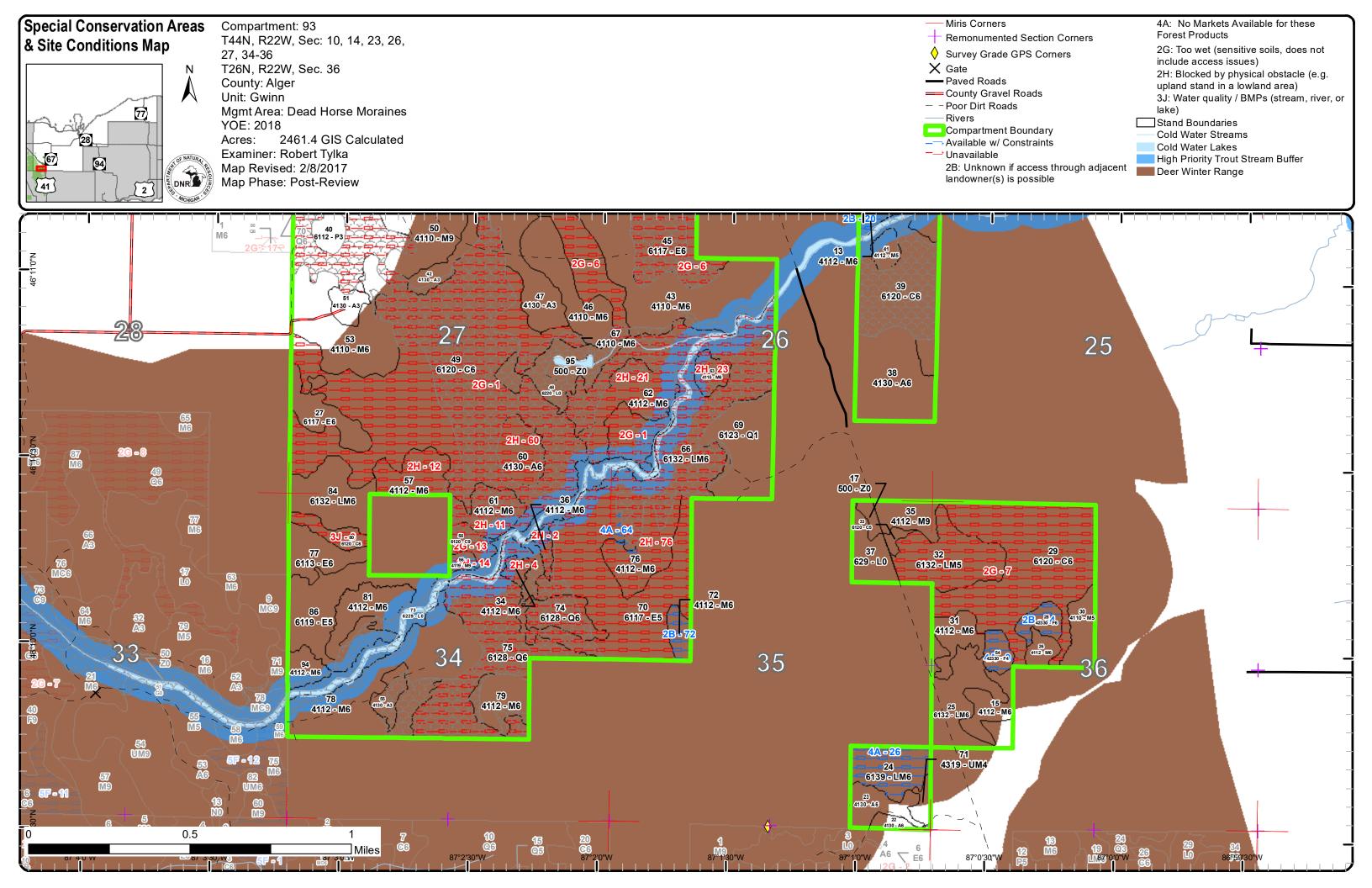
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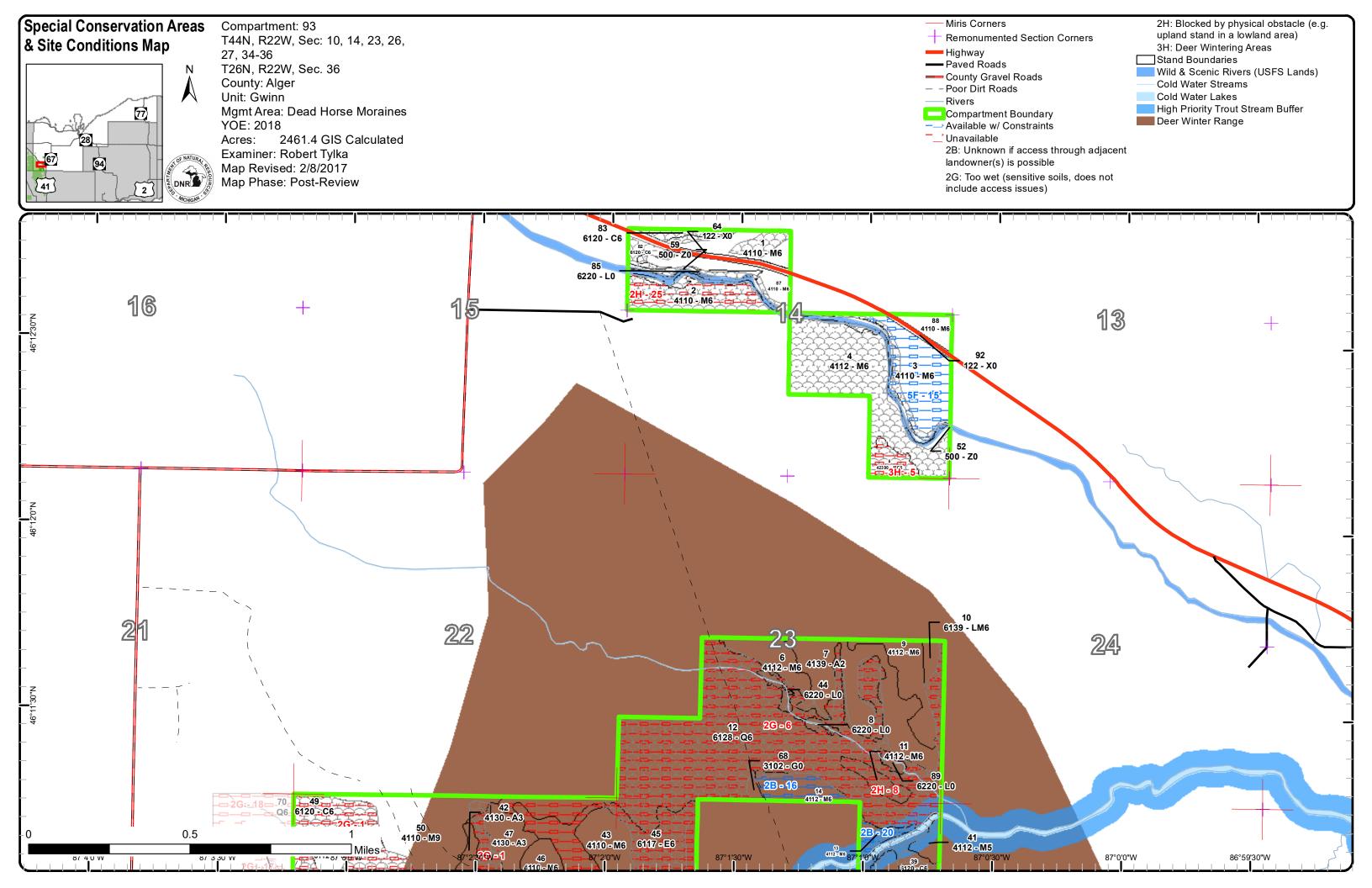
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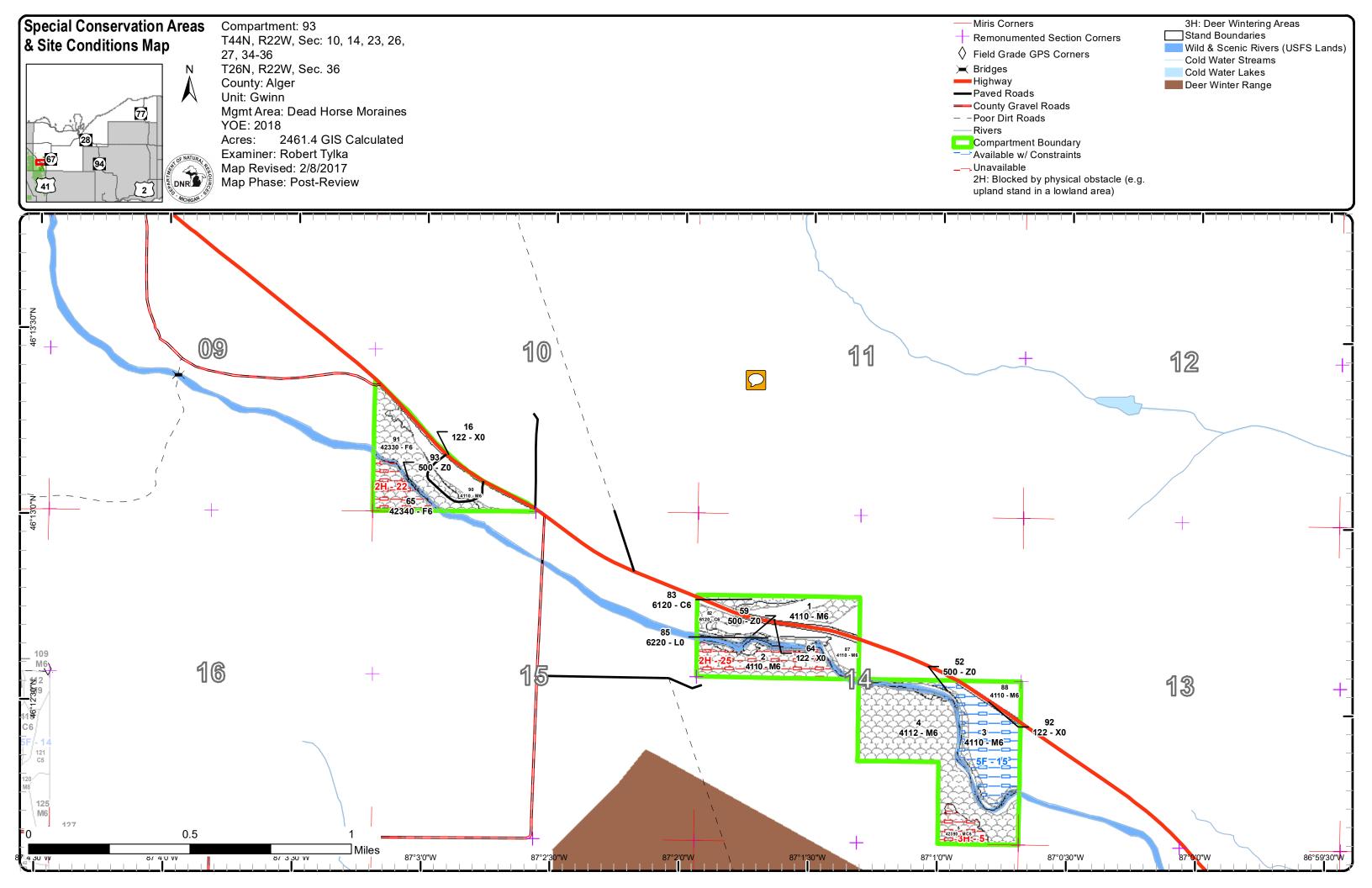


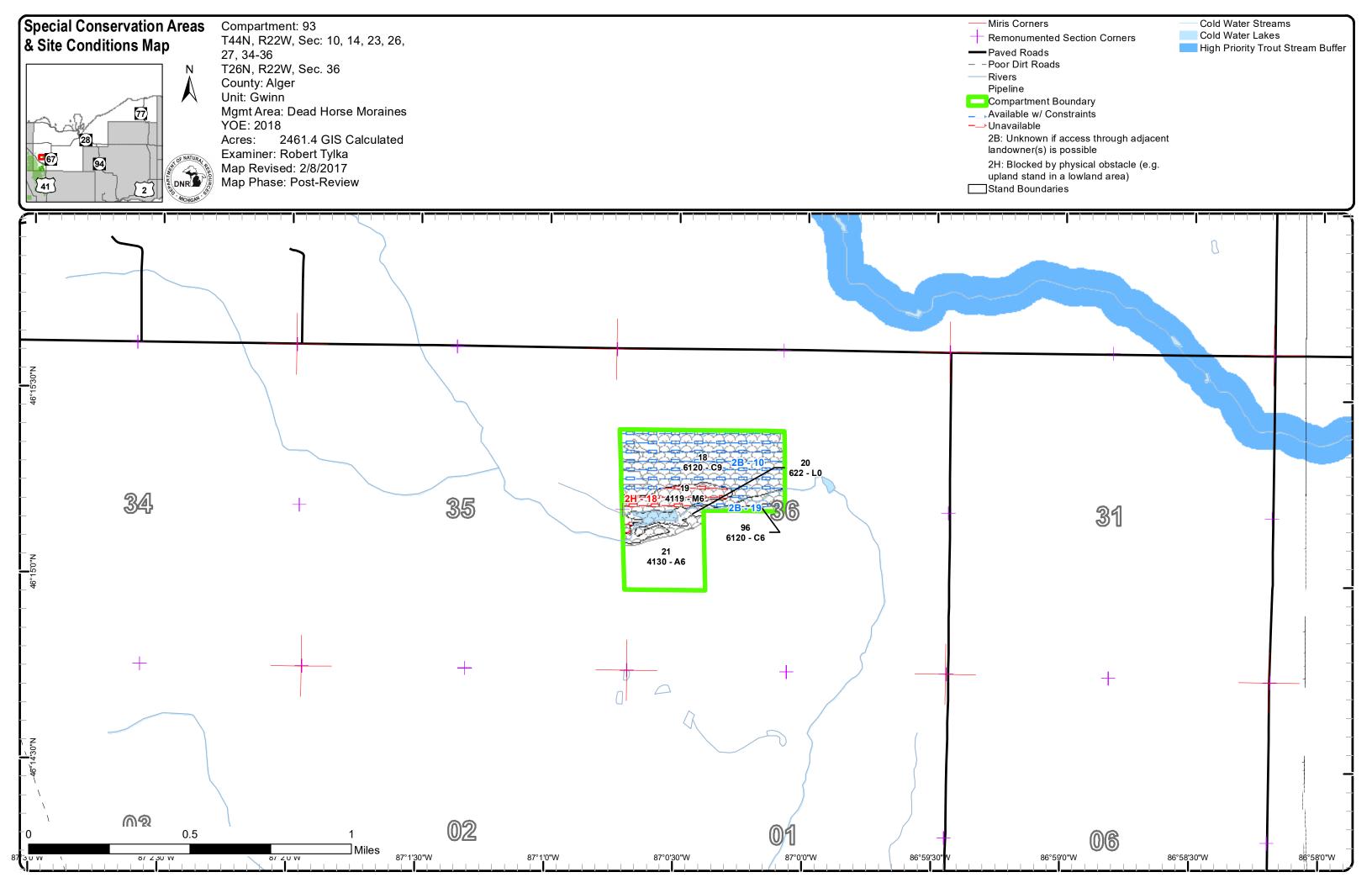


- 622 Lowland Shrub

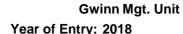








	Mgt. (: Exa	Unit Iminer		eport	:1-1	Fotal	Acres	s by (Cove	r Тур	e and	d Age	e Clas		ompar	tment	t	Year o	of Entry	A LANDAU
								Age C	Class											
				20 30 - 130	/ -		20 20 20 20				/		/				OF ST	<u> </u>	AND LO LO	
	#Error	#Error	######	#Error	######	#Error	¥#####	#Error	######	#Error	4#####	#Error								
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



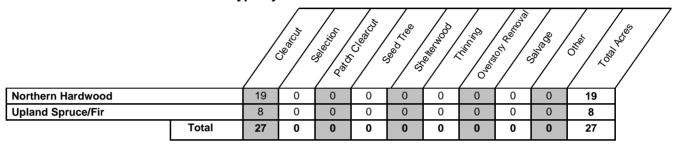
 Year of Entry: 2018
 Acres of Harvest
 Total Compartment Acres: 2,461

 Commercial Harvest Commercial Harvest

 Harvests with Site Condition - 0
 Next Step Harvest - 0

 Habitat Cut - 0
 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method

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Current		27	0	0	0	0	0	0	0	0	27	
Next Step		0	13	13	0	0	13	40	0	0	80	
	Total	27	13	13	0	0	13	40	0	0	107	

S t		G	Gwinn Mgt. Unit		Re	eport 3	Treatme	nts	•	tment: 93 Entry: 2018	DNR DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
13 3	2093013-Cut	5.8	4112 - Maple, Beech, Cherry Association	Poletimber Well	· 81	51-80	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary
		n retention	Site Condition	-	strip alo	ng the rive	er.				
<u>Next S</u> Treatm		ring, Natur	ral Regen (Re-Inve	ntory)							
<u>Accept</u> <u>Regen</u> :		cies prese	nt in the current sta	and are acce	eptable.						
<u>Other</u> Comm		deer winte	ering complex a wir	nter cutting s	pec sho	ould be ad	Ided. Retain if	present any cedar	or hemlock		
Propos	sed Start Date:	<u>:</u> 10/01	/2017								
14 3	2093014-Cut	13.3	4112 - Maple, Beech, Cherry Association	Poletimber Well	[.] 81	51-80	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
Prescri Specs:	Leave I RP is p	room to pla lanted.	ant oak once the re	down to 1" ed pine is es	tablishe	d. Details	to be establish	ash swale/drainage ned - e.g. skip som	e rows and plant r	red oak XX yea	ars after the
<u>Next Si</u> Treatm		de, Skidde	er/Mechanical; Site	ePrep, Trend	ching;	Planting,	Initial Plant; N	Ionitoring, Artificial	Regen(1yr); Mor	hitoring, Artifici	al Regen(3yr)
Accept Regen:		d red pine	in the uplands.								
<u>Other</u> Comm		e adequate	e buffer to protect v	vetlands whe	en spray	/ing herbio	cide.				
_			. .	nter cutting s	pec sho	ould be ad	Ided. Retain if	present any cedar	or hemlock		
	sed Start Date		/2017								
28 3	2093028-Cut	1.1	42330 - Upland Fir	Well	. 72	81-110	Harvest	Clearcut with Retention	42330 - Upland Fir	Even-Aged	Draft Field Boundary
		w to avoid	Site Condition	_	n cedar	plus any	hemlock & whi	te pine encountere	d in the stand.		
<u>Next St</u> Treatm		ring, Natur	al Regen (Re-Inve	ntory)							
<u>Accept</u> <u>Regen</u> :		imercial tro	ee species now pre	esent are ac	ceptable	Э.					
<u>Other</u> Comm		deer winte	ering complex a wir	nter cutting s	pec sho	ould be ad	lded.				
Propos	sed Start Date	<u> </u>	/2017								
	Total Treatme reage Propos		26.8								

Gwinn Mgt. Unit

Robert Tylka : Examiner

Compartment: 93 Year of Entry: 2018

Availability for Management

Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Cone	dition	s	
Acres	Available	With Condition	Not Available		2B	2D	4A	5F	2G	2H
202	186	0	15	Aspen						15
525	62	64	400	Cedar	64				399	0
2	2	0	0	Herbaceous Openland						
7	7	0	0	Lowland Aspen/Balsam Poplar						
306	36	0	271	Lowland Conifers					271	
161	0	1	160	Lowland Deciduous			1		159	1
183	35	21	127	Lowland Mixed Forest			21		127	0
98	98	0	0	Lowland Shrub						
698	502	61	135	Northern Hardwood	12	13	1	34		135
38	23	14	0	Upland Spruce/Fir	8		6			
9	9	0	0	Urban						
18	18	0	0	Water						
2,247	978	161	1,108	Total Forested Acres	84	13	30	34	957	151
	44%	7%	49%	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	e 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)	601	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
2	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Compartment: 93

Robert Tylka : Examiner

Gwinn Mgt. Unit

Year of Entry: 2018

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3H: Deer Wintering Areas	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	270	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	126	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
	Comments: Unmapped drains a	nd vernal ponds throughout the	e stand.				
8	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Compartment: 93

Robert Tylka : Examiner

Gwinn Mgt. Unit

Year of Entry: 2018

9	Available	4A: No Markets Available for these Forest Products	7	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
С	Comments:						
S	Stand notes indica	te this is an old opening filling in					
10	Available	2B: Unknown if access through adjacent landowner(s) is possible	62	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
11	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: leed bridges etc. t	to get to this stand.					
12	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	17	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
С	Comments:						
13	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
С	Comments:						
14	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	Unspecified	Unspecified	Unspecified	Unspecified
	comments:						

Report 4 – Site Conditions

Compartment: 93

Robert Tylka : Examiner

Gwinn Mgt. Unit

Year of Entry: 2018

15	Available	5F: Evaluated for Forest Health Considerations	34	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	13	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments: Culvert(s) probably	v adequate instead of portable b	ridge				
18	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	14	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
19	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
20	Available	2B: Unknown if access through adjacent landowner(s) is possible	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
21	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	26	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
	017.0-02-50 AM						Dolla

	Gwinn Mgt. Unit Robert Tylka : Examiner			Report 4 – Site Cor	nditions	Compartment: 93 Year of Entry: 2018		
22	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	13	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
23	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
24	Available	2B: Unknown if access through adjacent landowner(s) is possible	8	Unspecified	Unspecified	Unspecified	Unspecified	
(Comments:							
25	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	24	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: No known access	across the W. Branch Whitefish	River					
26	Available	4A: No Markets Available for these Forest Products	21	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							

60		: Tylka : Examiner				Compartment: 93 Year of Entry: 2018		
00	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	16	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	2E: Road needed	Unspecified	Unspecified	
	omments:							
Ac	cess across wet	lowland timber and several drai	inages	would be prohibitively expen	sive and difficult.			
64	Available	4A: No Markets Available for these Forest Products	3	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified	
Co	omments:							
72	Available	2B: Unknown if access through adjacent landowner(s) is possible	6	2I: Survey needed	Unspecified	Unspecified	Unspecified	
Co	omments:							
76	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	22	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified	
Co	omments:	· · ·						



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
	Potential Old Growth		SCA Removal	27
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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditio stocked trout populations and those of other coldwater fish speci conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable by are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildl and Waterfowl Production Areas, deer wintering complexes in lo openings and savannas. Habitat areas are distinct from critical h endangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in coopera	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high of communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
SCA	Wild and Scenic Rivers	Wild and Scenic Rivers are established under authority of the Na Law 90-542, as amended. Each Wild and Scenic River has a riv and State agencies may enter into written cooperative agreemen for the management of Wild and Scenic Rivers that are upon Sta Federal designated Wild and Scenic Rivers that are located with	rer specific Federal management plan, its with the administering Federal agency ite-owned lands. There are 18 miles of

S t	Gwinr	Gwinn Mgt. Unit			– Forested	Stands Compartment: 93 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4110 - Sugar Maple Association	Poletimber Well	16.9	76	81-110	Thinned 1990. Thick F3 is some areas. Vernal ponds scattered throughout the stand but heavier where the fir is thicker. Should be ready to thin again next entry. There is also a 1.3 acre ash/cedar swale in the NE corner of the stand.
2	4110 - Sugar Maple Association	Poletimber Well	23.7	121	111-140	Nice hardwoods but no known access. Includes a strip of lowland cedar mix along the river that is too small to map out separately.
3	4110 - Sugar Maple Association	Poletimber Well	33.8	81	51-80	Medium quality sugar maple with a fair amount of balsam fir scattered throughout. BA varies between 70-100, so not ready to thin just yet. The site appears to have potential for higher quality with proper management.
4	4112 - Maple, Beech, Cherry Association	Poletimber Well	63.3	61	81-110	Mixed hardwood pole stand with scattered pockets of conifers. Unevenaged characteristics appear to be developing. Overall medium quality but it looks like there is potential for higher quality in the future.
6	4112 - Maple, Beech, Cherry Association	Poletimber Well	13.1	81	81-110	Mostly sugar maple poles. Last cut in '98
7	4139 - Aspen, Mixed Deciduous	Sapling Medium	48.3	14	Immature	Cut around 2002-2003. Some residual cedar, hemlock and yellow birch onsite. Mgt objective is aspen, and in most places it will probably outgrow the red maple, but for now this stand is mixed.
9	4112 - Maple, Beech, Cherry Association	Poletimber Well	17.4	72	51-80	Mixed hardwoods last cut in 2000 - quality is reasonably good but the regeneration appears to be rather slow due to browsing. Basal area is about 70 sq.ft./acre.
10	6139 - Mixed Lowland Forest	Poletimber Well	3.2	72	51-80	Mixed timber on a transitional site between the lowlands and uplands. Most of the aspen and balsam poplar that were present have died out.
11	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.7	101	51-80	Relatively poor quality. Access across the surrounding lowland stand would be difficult.
12	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	200.2	107	51-80	Mixed lowland timber on wet ground with numerous unmapped drainages. Stand density, species composition and site indices all vary significantly, making it hard to map this stand out into more coherent units for possible management. Operability is questionable at best, although there are significantly higher and dryer inclusion within the stand. There are also pockets of hemlock & a few white pine on slightly elevated sites, and small pockets of quaking aspen regen where natural disturbances have occurred.
13	4112 - Maple, Beech, Cherry Association	Poletimber Well	5.8	81	51-80	Generally medium-to-lower quality hardwoods with conifers scattered throughout. BA runs about 70-80 in most places. The ground gets softer & wetter as you approach the river. Access would have to come across private lands.

S	Gwinr		Report 7	– Forested	Stands Compartment: 93 Year of Entry: 2018	
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4112 - Maple, Beech, Cherry Association	Poletimber Well	13.3	81	51-80	Poor quality hardwood poles - fir etc has all but died out. Soils = Shoepac-Ensley complex 0-6% slope - Ensley muck in the drainage featuring ash, but highly fertile Shoepac fine sandy/silt loams elsewhere.
15	4112 - Maple, Beech, Cherry Association	Poletimber Well	12.5	76	81-110	Uneven-aged hardwoods featuring a mix of sugar & red maple with a few balsam fir, hemlock, cherry etc. scattered throughout. Last cut in 2003.
18	6120 - Lowland Cedar	Sawtimber Well	61.7	201	111-140	Very old cedar with open areas due to blow down. High regeneration of cedar in gaps. Stand also includes a small knob of upland hardwoods on the west side and areas with a mix of aspen and other lowland deciduous SPP in the east. The spruce is at least the second generation in this stand.
19	4119 - Mixed Northern Hardwoods	Poletimber Well	13.5	51	81-110	Mixed timber just above the creek bottom - Primarily hardwood poles but with a significant amount of spruce & fir included, and with aspen scattered throughout. The age shown is a rough estimate as some age class diversity is present but not well- developed.
21	4130 - Aspen	Poletimber Well	30.8	27	51-80	Young aspen just reaching merchantable size. Several pockets of lower & wetter ground are present, and balsam poplar/tag alder are prevalent in these areas. Balsam fir and red maple are shown here as minor species, but these are used to represent a mix of both other conifers and other hardwoods that are scattered throughout the stand in varying numbers. Q. Aspen is by far the dominant spp.
22	4130 - Aspen	Poletimber Well	3.7	34	111-140	Well-stocked aspen pole stand with primarily hardwood regeneration in the understory. Some balsam fir & upland brush also present below the aspen, with the fir more prevalent in the slightly wetter areas.
23	4130 - Aspen	Poletimber Well	11.9	24	51-80	Young aspen just reaching merchantabilitymore stems still sub- merchantable that will grow to merchantable size.
24	6139 - Mixed Lowland Forest	Poletimber Well	20.6	87	1-50	Age shown is for the dominant trees but due to the semi-open nature of the slow-growing timber, age-class diversity is almost certainly present. The balsam fir appears to be a second- generation cohort. Overall the site is features wet and soft ground, making operability questionable. At this time not enough volume is present to consider commercial cutting.
25	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	31.7	72	51-80	Variable terrain but mostly lowland, with some age class diversity developing. A few of the larger cedar are older than the age given but are probably remnants of the previous stand. The understory shows evidence of deer browsing.
26	4112 - Maple, Beech, Cherry Association	Poletimber Well	5.7	61	51-80	Red maple /paper birch poles. BA is right at 70 sq.ft./acre.
28	42330 - Upland Fir	Poletimber Well	7.7	72	81-110	Primarily upland fir with spruce and red maple mixed in. Cedar and spruce dominant on the lowland inclusions.

S t	Gwinr	Gwinn Mgt. Unit				Stands	Compartment: 93 Year of Entry: 2018	DNR DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	C	General Comments:	He MICHIGAN
29	6120 - Lowland Cedar	Poletimber Well	91.7	141	51-80	approximate age of the sec also includes several poc dominant, and in some are lowland brush (primarily throughout as natural distu	DBH. The balsam fir pole on in this stand, and mate cond generation of cedar kets where lowland hard as the understory consis v tag alder.) Stand densit	s appear to ches the The stand voods are is mainly of y varies
30	4110 - Sugar Maple Association	Poletimber Medium	12.6	101	1-50	Understocked map	e with a low pocket of sp	ruce
35	4112 - Maple, Beech, Cherry Association	Sawtimber Well	11.3	101	81-110	More red maple than sug	ar maple. Balsam fir rege	n present
36	4112 - Maple, Beech, Cherry Association	Poletimber Well	3.4	76	81-110	Ridge of upland timber ne	ar the creek. Access is p	roblematic.
38	4130 - Aspen	Poletimber Well	39.5	44	81-110	Well stocked	aspen with fir in parts.	
39	6120 - Lowland Cedar	Poletimber Well	53.2	127	81-110	Mostly cedar with areas of mixed timber. Some larger diameter cedar and a few hemlock are present. The ground is soft but better than most areas in this compartment; some BMP issues still exist but this stand appears to be manageable. Good winter deer cover.		is soft but 3MP issues
40	6112 - Lowland Aspen	Sapling Well	7.2	15	Immature	Well-stocked young aspen	with scattered residuals f stand.	rom the last
41	4112 - Maple, Beech, Cherry Association	Poletimber Medium	10.5	44	81-110	Cut hard in the early 70's - a few larger trees remain but mos this stand is fairly small poles 1-3 sticks and the quality is generally low to medium. BA is about 50-70 in most places Access is a major issue, and deer browsing has limited the amount of quality regeneration under the poles.		quality is st places. mited the
42	4130 - Aspen	Sapling Well	10.2	15	Immature	1 to 3" quaking aspen full ເ	y stocked. Pockets of rec inderstory.	I maple in
43	4110 - Sugar Maple Association	Poletimber Well	70.6	77	81-110	Good quality logs	s & poles - last cut in 200	3.
45	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	70.0	77	51-80	Wet ground supporting a mi Stand density and compo place with many areas und slow-growing and this stan areas due to soft grou	sition vary quite a bit from erstocked. Overall the time	n place to ber is fairly ble in many
46	4110 - Sugar Maple Association	Poletimber Well	27.4	77	81-110	Good qual	ity - last cut in 2000.	
47	4130 - Aspen	Sapling Well	28.0	15	Immature	Young aspen, fully stocked few sc	I. Maple in the understory attered conifers.	with just a

S t	Gwinr	Gwinn Mgt. Unit			– Forested	Stands Compartment: 93 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	6120 - Lowland Cedar	Poletimber Well	300.5	107	81-110	Mostly cedar poles with scattered lowland hardwoods. It looks like the first cohort of spruce & fir have died out, and scattered birch poles are on their way, too. Everything appears to be rather slow-growing, though the site indices do appear to be quite variable. Stand density & composition also tend to differ from place to place, with lowland brush/submerchantable ash dominating some areas.
50	4110 - Sugar Maple Association	Sawtimber Well	47.6	121	81-110	Last cut in 2003-BA presently averages about 103 sq. ft./ acre. Size and density of understory is variable. A few conifers were also present.
51	4130 - Aspen	Sapling Well	6.3	15	Immature	Young aspen - fully stocked stand.
53	4110 - Sugar Maple Association	Poletimber Well	46.2	71	51-80	2016 - Mostly Sugar maple/basswood but turning into sugar/red maple mix as it drops closer to the lowland types to the east & south. Regen does have pockets where ironwood is dominant but some maple mixing in as well. Quality is good; BA currently runs about 70-80 on average, heavy to poles but developing better size/age class structure. Last entry was during the last decade.
54	42330 - Upland Fir	Poletimber Poor	6.5	61	1-50	Old grassy opening? Filling in with fir and spruce in the middle, and hardwoods are creeping in on the edges
55	4130 - Aspen	Sapling Well	7.4	5	Immature	young aspen - fully stocked.
57	4112 - Maple, Beech, Cherry Association	Poletimber Well	17.4	81	51-80	Medium to good quality poles on the uplands with wet swales supporting ash etc. Access would be pretty difficult and BMP issues within the stand make harvest even more unlikely. It appears that there were bigger, lower-quality trees present but the largest have aged out and died.
58	6120 - Lowland Cedar	Sawtimber Well	7.4	107	111-140	Low, wet area - mostly cedar but patches of ash, & spruce, plus y. birch scattered throughout. Wet ground and a small stream through the stand make operability questionable, and access would also be an issue.
60	4130 - Aspen	Poletimber Well	15.5	82	81-110	Island of mature aspen surrounded by lowland timber. Access across the wet terrain and several stream crossings make management a very difficult proposition and not feasible at this time. Break-up is underway, and this stand will succeed to a mix of upland timber spp with red maple dominant.
61	4112 - Maple, Beech, Cherry Association	Poletimber Well	16.1	81	51-80	Remote stand featuring poor access. The larger, poor quality trees observed last entry are dying off from storm damage, etc leaving a higher quality pole/small log stand in its place. Evidence of deer browse on the regen. Access could be very expensive.
62	4112 - Maple, Beech, Cherry Association	Poletimber Well	25.9	81	81-110	Mixed hardwoods on soft ground - manageable for a winter cut if you can get there, but access across the lowland types around it is improbable.

S	Gwinr		Report 7	– Forested	Stands Compartment: 93	
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
63	4115 - Y.Birch, Hemlock NH	Poletimber Well	6.9	81	81-110	Hardwood mix (primarily red maple) with some hemlock and a few scattered balsam poplar, w. pine, black ash & fir.
66	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	127.9	72	81-110	Partially cut in some places about 30 years ago. Mixed timber on gently rolling terrain - generally more lowland than upland, but the species composition and stand density are both so variable that defining smaller stands here would be difficult. Balsam fir dominates the understory. Scattered ash present in the wettest areas but it's mostly slow-growing and unmerchantable.
69	6123 - Lowland Fir	Sapling Poor	35.8	24	Immature	Transitional site on gently rolling terrain. The balsam is pretty dense in many areas with others, especially red maple, in patches. A 3-acre retention patch was left when the stand was cut and serves as wildlife habitat while this stand is growing.
70	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	91.3	87	51-80	Mostly low wet ground with pockets of slightly higher & dryer. BMP issues and poor access are problematic. Stand density is extremely variable. Scattered hemlock, spruce and cedar in small pockets throughout the stand.
72	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.4	71	81-110	Decent quality. Requires winter access across private lands.
75	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	70.3	87	51-80	Primarily a mix of slow-growing cedar, red maple and ash. Some small areas of upland containing cedar and hemlock plus hardwoods. Stand density is extremely variable but generally averages around 50-60 sq.ft./acre; site indices are also variable.
76	4112 - Maple, Beech, Cherry Association	Poletimber Well	22.9	71	111-140	Decent quality - winter only access
78	4112 - Maple, Beech, Cherry Association	Poletimber Well	68.0	81	51-80	Mixed hardwoods - last cut in 2012. BA is currently around 60- 70 in most places.
79	4112 - Maple, Beech, Cherry Association	Poletimber Well	16.7	81	81-110	Good quality pole stand starting to show a few more logs.
81	4112 - Maple, Beech, Cherry Association	Poletimber Well	17.3	77	81-110	Upland mix of red & sugar maple with scattered hemlock and a few paper birch. Some age class diversity is present but it appears that past history has this stand at about the same age as other hardwood stands in the vicinity.
82	6120 - Lowland Cedar	Poletimber Well	4.4	87	51-80	Mix of lowland conifer and lowland hardwood, heavy to cedar. Whitefish river buffer.
83	6120 - Lowland Cedar	Poletimber Well	4.1	87	51-80	Mix of lowland conifer and lowland hardwood, heavy to cedar. Drainage channel through the stand.
87	4110 - Sugar Maple Association	Poletimber Well	13.9	101	81-110	Narrow stand between the river and the highway. Timber quality is not impressive - many den trees, etc. Best value at this time is to serve as a river buffer, but it might be ready to thin next entry.

S t	Gwinn Mgt. Unit			Report 7	– Forested	Stands Compartment: 93 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
88	4110 - Sugar Maple Association	Poletimber Well	6.9	81	81-110	Medium-to-low-quality hardwoods, but the site can probably produce better with proper management. BA is around 80-90, so still not quite ready for a thinning.
90	4110 - Sugar Maple Association	Poletimber Well	16.9	111	81-110	Borders old campground. Decent hardwood site
91	42330 - Upland Fir	Poletimber Well	23.4	41	51-80	borders old campground and creek. Thick balsam fir throughout
94	4112 - Maple, Beech, Cherry Association	Poletimber Well	7.5	77	81-110	Upland hardwood - mix of red & sugar maples with a few other spp scattered throughout. BA is presently averagesabout 80- 100 sq.ft./acre, with a few spots running higher. Still more or less even-aged but age-class diversity is developing.
96	6120 - Lowland Cedar	Poletimber Well	2.2	87	81-110	Strip of cedar along the creek bottom - limited access as it is bounded on the south by private lands - maintain for wildlife cover.

Gwinn Mgt. Unit

Compartment: 93 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
20	622 - Lowland Shrub	12.3	No	Lowlands along the creek - varies from stunted timber and/or lowland brush spp to open marshland. Actual water levels vary seasonally but the area is generally inoperable. Several small knobs/ridges of merchantable timber are included - these are virtually unreachable.
37	629 - Mixed non-forested wetland	13.7	No	Backflooded area - many dead & dying trees but scattered survivors on higher knobs are hanging on for now. More are alive near the west edge but the mortality is continuing to spread.
48	6220 - Alder/willow	20.2	No	Lowland brush, mostly alder along creek. Some areas containing mostly grass.
52	500 - Water	7.1	No	W. Branch Whitefish River
59	500 - Water	4.5	No	WHITEFISH RIVER
64	122 - Road/Parking Lot	6.5	No	US-41 ROW
68	3102 - Grass	1.5	No	Small opening with scattered trees along the edges. Transitional site - dryer in the middle and wetter along western perimeter.
73	6229 - Mixed lowland shrub	44.0	No	Mix of lowland brush spp. and scattered trees in the bottomland along Werner Creek.
85	6220 - Alder/willow	7.3	No	Lowland brush along the Whitefish River, with a few clumps of cedar along the banks.
92	122 - Road/Parking Lot	2.4	No	US-41 ROW
93	500 - Water	1.3	No	West Branch Whitefish River
95	500 - Water	5.3	No	Beaver pond on feeder stream to Werner Creek. Water level varies seasonally.