DNR MICHIGAN

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 243
Entry Year 2016
Acreage: 1,241

County Marquette

Management Area: Chain Lakes Moraine

Revision Date: 08/08/2014

Stand Examiner: Dean Wilson

Legal Description:

T45N-R29W, Sections 27 & 34.

Identified Planning Goals:

Maintain or increase the component of oak, birch and aspen within the compartment. Harvest older stands to encourage regeneration of both deciduous and coniferous species.

Soil and topography:

Topography ranges from level creek bottoms, swamp conifer, tag alder and bog or marshlands to rolling or only slightly hilly upland terrain.

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

This compartment is essentially surrounded by State land on all sides and borders Dickenson County on the south end. It does have some small parcels of non-industrial private ownership in the surrounding area. Development (other than the ELF communication system cleared right of way) is virtually nonexistent. A few seasonal dwelling/hunting camps occupy the private parcels. Production of forest products along with low key recreational activities such as hunting, trapping and snowmobiling make up the land uses here.

Unique Natural Features:

Hermit Lake and the Schwartz creek and tributaries.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

Contains tributaries of Chain of Lakes, Martell's Lake. Also contains Hermit Lake. BMP's would apply in these areas.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of coarse-textured till and medium and coarse-textured tills. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone. A gravel pit is located two miles away, but potential should be good. The abandoned Republic iron mine is located ten miles to the north. Section 27 was previously leased and Section 34 is leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

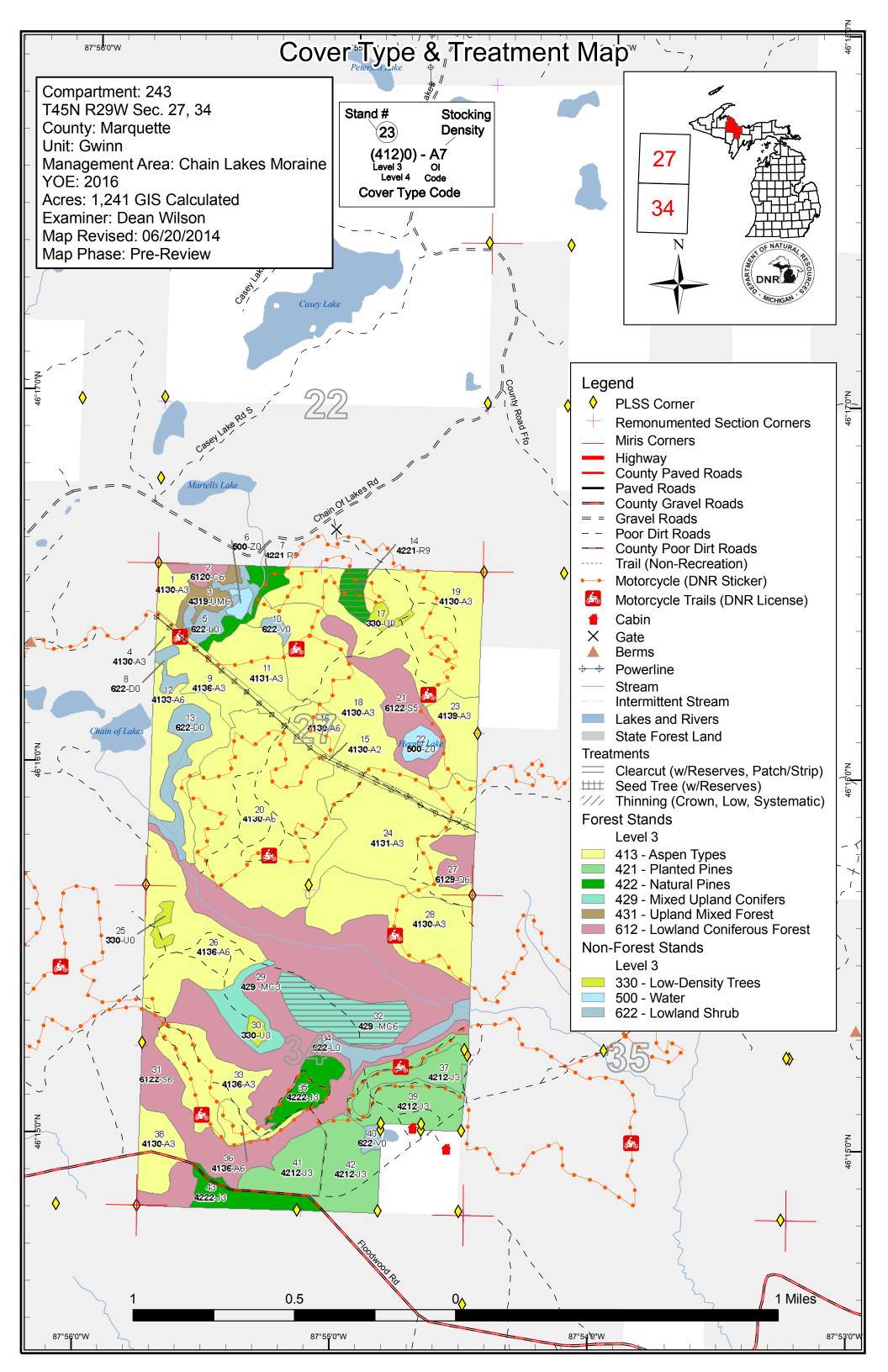
The Floodwood Road (county road FFO) provides primary access for most of the compartment from the South. The Porterfield Lake Road also provides access from the North. Various other two track roads provide access to the compartment interior.

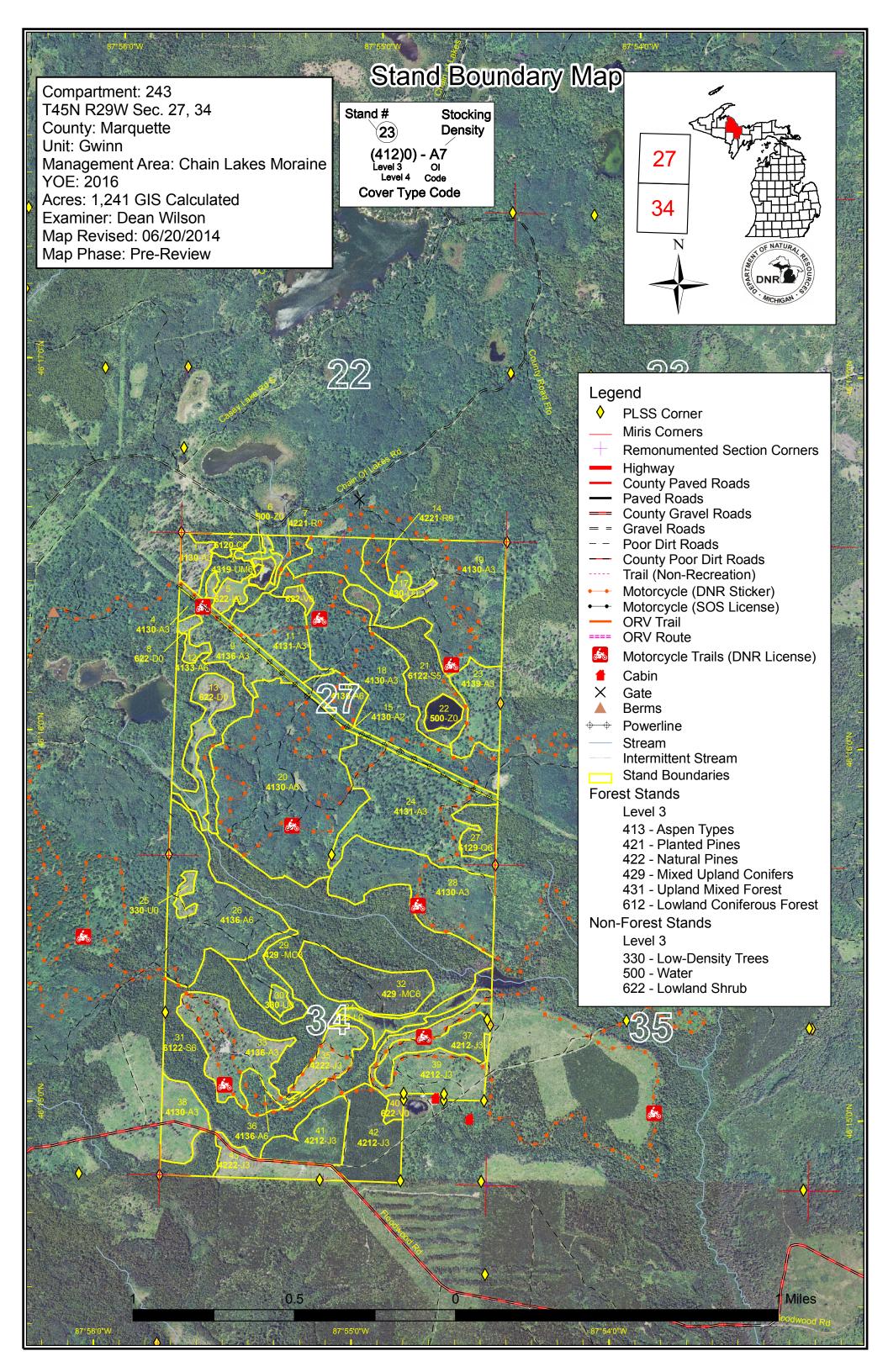
Survey Needs:

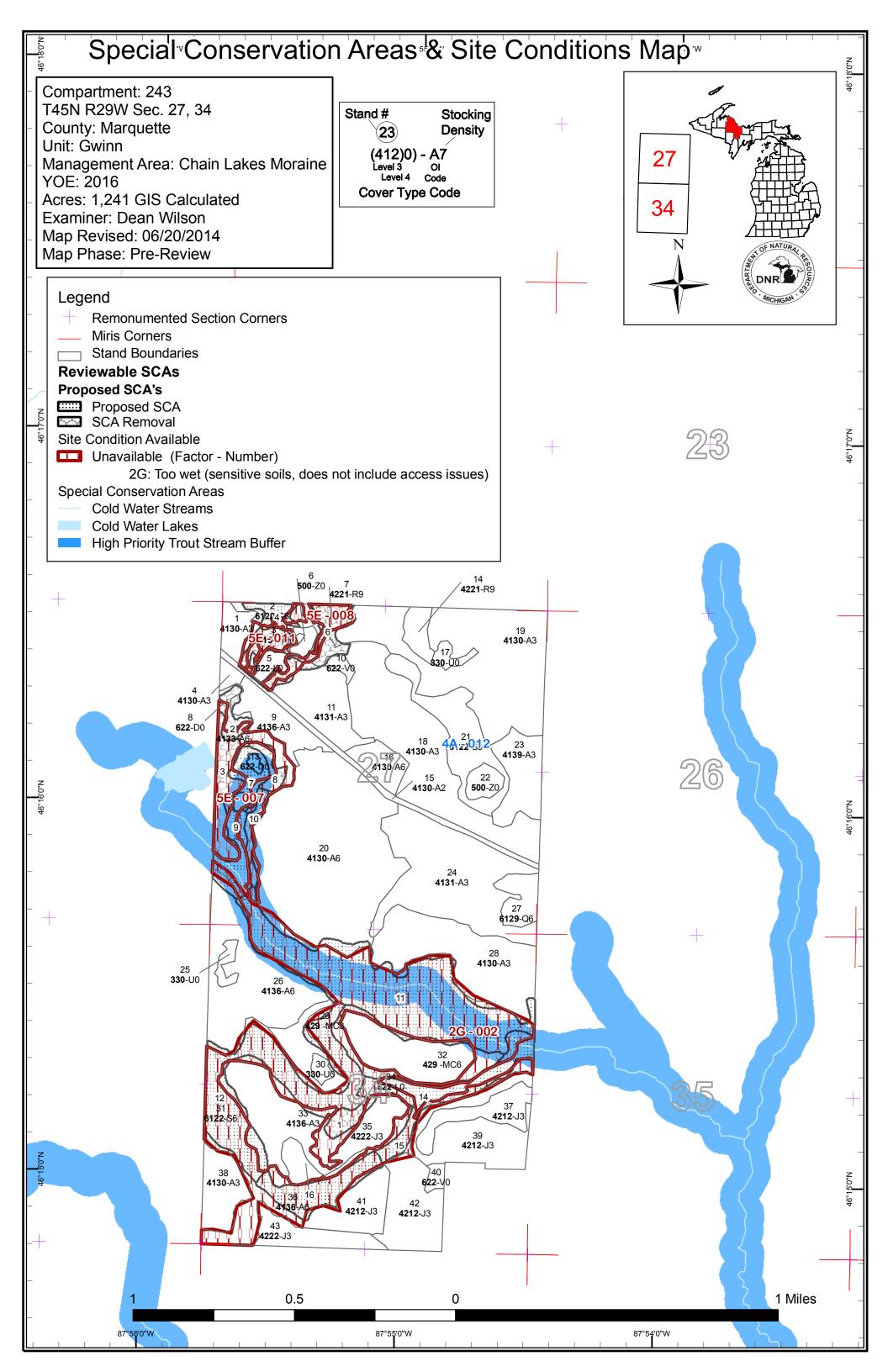
No survey needs for this year of entry.

Recreational Facilities and Opportunities:

The Porterfield Lake Motorcycle ORV trail provides recreational opportunity to ORV users. Other recreational activities include: fishing, hunting, biking, berry picking, bird watching and trapping.







Fire Protection:

This compartment is included within the "581 Zone Dispatch" area which provides for a pre-planned dispatch of specified fire equipment from within the Gwinn and Crystal Falls Management Units. This dispatch is dependent on the severity of forecast burning conditions for the specified day. Areas of jack pine and red pine cover types with the encroachment of recreational seasonal dwellings have warranted this pre-planning. Mutual aide agreements with local township volunteer fire departments also provide critical fire suppression response, especially in the area of structure fire and/or protection, and evacuations.

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

Gwinn Mgt. Unit

Dean Wilson : Examiner

Compartment 243 Year of Entry 2016



	Age Class															
		80	0,00	Se S	, g	Day .	ig /	00 / S	18°	8 8 8	88	00,00	va vo	70 [×] / 30°	A A	, so l
Aspen	217	141	299	8	0	0	0	0	34	0	0	0	0	0	699	
Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Cedar	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	
Jack Pine	66	38	30	0	0	0	0	0	0	0	0	0	0	0	134	
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Lowland Conifers	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11	
Lowland Shrub	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
Lowland Spruce/Fir	0	0	0	0	0	0	0	31	0	219	0	0	0	0	250	
Red Pine	0	0	0	0	0	0	0	0	9	7	0	0	0	0	17	
Treed Bog	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
Upland Conifers	0	0	15	0	0	0	33	0	0	0	0	0	0	0	47	
Upland Mixed Forest	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
Total	351	179	344	8	0	11	33	31	53	231	0	0	0	0	1241	



Report 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit

Compartment 243 Year of Entry 2016 **Total Compartment Acres: 1,241**

Acres by Treatment Type

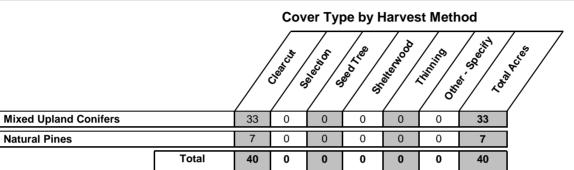
Commercial Harvest - 40

Tree Planting - 7

Other - 0

Habitat Cut - 0

Opening Maintenance - 0



Compartment: 243 Gwinn Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2016 with No Limiting Factor s t а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment Cover Type** Approval n Method Name **Density** Range Objective **Status** d Age Type 42211 - Natural 7.3 High Clearcut 4211 - Planted Red Cmpt. Review 32243014-Cut 96 111-140 Harvest 14 Red Pine. Mixed **Density Log** Pine Proposal Deciduous Prescription Clear cut followed by trenching and hand planting red pine. Leave all oak. Specs: Herbicide as necessary. Other Comments: Next Check regeneration per work instructions. Steps: Proposed 10/01/2015 Start Date: 32 32243032-Cut 32.7 429 - Mixed Upland High 69 81-110 Harvest Clearcut 42340 - Upland Cmpt. Review Conifers Density Spruce/Fir Proposal Pole Prescription Clear cut this stand. Create several exclusion pockets/patches of spruce, fir, red and white pine to leave. Specs: <u>Other</u> If possible consideration should be given to planting this stand with jack or red pine. If oak is found it should be retained.

Comments:

Next Check regeneration per work instructions.

Steps:

Proposed

Start Date: 10/01/2015

Total Treatment

Acreage Proposed: 40.1

Gwinn Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 243 a Site Condition s Year of Entry 2016 t а **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Method Objective Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: Other Comment: **Next** Steps: <u>Proposed</u> #Type!

Total Treatment

Start Date: # Limiting Factor

Acreage Proposed: 0.0

Gwinn Mgt. Unit

Dean Wilson: Examiner

Compartment 243 Year of Entry 2016

Avail	ability for I	Management					
Total	Acres	Acres	[Domina	nt Site	e Cond	ditions
Acres	Available	Not Available		No	5E	4A	2G
698	660	38	Aspen	660	34		4
5	5		Cedar	5			
134	132	2	Jack Pine	132			2
11	11		Lowland Conifers	11			
249	35	213	Lowland Spruce/Fir	4		31	213
17	7	9	Red Pine	7	9		
47	47	1	Upland Conifers	47			1
9		9	Upland Mixed Forest		9		
1,170	897	273	Total Forested Acres	867	53	31	220
	77%	23%	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.

•	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Not Available	2G: Too wet (sensitive soils, does not include access issues)	221				
C	Comments:						
007	Not Available	5E: Long Term Retention	34	3J: Water quality / BMPs (stream, river, or lake)	2F: Too steep		
	Comments: Area was left as a re	etention zone when adjacent s	stand wa	s harvested. Some areas r	nay be accessible, but otl	nerwise, provides riparian լ	protection.
008	Not Available	5E: Long Term Retention	9	3J: Water quality / BMPs (stream, river, or lake)	3D: Recreational / Scenic values		
C	Comments: Contains Porterfield djacent stand was	Motorcycle Trail, but also ver harvested.	y scenic	and , in places, very steep	area along Martell's drain	age/pond. Was left as ret	ention area when

Report 5 – Site Conditions

Gwinn Mgt. Unit
Dean Wilson: Examiner

Compartment 243 Year of Entry 2016

011	Not Available	5E: Long Term Retention	10	3J: Water quality / BMPs (stream, river, or lake)	3D: Recreational / Scenic values	
_						

Comments:

Scenic area adjacent to Martell's Lake tributary/pond. Small portion of upland areas could possibly be treated as some point, but currently inadequate volume overall. Steeper portion drops into cedar type and scenic pine wraps around pond/drainage.

012 Available 4A: No merchantable 31 products (see product standards)

Comments:

A lot of this is treed bog, with some higher spruce/cedar. A buffer area should be maintained around Hermit Lake due to BMP issues.

Gwinn Mgt. Unit Compartment: 243 Year of Entry: 2016



Report 6 - 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 Category	Detail Type	Recommendation	n Acres
15	Spring-Seeps, Riparian Areas	Riparian Area	SCA	4.5
Comments				
	theasterly through stand. This is a narrocut in 1976, permit #8-75A, the "Uncle			t of a
4	Spring-Seeps, Riparian Areas	Riparian Area	SCA	5.4
Comments				
Riparian protection.				
7	Spring-Seeps, Riparian Areas	Riparian Area	SCA	7.1
Comments				
Small bog surrounding a	a tiny beaver pond.			
9	Spring-Seeps, Riparian Areas	Riparian Area	SCA	12.7
Comments				
Riparian zone on Swartz	z creek.			
16	Spring-Seeps, Riparian Areas	Riparian Area	SCA	17.6
Comments				
	theasterly in stand. Beaver had this dan e in May 2004. Per our mini-review hele			nd beaver are
14	Spring-Seeps, Riparian Areas	Riparian Area	SCA	21.6
Comments				
Potential old growth sta	and The course and of this standards floor	de al level e a como for the a 4000 . It is no		
	nd. The west end of this stand was flood of the stand have begun seeding in with			ormal creek
channel and the edges				ormal creek 56.8
channel and the edges	of the stand have begun seeding in with	n spruce. The center is marsh/alder	creek bottom. The	
channel and the edges of the edges of the channel and the edges of the edges of the channel and the edges of the edges o	of the stand have begun seeding in with	n spruce. The center is marsh/alder Riparian Area	SCA	56.8
channel and the edges of the channel and the channel and the edges of the edges of the channel and the edges of the edge	of the stand have begun seeding in with Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de	n spruce. The center is marsh/alder Riparian Area	SCA	56.8
channel and the edges of 12 Comments Per our min-review held thermal cover. Part of S	of the stand have begun seeding in with Spring-Seeps, Riparian Areas on 9/9/04, widlife wanted this stand de Swartz Creek watershed.	Riparian Area signated potential old growth due to	SCA its use as deer yard and t	56.8 he need for
channel and the edges of the comments Per our min-review held thermal cover. Part of S 11	Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de Swartz Creek watershed. Spring-Seeps, Riparian Areas	Riparian Area signated potential old growth due to	SCA its use as deer yard and t	56.8 he need for
channel and the edges of the theorem and the edges of the theorem and the edges of the theorem and the edges of the edges	Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de Swartz Creek watershed. Spring-Seeps, Riparian Areas	Riparian Area signated potential old growth due to	SCA its use as deer yard and t	56.8 he need for
channel and the edges of the comments Per our min-review held thermal cover. Part of S 11 Comments Riparian zone on Swarts	of the stand have begun seeding in with Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de Swartz Creek watershed. Spring-Seeps, Riparian Areas z Creek.	Riparian Area signated potential old growth due to	sca its use as deer yard and t SCA	56.8 he need for 91.5
channel and the edges of 12 Comments Per our min-review held thermal cover. Part of S 11 Comments Riparian zone on Swart:	of the stand have begun seeding in with Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de Swartz Creek watershed. Spring-Seeps, Riparian Areas z Creek. Potential Old Growth	Riparian Area signated potential old growth due to	sca its use as deer yard and t SCA	56.8 he need for 91.5
channel and the edges of the channel and the edges of the comments. Per our min-review held thermal cover. Part of State of Stat	of the stand have begun seeding in with Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de Swartz Creek watershed. Spring-Seeps, Riparian Areas z Creek. Potential Old Growth	Riparian Area signated potential old growth due to	sca its use as deer yard and t SCA	56.8 he need for 91.5
channel and the edges of 12 Comments Per our min-review held thermal cover. Part of S 11 Comments Riparian zone on Swart: 8 Comments Not unique-treatment pr	of the stand have begun seeding in with Spring-Seeps, Riparian Areas I on 9/9/04, widlife wanted this stand de Swartz Creek watershed. Spring-Seeps, Riparian Areas z Creek. Potential Old Growth	Riparian Area signated potential old growth due to	sca its use as deer yard and t SCA SCA SCA SCA SCA Removal	56.8 he need for 91.5

Gwinn Mgt. Unit Compartment: 243 Year of Entry: 2016



Report 6 - 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
1	Potential Old Growth		SCA Removal	5.3
Comments				
	ercially cut in the Fall of 1976 under perm Il evident, and the area is heavy to fir sapl			ay of 2004,
2	Potential Old Growth		SCA Removal	6.0
Comments				
Beaver flooding-not up	nique.			
3	Potential Old Growth		SCA Removal	14.0
Comments				
Not unique-treatment	proposed.			
6	Potential Old Growth		SCA Removal	21.8
Comments				
Not unique-treatment	proposed.			

Gwinn Mgt. Unit Compartment: 243





Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA Archaeological Site		An aquatic or terrestrial area of the State that contains physical risites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settler and British outposts, nineteenth century logging camps, mines at the Great Lakes, there are shipwrecks and other remains documbe identified by Natural heritage data from the State Historic Prethis compartment will be implemented in such a manner as to make sensitive nature of this information, no further detail about log	errestrial areas and Great Lakes nents and burial sites, as well as French and homesteads. Beneath the waters of nenting the maritime trade. Such sites may servation Office. Proposed treatments in aintain the integrity of these sites. Due to				
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spectonditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by				
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduce tocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from the period of the conditions of groundwater 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 designated as trout resources by Fisheries Order 210.					
SCA	Habitat Area	life species, including State Wildlife Areas wland conifer communities, grassland labitat designated for recovery of piping plover areas) in that they are more rendangered species, and are not ation with Federal agencies.					
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 communities are ecologically and socially significant in their effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well				

S t				Report 8	– Forested	Stands Compartment: 243 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Sapling	8.3	3		Harvested in 2011: TS# 106-09-01. Oak, fir, red and white pine, and white birch seed trees retained.
2	6120 - Lowland Cedar	High Density Pole	5.1	93	111-140	Contains drains that flow into lake.
3	4319 - Mixed Upland Forest	High Density Pole	9.5	86	81-110	Remove from old growth and clear cut. Retain 10 each per acre of oak, red and white pine. Exclude the steep slopes down to the bog from the sale.
4	4130 - Aspen	High Density Sapling	3.0	15		Harvested in1999: TS# 110-99-01. Oak, red and white pine retained.
7	42210 - Natural Red Pine	High Density Log	9.4	86	111-140	Remove from old growth and thin red pine and miscellaneous species.
9	4136 - Aspen, Mixed Conifer	High Density Sapling	18.5	5		Harvestered in 2009: TS# 105-06-01. Oak, red and white pine retained.
11	4131 - Aspen, Oak	High Density Sapling	26.6	5		Harvested in 2009: TS# 105-06-01. Oak, red and white pine retained.
12	4133 - Aspen, Mixed Pine	High Density Pole	34.1	86	81-110	Remove from old growth and clear cut retaining 5 to 10 trees per acre each of oak, red and white pine. Retain all the cedar.
14	42211 - Natural Red Pine, Mixed Deciduous	High Density Log	7.3	96	111-140	Clear cut this stand and plant back to red pine. Herbicide as necessary. Retain up to 10 oaks per acre where possible.
15	4130 - Aspen	Medium Density	12.6	8		
16	4130 - Aspen	High Density Pole	10.9	26	1-50	Harvested in 1988: TS# 7-97. Red and white pine retained.
18	4130 - Aspen	High Density Sapling	79.6	17		Harvested in 1997: TS# 3-96. Oak, red and white pine retained.
19	4130 - Aspen	High Density Sapling	92.8	25	1-50	Harvested in 1989: TS# 20-86.
20	4130 - Aspen	High Density Pole	133.8	25	1-50	Harvested in 1989: TS# 7-87. Red and white pine and somme oak were retained.
21	6122 - Black Spruce	Medium Density Pole	30.9	76	51-80	Clear cut the upland perimeter portions and 1/4 to 1/2 acre patches internally where the timber permits. Retain the cedar. More open bog to the north and south.
23	4139 - Aspen, Mixed Deciduous	High Density Sapling	21.6	5		Harvested in 2009: TS# 106-06-01. Oak, red and white pine retained.

S	Gwin	n Mgt. Unit	Report 8	– Forested	Stands Compartment: 243 Year of Entry: 2016	
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	4131 - Aspen, Oak	High Density Sapling	72.7	5		Harvested in 2009: TS# 106-06-01. Oak, red and white pine retained.
26	4136 - Aspen, Mixed Conifer	High Density Pole	61.6	24	1-50	Harvested in 1989: TS# 18-86.
27	6129 - Mixed Coniferous Lowland Forest	High Density Pole	10.8	53	51-80	
28	4130 - Aspen	High Density Sapling	58.3	17		Harvested in 1997: TS# 4-96. Oak, Cherry, red and white pine retained.
29	429 - Mixed Upland Conifers	High Density Sapling	14.6	25	1-50	Harvested in 1989: TS# 18-86.
31	6122 - Black Spruce	High Density Pole	218.8	92	81-110	SCA = Winter thermal cover for deer and wildlife corridor. Last entry wildlife requested to maintain this stand as an SCA.
32	429 - Mixed Upland Conifers	High Density Pole	32.7	69	81-110	Contains some lowland black spruce inclusions.
33	4136 - Aspen, Mixed Conifer	High Density Sapling	37.6	4		Harvested in 2010: TS# 107-06-01. Red and white pine retained.
35	42220 - Natural Jack Pine	High Density Sapling	14.9	4		Harvested in 2010: TS# 107-06-01. Regenerated naturally. Red and white pine retained.
36	4136 - Aspen, Mixed Conifer	High Density Pole	8.0	38	51-80	Harvested in 1976: TS# 8-75A. Spruce, fir, red and white pine retained.
37	42120 - Planted Jack Pine	High Density Sapling	16.5	16		Harvested in 1998: TS# 5-96-01. Trenched and direct seeded in 1998.
38	4130 - Aspen	High Density Sapling	18.6	6		Harvested in 2008: TS# 112-05-01.
39	42120 - Planted Jack Pine	High Density Sapling	34.8	6		Harvested in 2007: TS# 129-06-01. Planted in 2008.
41	42120 - Planted Jack Pine	High Density Sapling	21.7	15		Harvested in 1998: TS# 5-96-01. Planted to red pine in 1999 which mostly failed due to competition with naturally regenerated jack pine.
42	42120 - Planted Jack Pine	High Density Sapling	29.8	24	1-50	Harvested in 1988: TS#7-86-1. Planted in 1990.
43	42220 - Natural Jack Pine	High Density Sapling	16.5	5		Harvested in 2009: TS# 107-06-01. Regenerated naturally.

Compartment: 243 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	622 - Lowland Shrub	10.1	No	Unspecified	
6	50 - Water	3.1	No	Unspecified	
8	6224 - Treed Bog	4.2	No	Unspecified	
10	6225 - Bog	2.5	No	Unspecified	
13	6224 - Treed Bog	18.2	No	Unspecified	
17	3302 - Low Density Conifer Trees	3.8	No	Unspecified	
22	50 - Water	6.3	No	Unspecified	
25	3302 - Low Density Conifer Trees	3.5	Yes	Low	Opening created using herbicides in 1992.
30	3302 - Low Density Conifer Trees	2.7	Yes	Low	Opening created, disked, and seeded in 1992.
34	6223 - Inundated Shrub Swamp	11.8	No	Unspecified	
40	6225 - Bog	2.7	Unspecified	Unspecified	