

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32283 Entry Year 2016

Acreage: 1288.49130000

County Marquette

Management Area: Sand River Lake Plain

Revision Date: 2014-09-18

Stand Examiner: Jennifer Burnham

Legal Description:

T47N, R 23W, Sections 10, 15

Identified Planning Goals:

This compartment is part of the Sand River Lake Plain Management Area. The objectives for the area include: timber harvesting, maintenance or enhancement of wildlife habitat, protection of areas with unique characteristics, and opportunities for forest recreation.

Soil and topography:

Glacial drainage ways, till plains, and ground moraines from topography that is nearly level to moderately steep. Soils are very poorly drained nonacid organic soils, poorly drained loamy soils, well drained loams, and poorly drained loams.

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

The compartment is part of a large block of state ownership. There are a few small, non-industrial ownerships in northern part of the compartment.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

None known.

Watershed and Fisheries Considerations:

Fisheries Values: Minimal to None

Fisheries Concerns: Most of the northern tier of this compartment contains wet areas which drain to Lake LeVassuer. The wet areas do not provide any benefits as a fishery, but still contribute to the natural processes in ground and surface water movement. Any prescribed treatments should use standard BMP's near any wetland areas.

Wildlife Habitat Considerations:

Compartment 283 is found within the Sand River Lake Plain Management Area; on a Till-floored Lake Plain in northeastern Marquette County. The dominant Natural Communities are mesic northern forest and poor conifer swamps. Major forest cover types include Northern Hardwoods, Aspen, and Hemlock. Wildlife species considerations in the Sand River Lake Plain Man include managing to provide coniferous thermal cover for deer wintering complexes. The emphasis should be on hemlock in this management area as it represents approximately 20% of the WUP hemlock resource. Along with maintaining wildlife movement corridors along vernal and permanent riparian watercourses is also very important. Wildlife management issues in the management area are: habitat fragmentation; course woody debris; retain or develop large living and dead standing trees (for cavities); mesic conifer; mature forest; within-stand diversity; and deer wintering complexes.

The following have been identified as featured species for the Sand River Lake Plain Management Area: American marten, blackburnian warbler, red-shouldered hawk, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Sections 10 - 15, T47N-R23W, Marguette County

Surface sediments consist of thin to discontinuous lacustrine (lake) sand and gravel over bedrock. The glacial drift thickness varies between 10 and 50 feet. The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville was previously used as a building stone. A gravel pit is located in Section 14, and potential appears to be good. This compartment has never been leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Acess to the compartment is good but the access to the interior of the compartment is limited.

Survey Needs:

Potential for survey needs in the southeast corner on the compartment for timber sales.

Recreational Facilities and Opportunities:

The Marquette-Manistique Trail runs through the north section of the compartment. It is a gravel ORV and Snowmobile trail.

Fire Protection:

Compartment is mainly lowland timber types that have low fire potential.

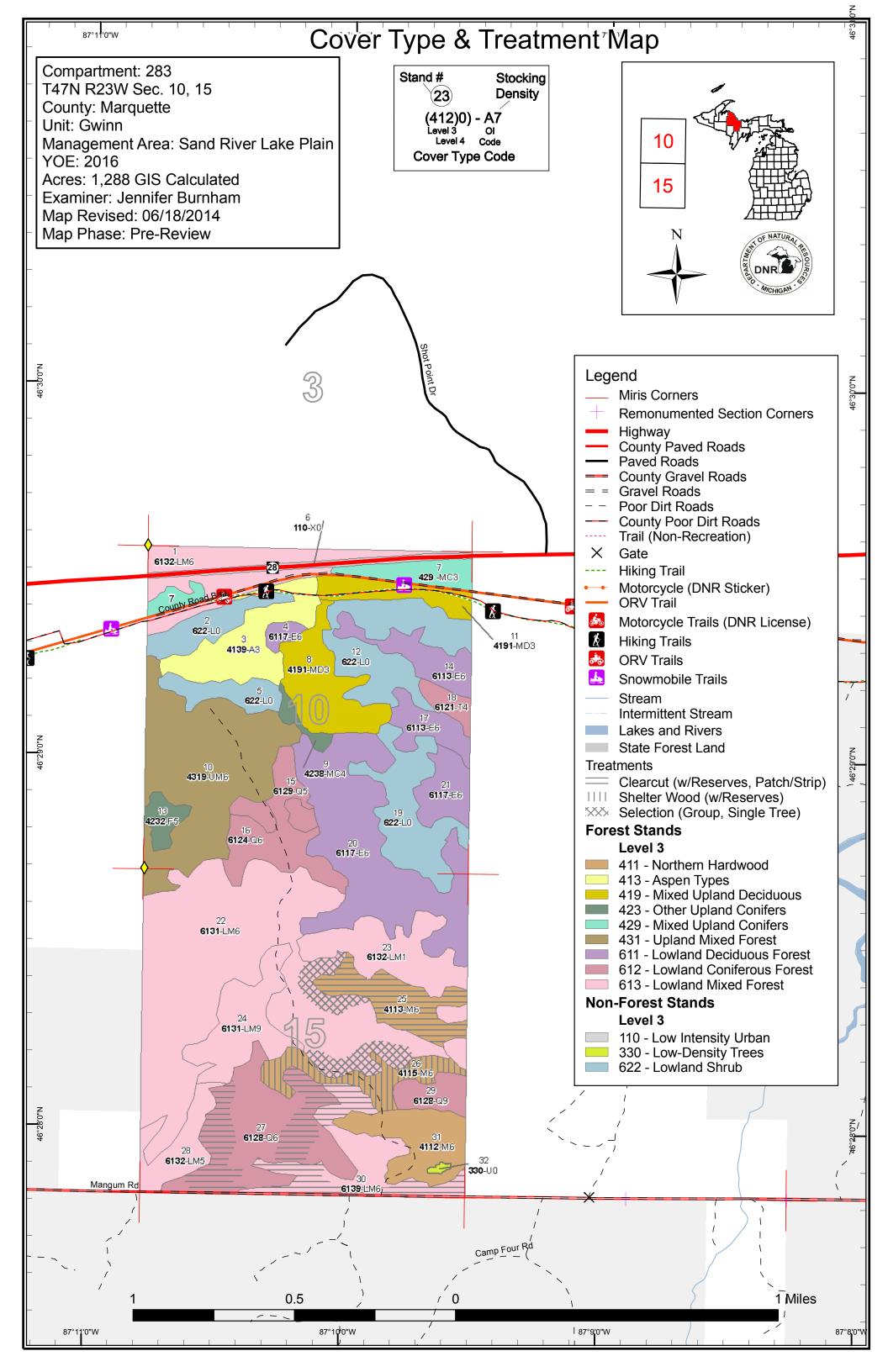
Additional Compartment Information:

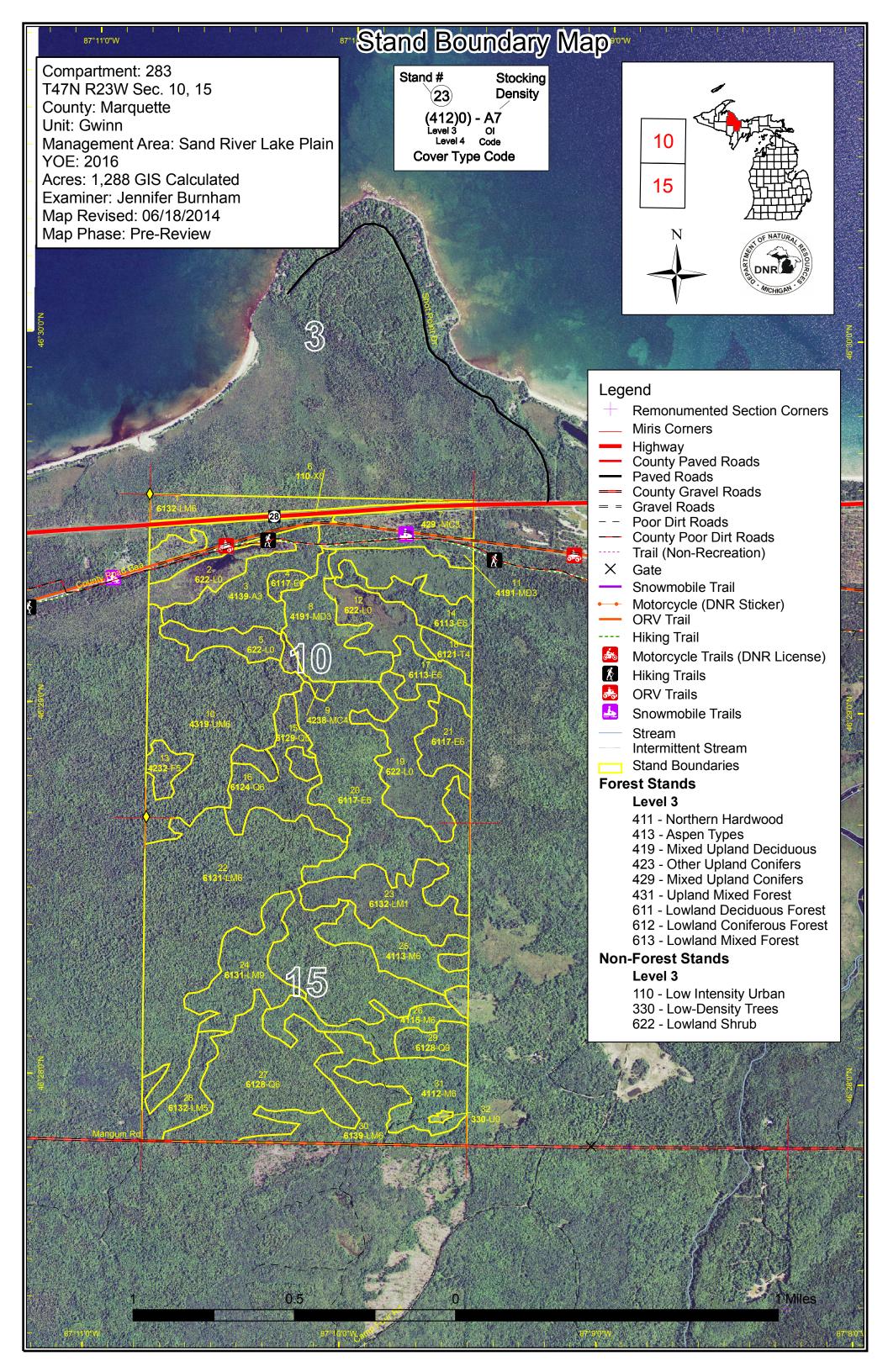
The following reports from the Inventory are attached:

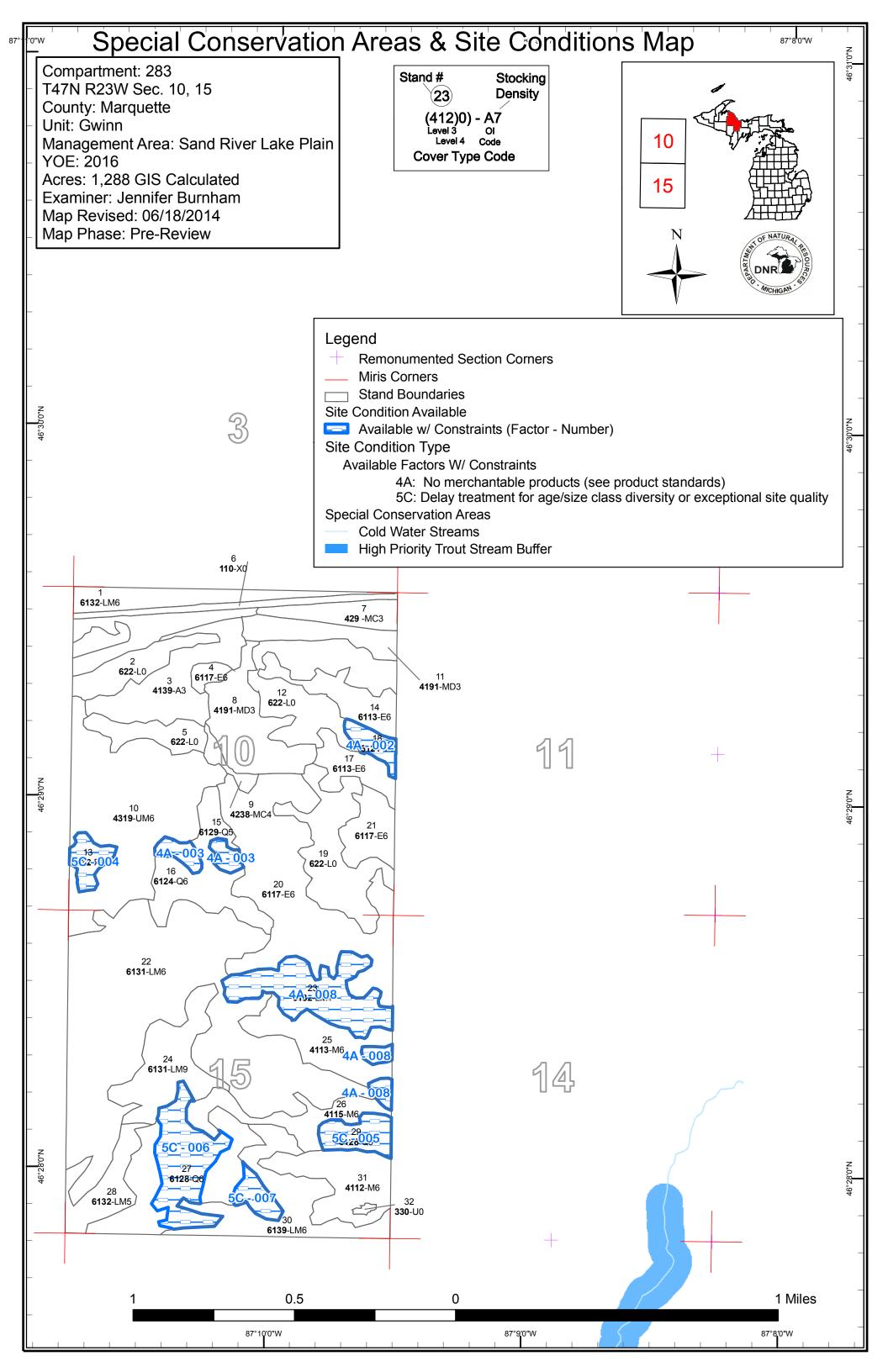
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment is mainly lowland timber types that have low fire potential.

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

Jennifer Burnham : Examiner

Compartment 283 Year of Entry 2016



Age Class																
		60	70,79	Park /	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	A LOS	So So So	, Q	'a 'a'	\$ 8 P	85	00,00	72,70	,	S /	, pr
Aspen	0	0	0	44	0	0	0	0	0	0	0	0	0	0	44	
Low-Density Trees	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Lowland Conifers	0	0	0	0	0	0	0	39	0	109	0	0	0	0	148	
Lowland Deciduous	0	0	0	0	0	0	134	45	0	0	0	0	0	0	179	
Lowland Mixed Forest	0	0	0	0	0	0	0	141	0	301	0	0	0	0	443	
Lowland Shrub	139	0	0	0	0	0	0	0	0	0	0	0	0	0	139	
Mixed Upland Deciduous	0	63	0	0	0	0	0	0	0	0	0	0	0	0	63	
Northern Hardwood	0	0	0	0	0	0	0	98	0	0	0	0	0	0	98	
Tamarack	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	
Upland Conifers	24	0	0	0	0	0	0	5	0	0	0	0	0	0	29	
Upland Mixed Forest	0	0	0	0	0	0	0	0	114	0	0	0	0	0	114	
Upland Spruce/Fir	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
Total	177	63	0	44	0	0	134	338	122	411	0	0	0	0	1288	



Report 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit

Compartment 283 Year of Entry 2016 **Total Compartment Acres: 1,288**

Acres by Treatment Type

Commercial Harvest - 156 Tree Planting - 0 Other - 0

Habitat Cut - 0

Opening Maintenance - 0

		Cover Type by Harvest Method											
		/ (Control of	Section of	LOS S	Na Contraction of the Contractio	Cining Off		, keres				
Lowland Coniferous Forest		38	0	0	0	0	0	38					
Lowland Mixed Forest		32	25	0	0	0	0	56					
Northern Hardwood		35 0 0 27 0 0 61											
	Total	104	25	0	27	0	0	156					

Gwinn Mgt. Unit S

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 283 Year of Entry 2016

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	32283022- Cut_small	13.8	6131 - Hemlock, White Pine, Maple, Birch	High Density Pole	96	81-110	Harvest	Group Selection	613 - Lowland Mixed Forest	Cmpt. Review Proposal

Prescription Final harvest areas along stand 26 and 25 boundary to promote diversity and possible food for deer yard area. Do not cut cedar or hemlock

Specs:

Other Winter harvest, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

<u>Next</u> Regen counts - natural regen, spp will be what is present now.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

22 32283022-6131 - Hemlock, High 81-110 Harvest **Group Selection** 613 - Lowland Cmpt. Review White Pine, Maple, Mixed Forest Proposal Density Cut_small_1 Birch

Prescription Final harvest areas along stand 26 boundary to promote diversity and possible food for deer yard area. Do not cut cedar or hemlock

Specs:

<u>Other</u> Winter harvest, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

Regen counts - natural regen, spp will be what is present now. <u>Next</u>

Steps:

Proposed

Start Date: 10/01/2015

32283025-Cut 34.5 4113 - R.Maple. High 72 81-110 Harvest Clearcut with 4113 - R.Maple. Cmpt. Review 25 Conifer Density Reserves Conifer Proposal

Pole

Prescription Remove all species except for white pine, hemlock and cedar. Retain big tooth aspen in retention pockets. Harvest in the winter on frozen ground. Specs:

Other_ Winter Harvest. There is more blow down at the north end of the stand, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

Next Monitor for natural regeneration - will get same species present as what is there now.

Steps:

Proposed

10/01/2015 Start Date:

32283026-Cut 26.6 4115 - Y.Birch, 74 51-80 Shelter Wood 4115 - Y.Birch, Cmpt. Review 26 High Harvest Hemlock NH Density with Reserves Hemlock NH Proposal Pole

Prescription Final harvest leaving hemlock, cedar and yellow birch. Mostly high ground but some areas of wet; stand should be harvested in frozen conditions. Retain big tooth aspen in regen pockets.

Specs:

Other No chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

Natural regeneration- same species will regenerate as in the stand now.

Next Steps:

Proposed

Start Date: 10/01/2015 Gwinn Mgt. Unit

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 283 Year of Entry 2016

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
27	32283027- Cut_small_1	21.0	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	96	81-110	Harvest	Patch or Strip Clearcut	613 - Lowland Mixed Forest	Cmpt. Review Proposal

Prescription Final harvest removing all spp. Do not cut cedar or hemlock. There will be areas where the BA is high and may need to be excluded from the

Specs: treatment.

Other Winter harvest, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

<u>Next</u> Regen check. Natural regeneration of the spp that are present now.

Steps:

S

<u>Proposed</u>

Start Date: 10/01/2015

27 32283027-6128 - Lowland High 81-110 Harvest Patch or Strip 613 - Lowland Cmpt. Review Mixed Forest Proposal Coniferous, Mixed Density Clearcut Cut_small_2 Deciduous

Prescription Final harvest removing all spp. Do not cut cedar or hemlock. There will be areas where the BA is high and may need to be excluded from the

treatment. Specs:

<u>Other</u> Winter harvest, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Regen check. Natural regeneration of the spp that are present now.

Comments:

<u>Next</u> Steps:

Proposed

10/01/2015

Start Date: 30

32283030-22.7 6139 - Mixed High 74 81-110 Harvest Patch or Strip 613 - Lowland Cmpt. Review Cut_small Lowland Forest Density Clearcut Mixed Forest Proposal Pole

Prescription. Final Harvest removing all spp except hemlock and cedar. Some areas will have a higher BA of these spp and should not be part of the

Specs: treatment.

Other_ Winter harvest, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

Next Regen check - natural regen of spp that are currently present.

Steps:

Proposed 10/01/2015 Start Date:

30 32283030-8.9 6139 - Mixed High 74 81-110 Patch or Strip 613 - Lowland Cmpt. Review Harvest Cut_small_1 Lowland Forest Density Clearcut Mixed Forest Proposal

Prescription Final Harvest removing all spp except hemlock and cedar. Some areas will have a higher BA of these spp and should not be part of the

Pole

Specs: treatment.

Other Winter harvest, no chipping due to SGF- Am. Martin, Red Shouldered hawk.

Comments:

Regen check - natural regen of spp that are currently present.

Next Steps:

Proposed Start Date: 10/01/2015

Total Treatment

155.8 **Acreage Proposed:**

Gwinn Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 283 a Site Condition s Year of Entry 2016 t **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>

Total Treatment

Start Date: # Limiting Factor

Acreage Proposed: 0.0

#Type!

Report 5 - Site Conditions

Gwinn Mgt. Unit

Jennifer Burnham: Examiner

164

9

1,135

164

9

1,135

100%

Compartment 283 Year of Entry 2016

Availability for Management Dominant Site Conditions Total Acres Acres 5C 4A Acres Available Not Available No 44 Aspen 148 59 148 **Lowland Conifers** 80 10 179 179 **Lowland Deciduous** 179 393 393 **Lowland Mixed Forest** 393 63 63 63 **Mixed Upland Deciduous** 98 98 Northern Hardwood 98 8 8 Tamarack 8 29 29 **Upland Conifers** 29

Upland Mixed Forest

Upland Spruce/Fir

Total Forested Acres

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.

18

164

1,049

9

68

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Available	4A: No merchantable products (see product standards)	8				
С	omments:						
hi	igh water table- sta	and will not become merchant	able				
003	Available	4A: No merchantable products (see product standards)	10				
С	omments:						
Н	igh water table will	keep the stand from not bein	ng mercha	antable.			

Report 5 – Site Conditions

Gwinn Mgt. Unit
Jennifer Burnham: Examiner

Compartment 283 Year of Entry 2016

004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	2E: Road needed
	omments: eat when surrou	nding stand is harvested		
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	
	omments: ait to see how ot	her treatments work in the area b	oefore tr	eating this stand
006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	36	
	omments: ait to see how s	urrounding treatments regenerate	е	
007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	
	omments: ait to see how s	urrounding treatments regenerate	е	
008	Available	4A: No merchantable products (see product standards)	50	
	omments: gh water table -	stand will not become merchanta	ıble	

Gwinn Mgt. Unit Compartment: 283

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
Comments				

Gwinn Mgt. Unit Compartment: 283





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 r sites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settlen 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 mathe 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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.								

S t	Gwini	Gwinn Mgt. Unit				Stands Compartment: 283 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6132 - Mixed Lowland Forest with Cedar	High Density Pole	50.2	74	1-50	
3	4139 - Aspen, Mixed Deciduous	High Density Sapling	43.9	33		Stand cut in 1981 under final harvest. Good beaver activity in the area some of the edges will die off because of the water table. Stand holds water for a long time but is mainly upland.
4	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	4.8	70	51-80	Cut all the way around, some high ground and will eventually convert to cedar if treatment doesn't occur. Fir is starting to die out.
7	429 - Mixed Upland Conifers	High Density Sapling	23.7	5	1-50	Stand cut in 2009
8	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	42.0	15		Stand was harvested in 1999- good regeneration. There are some areas that are a bit lower and will hold water longer, this is were the confier is growing well.
9	42380 - Non Pine Upland Conifer, Mixed Deciduous	Low Density Pole	5.5	73	1-50	Blow down has taken most of the stand - there is regeneration coming in.
10	4319 - Mixed Upland Forest	High Density Pole	114.0	86	81-110	Some areas were picked through in 1983, this is where good hemlock, red maple regeneration is. There are areas with white birch and balsam fir. The stand is a mix of lowland and high ground - low ground only because it holds water longer than hardwood stands.
11	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	20.9	15		Regeneration is 10-15' tall- white and red pine are residual from the cutting. There are still conifer seeding in the more open areas
13	42320 - Upland Spruce	Medium Density Pole	9.4	73	51-80	
14	6113 - Lowland Maple	High Density Pole	22.6	74	51-80	Poor quality trees, wet and possible drains in the stand but the amount of snow it was hard to tell.
15	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	9.9	96	1-50	High water table, stand is more of a S4
16	6124 - Lowland Spruce- Fir	High Density Pole	39.2	73	51-80	
17	6113 - Lowland Maple	High Density Pole	17.7	76	51-80	Areas of M3 possible beaver cuttings. Possible drain in the center of the stand - not 100% sure because of the snow depth. Trace amounts of black spruce
18	6121 - Tamarack	Low Density Pole	8.2	86		basic T4/S4 - poor quality, high water table, stand will remain stunted.

S t	Gwinr	Mgt. Unit		Report 8	– Forested	Stands Compartment: 283 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	114.1	66	51-80	Stand is a mix of upland and lowland - picked lowland because it would be best to cut stand on frozen ground. It would not be impossible to treat in a dry year.
21	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	19.7	66	51-80	What stand to the north looked like before it was cut.
22	6131 - Hemlock, White Pine, Maple, Birch	High Density Pole	228.2	96	81-110	Stand is not really a lowland but with the high water table it should be harvested in frozen conditions. There are a couple small drains in the stand but dry up in the dry part of the year. Trace amounts of XL white pine. Good regeneration of hemlock and cedar in areas where blow down has occured. Patches of cedar were cut out way back and where there is sunlight to the ground cedar is coming back. There are many old skid roads in the stand where cedar was cut out - those areas now have cedar 3-8"dbh 30-40' high, red maple, hemlock, fir and spruce are all coming back into these areas.
23	6132 - Mixed Lowland Forest with Cedar	Low Density Sapling	49.5	96	1-50	High water table is keeping timber production low. There are some "higher" areas and this is allowing for trees to grow but stand will not become merchanable.
24	6131 - Hemlock, White Pine, Maple, Birch	High Density Log	41.8	76	81-110	More drains in the stand than the surrounding areas but still many areas of higher ground. Cedar cut out in the past but still more cedar in this stand than the surrounding stands, red maple is smaller. If cedar and hemlock not cut stand would be inopperable.
25	4113 - R.Maple, Conifer	High Density Pole	34.5	72	81-110	Cedar was cut out back when, H1/M1/F2 pocketed in the understory. Saw only trace amounts of white pine and cedar. There is more blow down on the north side of the stand against the open area.
26	4115 - Y.Birch, Hemlock NH	High Density Pole	26.6	74	51-80	Leave cedar, hemlock, and yellow birch when cut.
27	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	85.1	96	81-110	In open areas there is excellent hemlock, red maple and yellow birch regeneration. Stand has wet areas but could be worked in frozen conditions. Red maple, yellow birch, balsam fir and spruce dying out because of age.
28	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	23.6	96	1-50	Drain runs through the center of the stand. High water table inhibits good growth on the timber, cedar is not as affected as the red maple.
29	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	14.3	96	81-110	wet ground, possible drain or old skid road from when the cedar was cut out. Hemlock regen in the open areas.
30	6139 - Mixed Lowland Forest	High Density Pole	49.2	74	81-110	Both lowland and upland, could be either of the two. Used lowland to keep the idea of harvesting on frozen or dry ground. Fir is falling out

S t a n d	Gwin		Report 8	– Forested	Stands Compartment: 283 Year of Entry: 2016	OF NATURAL PRODUCTION OF NATURAL PRODUCTION OF NATURAL PROPURS OF NATU	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN
31	4112 - Maple, Beech, Cherry Association	High Density Pole	36.6	78	81-110	Fair to good quality, could wait another 10 years to dbh and BA into the stand. West side has more und larger canopy gaps. Very rocky ground. Thinned	derstory and

Compartment: 283 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	6220 - Alder/willow	21.0	No	Unspecified	Beaving Flooding, appears to be expanding so timber mortality is spreading.
5	6220 - Alder/willow	17.2	No	Unspecified	Area gets flooded annually due to beaver activity
6	11 - Low Intensity Urban	12.8	No	Unspecified	
12	6220 - Alder/willow	54.4	No	Unspecified	Beaving Flooding, appears to be expanding so timber mortality is spreading.
19	6220 - Alder/willow	46.8	No	Unspecified	
32	3301 - Low Density Deciduous Tree	1.0	Natural Regen	Northern Hardwood	Old opening filling in with surrounding spp of hardwood stand