

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32069
Entry Year 2017
Acreage: 1,909

County Marquette

Management Area: Ralph Ground Moraine

Revision Date: 2015-07-07

Stand Examiner: Kevin LaBumbard

Legal Description:

T43N R25W Sections 28, 29, 30.

Identified Planning Goals:

To improve the quality and diversity of State forests and wildlife through proper habitat management, while protecting the riparian values of our wetlands and waters.

Soil and topography:

Emmet fine sandy loam, Carbondale and Tawas soils, Rubicon sand, Croswell sand, Nahma muck, Cunard fine sandy loam, Escanaba loamy fine sand, Solona fine sandy loam, Ensley muck, Nadeau-Mancelona complex, Kalkaska sand are the predominant soil types.

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

This compartment lies within a solid block of state land. Nearby private land is developed primarily for private hunting camps.

Unique Natural Features:

Stand 31 is an exceptionally high quality northern hardwood stand.

Archeological, Historical, and Cultural Features:

There are many old sites associated with the early logging days and the area has several old narrow gauge railroad grades and old logging camps.

Special Management Designations or Considerations:

ERA nomination for stand 31.

Watershed and Fisheries Considerations:

Lone Pine Creek.

Wildlife Habitat Considerations:

Compartment 69 is found within the Ralph Ground Moraine Management Area; on Ground Moraines in northern Dickinson and southern Marquette Counties. The dominant Natural Communities are mesic northern forest, poor conifer swamps, and dry mesic northern forest. Major forest cover types include Aspen, Northern Hardwoods, and Mixed Lowland Conifers. Almost every cover type and associated species can be found within the management area including several deer wintering complexes. This management area provides some of the finest grouse and woodcock hunting in the Midwest and this is a wildlife management priority that will continue. Wildlife management issues in the management area are: early successional forest conditions (associated with alder, riparian zones, or forested wetlands); mast (hard and soft); habitat fragmentation; mature forest (upland deciduous, especially aspen and mixed forest with little understory); course woody debris; and deer wintering complexes.

The following have been identified as featured species for Ralph Ground Moraine Management Area: American woodcock, black bear, Northern goshawk, ruffed grouse, and whitetail deer.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured till and glacial outwash sand and gravel and postglacial alluvium. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien Group subcrops below the glacial drift. The PdC could be used for stone. A gravel pit is located two miles to the southwest and potential is good on the upland areas. Abandoned iron mines are located ten miles to the north. State mineral lands immediately north of the compartment (Section 19) are currently leased for metallic mineral exploration and development. There is no economic oil and gas production in the UP.

Vehicle Access:

Is very good via Little West Road.

Survey Needs:

None

Recreational Facilities and Opportunities:

This compartment is heavily hunted for upland game and deer. Snowmobile trail #33 also runs thru it.

Fire Protection:

This compartment has a low fire frequency with good access to most areas.

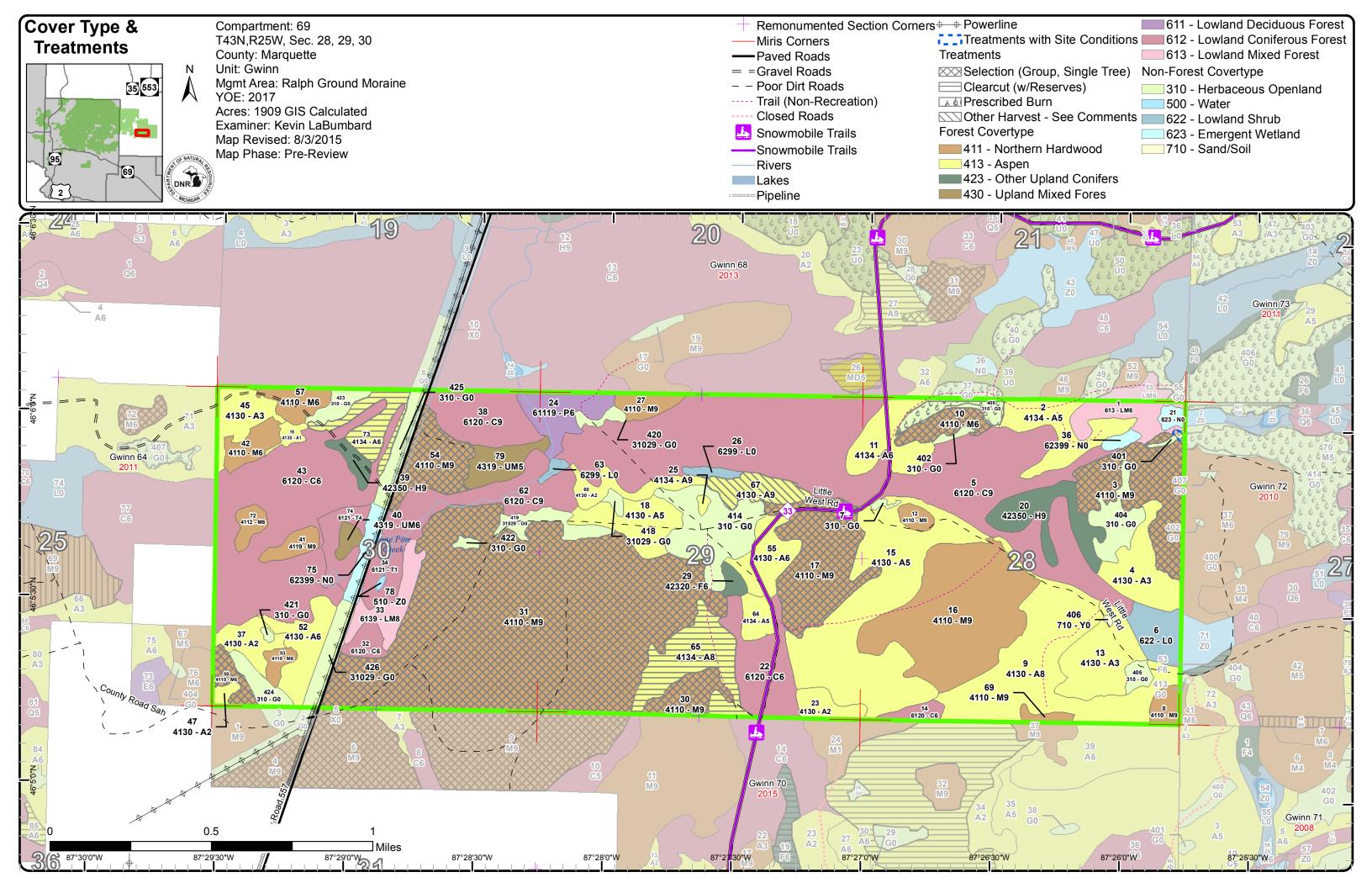
Additional Compartment Information:

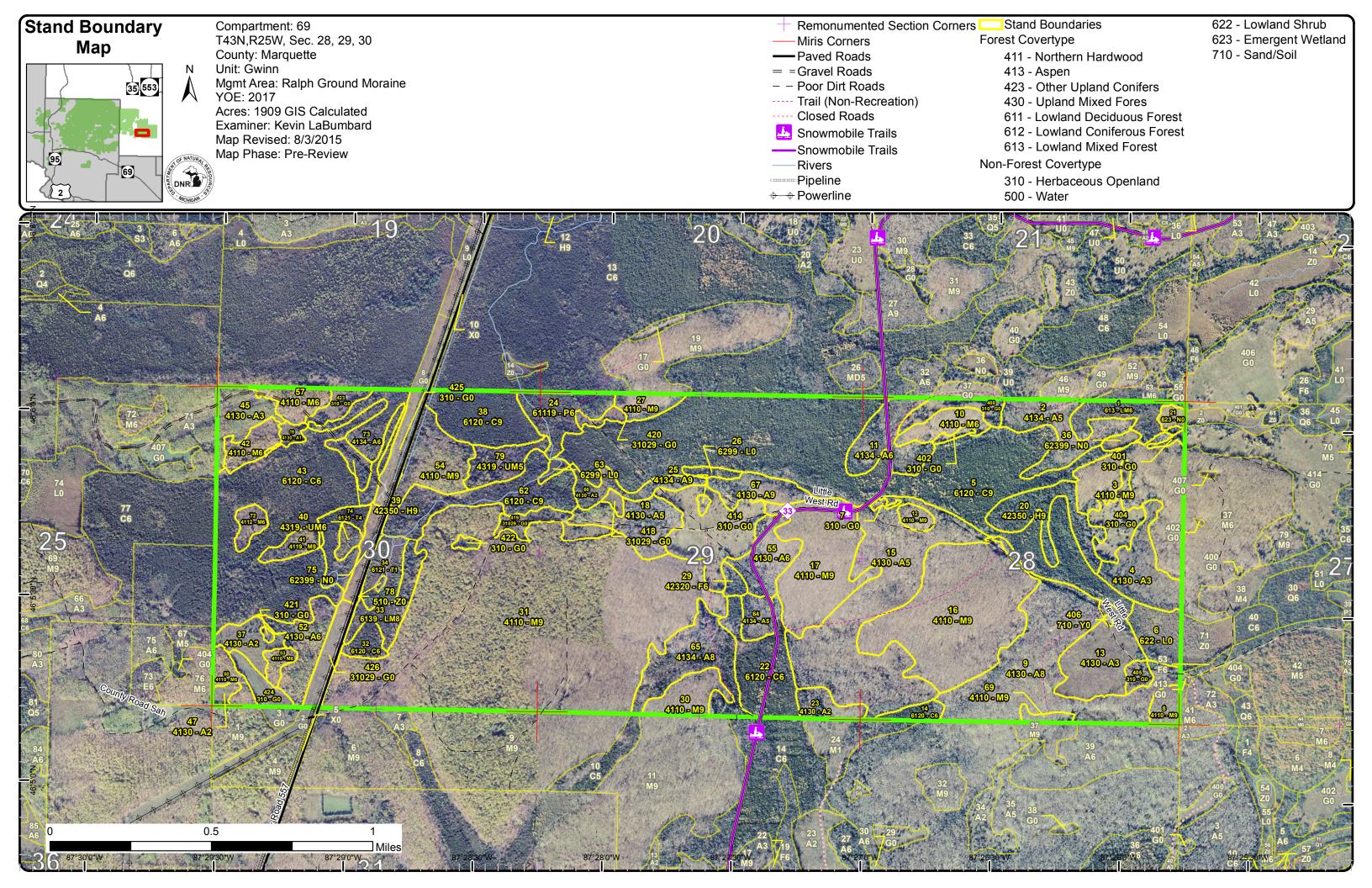
The following reports from the Inventory are attached:

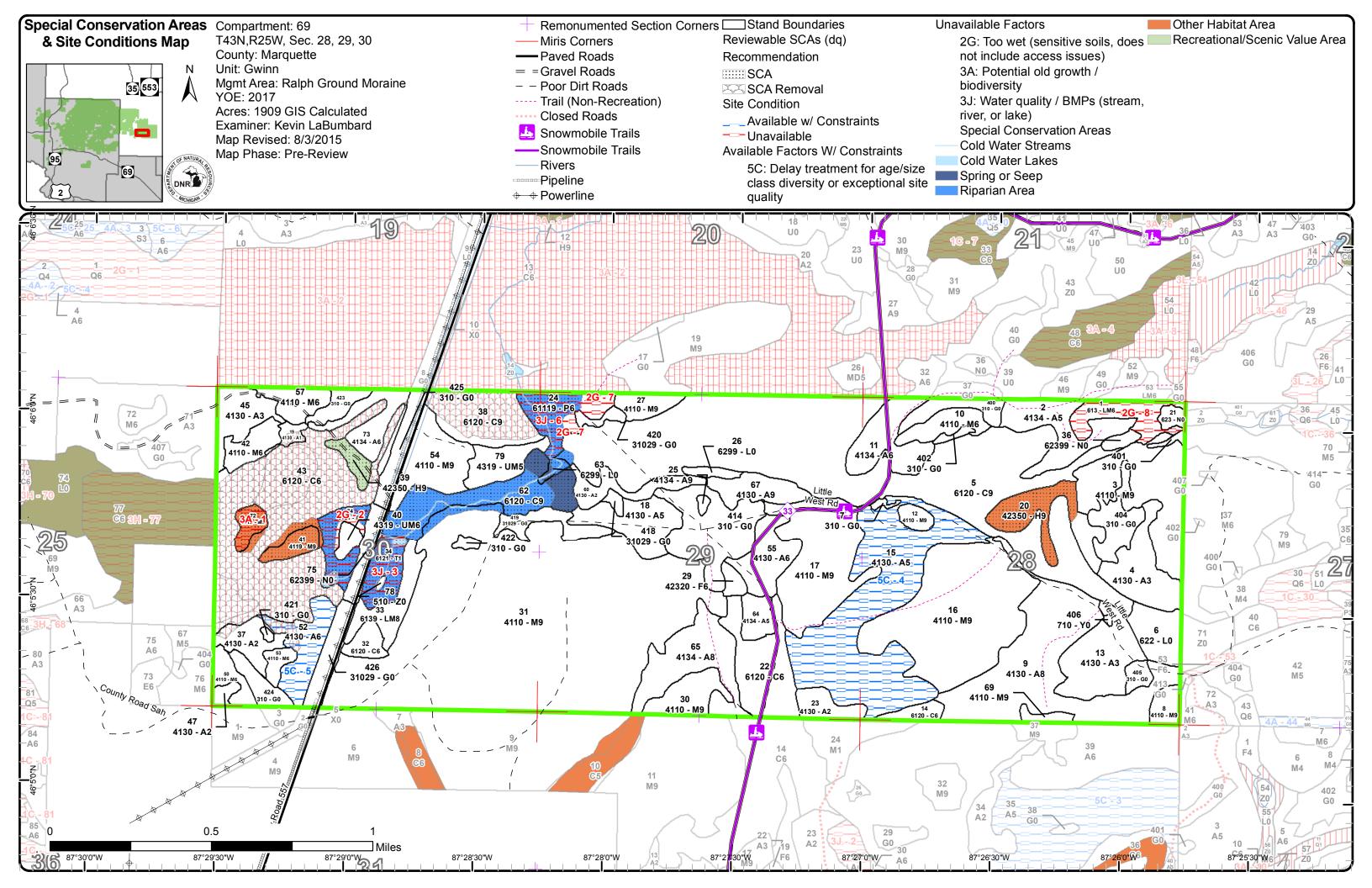
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 69

Year of Entry 2017

Gwinn Mgt. Unit
Kevin LaBumbard : Examiner



Age Class

	¥or	L'AST C	3/2	S. / &	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	87 / 62	8	3/8	, S	/ / / §	80 80	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	og z	,	, S.	No. No.	I A S	St July	No. No.
Aspen	0	59	65	71	0	108	195	0	0	0	0	0	0	0	0	0	0	0	498
Cedar	0	0	0	0	0	0	0	0	0	0	126	315	30	0	0	0	0	0	471
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	24	30
Herbaceous Openland	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	20
Lowland Mixed Forest	0	0	0	0	0	0	0	0	16	0	16	0	0	0	0	0	0	0	32
Lowland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Marsh	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	217	0	0	0	0	0	11	415	643
Sand, Soil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tamarack	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	28
Upland Mixed Forest	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	14	18
Upland Spruce/Fir	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	166	59	65	71	0	112	195	28	20	20	359	315	30	0	0	6	11	453	1910



Report 2 – Treatment Summary

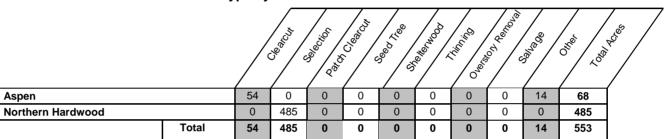
Gwinn Mgt. Unit Year of Entry: 2017

Acres of Harvest

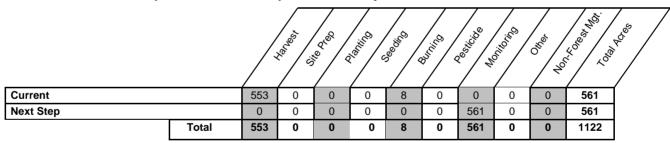
Compartment 69
Total Compartment Acres: 1,909

Commercial Harvest - 553 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Regen:

Other

Old next step comments:

Comment:

10/1 /2016 **Proposed Start Date:**

11.2 4110 - Sugar Maple Poletimber 32069010-Cut 99 111-

Association Well 140 Selection Hardwood

Harvest

Single Tree

411 - Northern

Uneven-Aged

Proposal

Habitat Cut: No Site Condition:

Prescription Mark to residual ba of 80, follow Compleat Marker, retaining most of the basswood and minor species

Specs:

Next Step Treatments:

Acceptable sugar maple

Regen:

Old next step comments: Other

Comment:

Proposed Start Date: 10/1 /2016

Acceptable Sugar maple, basswood

Regen:

Other Extremely high quality hardwood site...better than Dukes Forest. Recommend this stand for an ERA. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

8.0 4110 - Sugar Maple Poletimber 32069050-Cut 99 111-Single Tree 411 - Northern Uneven-Proposal Harvest

Association

Well 140

Site Condition:

Selection

Hardwood

Aged

Habitat Cut: No

Prescription Mark to residual ba of 80, follow guidelines of the Compleat Marker, retaining most of the basswood and minor species.

Specs:

Next Step **Treatments:**

Acceptable sugar maple, basswood.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2020 Gwinn Mgt. Unit Report 4 -- Treatments

Compartment: 69 s Year of Entry: 2017 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** n Method Objective Name CoverType Density Age Range Type d 54 32069054-Cut 25.8 4110 - Sugar Maple Sawtimber Single Tree 411 - Northern 111-Harvest Association Well 140 Selection Hardwood

Structure **Status** Uneven-Proposal

Age

Aged

Approval

Habitat Cut: No Site Condition:

Prescription Mark to 80-90 ba following guidelines per Compleat Marker. Expand gap size to 60' diameter. Retain most of the basswood, y. birch, all Specs:

hemlock and pine. Favor cherry and retain larger aspen.

Next Step Treatments:

Acceptable sugar maple, red maple, basswood, yellow birch.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

413 - Aspen 65 32069065-Cut 36.4 4134 - Aspen, Sawtimber 51 51-80 Harvest Clearcut with Even-Aged Proposal

Spruce/Fir Medium Retention

Habitat Cut: No Site Condition:

Prescription Final harvest retaining hardwoods. Especially basswood. Winter harvest-deer wintering complex.

Specs:

Next Step **Treatments:**

Acceptable aspen

Habitat Cut: No

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

32069067-Cut 14.0 51 4130 - Aspen Sawtimber 81-110 Other - Specify 411 - Northern Uneven-Proposal Hardwood Aged

Harvest

Site Condition:

Prescription Final harvest of aspen retaining the young clones. Retain most tamarack around the wet area and any cedar if present.

Specs:

Next Step

Treatments:

<u>Acceptable</u> Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

32069073-Cut 4134 - Aspen, 55 17.1 Poletimber 81-110 Clearcut with 413 - Aspen Even-Aged Proposal Harvest Retention

Spruce/Fir Well

Habitat Cut: No Site Condition:

Prescription Final harvest of aspen, retaining any cedar. Also retention patches on the east and west sides. Confine harvest to the center high ground ridge.

Specs:

Next Step Treatments:

Acceptable aspen

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Total Treatment

Acreage Proposed:

560.8

Report 5 – Site Conditions

Gwinn Mgt. Unit

Compartment: 69 Year of Entry: 2017 **Kevin LaBumbard : Examiner**

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres	D	ominar	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		5C	2G	ЗА	3J
498	372	126	0	Aspen	126			
471	471	0	0	Cedar				
30	30	0	0	Hemlock				
128	128	0	0	Herbaceous Openland				
20	0	0	20	Lowland Aspen/Balsam Poplar		6		14
32	16	0	16	Lowland Mixed Forest		16		
21	21	0	0	Lowland Shrub				
16	16	0	0	Marsh				
643	637	0	6	Northern Hardwood			6	
0	0	0	0	Sand, Soil				
28	0	0	28	Tamarack		14		14
18	18	0	0	Upland Mixed Forest				
4	4	0	0	Upland Spruce/Fir				
1	1	0	0	Water				
1,909	1,713	126	69	Total Forested Acres	126	36	6	28
	90%	7%	4%	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 Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Unavailable	3A: Potential old growth / biodiversity	6	Unspecified	Unspecified	Unspecified	Unspecified
	growth.					
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:						
•	Comments: Potential Type 2 old	Unavailable Ominant Site Condition Unavailable Ominant Site Condition 3A: Potential old growth / biodiversity Comments: Otential Type 2 old growth. Unavailable Ominant Site Condition 3A: Potential old growth / biodiversity Comments: Otential Type 2 old growth. Unavailable Ominant Site Condition	Unavailable One in an in Site Condition One in a condition in a	Cond Availability Dominant Site Condition Acres Other Site Condition Unavailable 3A: Potential old growth / 6 Unspecified Comments: Potential Type 2 old growth. Unavailable 2G: Too wet (sensitive soils, does not include access issues) 14 3J: Water quality / BMPs (stream, river, or lake)	Cond Availability Dominant Site Condition Acres Other Site Condition Other Site Condition Unavailable 3A: Potential old growth / biodiversity 6 Unspecified Unspecified Comments: Potential Type 2 old growth. 20: Too wet (sensitive soils, does not include access issues) 14 3J: Water quality / BMPs (stream, river, or lake) Unspecified	Cond Availability Dominant Site Condition Acres Other Site Condition Other Site Condition Other Site Condition Other Site Condition Unavailable 3A: Potential old growth / biodiversity 6 Unspecified Unspecified Unspecified Comments: Potential Type 2 old growth. 2G: Too wet (sensitive soils, does not include access issues) 14 3J: Water quality / BMPs (stream, river, or lake) Unspecified Unspecified

Report 5 – Site Conditions

Gwinn Mgt. Unit Kevin LaBumbard : Examiner

Compartment: 69 Year of Entry: 2017

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	105	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: High site quality co	onversion to northern hardwoods	3				
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Compartment: 069 Year of Entry: 2017



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
C. 69 removal 1	Other SCA		SCA Removal	25
Comments				
Mostly cedar with some fir a but not thick. Not old growth		r trees along upland. More twisted and	d small interior of stand. W	ell-stocked
C. 69 removal 2	Other SCA		SCA Removal	38
Comments				
Cedar big along high ground	d edge. Mostly thickly stocked small	ller trees of poorer timber quality interi	or of stand. Not old growth	۱.
C. 69 removal 3	Other SCA		SCA Removal	58
Comments				
Nice cedar west and south ogrowth.	of stand 41. Sparse SE part of stan	d. Open understory and large size esp	pecially along upland edges	s. Not old
C. 69 removal 4	Other SCA		SCA Removal	17
Comments				
	e birch scattered over alder.Some edar. Birch is dying back and stand	areas are P type but overall stand is on is converting. Not old growth.	edar due to cedar mixed th	roughout
C. 69 removal 5	Other SCA		SCA Removal	8
Comments				
Mix of Cedar and P type. Pa Not old growth; BMP's would		overall with alder undersrory thick. Tre	ees small only 2-3 stick all	species.
Hardwood island 1	Habitat Areas or Corridors	Other Habitat Area	Proposed SCA	7
Comments				
		om nearest accessible high ground. M 20 years and left the stand poorly sto		ost cracks
Hardwood island 2	Habitat Areas or Corridors	Other Habitat Area	Proposed SCA	10
Comments				
		I. Sugar maple in the center with red m rge patch of hemlock 3 acres mostly N		ne edge.
KC Hemlock visual	Visual Management Area	Recreational/Scenic Value Area	Proposed SCA	6
Comments				
-	llock along road. Some hardwood r d. Also stream influence. Hemlock	mixed in mostly larger and low timber o looks healthy.	quality. Very nice scenic sta	and at
Lone Pine Creek brush	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	2
Comments				
Lowland brush along lone pi	ine creek. Riparian values protecte	d with biodiversity stewardship coding	for this stand.	
Lone Pine Creek cedar	Spring-Seeps, Riparian Areas	Spring Seep	Proposed SCA	9
Comments				
Mostly cedar south and become important in this biodiversity		edar but not overstocked. Lone pine co	reek buffer stand. Riparian	values

important in this biodiversity maintenence stand.

Compartment: 069 Year of Entry: 2017

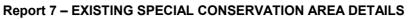


Report 6 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* 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
Lone Pine Creek deciduous	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	19
Comments				
	thes of thick cedar. Also areas of pur chantible timber. Riparian values pro			is entirely
Lone Pine Creek N	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	14
Comments				
	ing and being replaced by cedar. Ce C probably converting to C. High rip		sed. Lone pine creek tributary is al	oout 4 foot
Lone Pine Creek SE	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	14
Comments				
some small tamarack and with biodiversity stewardsh	spruce seeding in 2" dbh. Alder too a iip stand.	and marsh grass. Riparian area	a with pond and lone pine creek p	rotected
Lone Pine Creek SW	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	12
Comments				
	ers mostly tamarack and spruce. Ald of lone pine creek protected by the b			and
Lone Pine Creek travel	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	14
Comments				
	h some H9 on the upland edges and mixed in the hemlock areas mainly.			, yellow
Watson cut across hemlock	Habitat Areas or Corridors	Other Habitat Area	Proposed SCA	18
Comments				
	emlock. Poor timber quality and hemage in stand. Stand has some low ar			

Gwinn Mgt. Unit Compartment: 69
Year of Entry 2017





* 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 HCVA = High Conservatio SCA = Special Conservatio									
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxyg stocked trout populations and those of other coldwater conditions for coldwater fishes may occur in Michigar groundwater inflows, or are located in colder (norther Director's action and designated as trout resources by	er fish species to persist from year to year. Suitable in lakes if they are relatively deep, have substantial in) areas of the state. Such lakes are established by								
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved o stocked trout populations and those of other coldwate year to year. Coldwater streams in Michigan typically contributions of groundwater to their stream flows. Su designated as trout resources by Fisheries Order 210	er fish species (e.g., slimy sculpin) to persist from provide these conditions due to substantial uch streams are established by Director's action and								

S t	Gwinr	n Mgt. Unit		Report 8	- Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	613 - Lowland Mixed Forest	Poletimber Well	15.9	95	51-80	OPIC - FMD: Q6 but parts of stand are Q5 or Q4 Also E and P type. Patches of well-stocked cedar mixed with P or Q type small and alder. Ash is 1-stick mostly with alder and red maple thick understory. Overall trees are small. Somewhat sparse in poles but seddlings 10 feet tall of red maple, ash.
2	4134 - Aspen, Spruce/Fir	Poletimber Medium	26.9	29	Immature	OPIC - FMD: Cut 1986, A3 4" DBH, Some conifer and cherry mixed. Some aspen is 1 or 2 sticks almost pole size overall. Sparse areas around G on map have more fir or cherry seeding in. Recent beaver activity along south edge has made that area mostly F2 with some maple smaller size than aspen north. Overall is diverse and should be fully stocked stand when next harvest occurs. 2015-areas of semi open u on frindge, larger aspen on edges.
3	4110 - Sugar Maple Association	Sawtimber Well	48.1	99	111-140	OPIC - FMD: Cut 2002 Under permit# 028-97-01. Nice patch of hemlock and cedar west edge. Good quality mostly sugar and basswood. 2015-numerous white spruce less than 3' tall west side. Ironwood saps heavier moving east. Lots of 1' browsed maple seedlings.
4	4130 - Aspen	Sapling Well	25.4	13	Immature	OPIC - FMD: Ccut permit # 028-97-01. Patches of F3 and some small hardwood residual left but mostly A3 1" dbh. 2015-Nice, high quality aspen doing very well.
5	6120 - Lowland Cedar	Sawtimber Well	237.0	101	111-140	OPIC - FMD: Mix of mostly smaller cedar with some areas of larger cedar. Well-stocked but not real thick in most areas. Understory of fir and hardwood in some areas. 2015- large stand, variable, deer yard.
8	4110 - Sugar Maple Association	Sawtimber Well	6.7	99	81-110	OPIC - FMD: cut in 1985. Ready for another light thinning. High quality mostly but some butt scars from possible old fire. Mostly ironwood in understory. Still crown room in areas so just a light thinning needed. ***Timber sale #024-07 "Camp 19 Sale" - cut December, 2009.
9	4130 - Aspen	Sawtimber Medium	88.9	43	51-80	OPIC - FMD: Hunter walking trail seeded and mowed occaisionally. Aspen is 4-5 stick with some larger and smaller 6-8"dbh average. Self-thinning phase now with some sparse areas. Scattered softwood and hardwood. 2015-Aspen is breaking up, 10-11 inch dbh. 43 years old but should be harvested along with the fir. Retain the sugar maple, cherry.
10	4110 - Sugar Maple Association	Poletimber Well	11.3	99	111-140	OPIC - FMD: Cut in 1999, Permit #26-97-1. Some areas have high BA but overall about 100 BA. Not quite ready for thin. 3-6 stick pole size nice stand. 2015-stand includes small aspen pole stand of 6" 3-4 stick poles. Narrow ridge of hardwood. Possible combine with stand 12 for treatment.
11	4134 - Aspen, Spruce/Fir	Poletimber Well	23.5	18	Immature	OPIC - FMD: F4M4F2, Cut 1999, Permit #26-97-1.Patches of A3 1" dbh but mostly F seeding in. Residual F patches and some maple scattered. Still regenerating. 2015-Spruce and fir poles over 2-3" aspen-aspen should be the featured stand. F4A3.

S t	Gwin	n Mgt. Unit		Report 8	- Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4110 - Sugar Maple Association	Sawtimber Well	4.4	99	81-110	OPIC - FMD: Cut permit #025-97-01. Good quality small stand. 2015- Small island of fair quality hardwoods cut in 1997. Heavy sedge. Should thin the maple, leave basswood, cut fir. Possibly combine with stand 10 for treatment.
13	4130 - Aspen	Sapling Well	31.0	5	Immature	OPIC - FMD: Stand mature and should be cut. Some mortality. Hazel understory. Will protect dead and down wood during harvest.We will have a summer restriction here. ***Timber sale #024-07 "Camp 19 Sale" - cut December, 2009. Left leave trees along road, and larger aspen along sale edge. 2015-Well stocked A3 with a few conifers and cherry.
14	6120 - Lowland Cedar	Poletimber Well	5.5	95	111-140	OPIC - FMD: Small patch of cedar very well-stocked. Heavy wildlife use in this stand mid winter 2005. One very large, burned 3 foot diameter mostly rotten cedar in the stand is possibly ancestor to all others here. All wildlife trails lead to this tree, another mystery of nature.
15	4130 - Aspen	Poletimber Medium	105.1	50	81-110	OPIC - FMD: 4-5 stick aspen mostly well-stocked.Merchantible but young. Areas of 2-3 stick. Some areas with raspberry and some hazel understory. Scattered fir and cherry. Also spruce, basswood and sugar maple in stand. 2015- High quality site with lots of leeks. Aspen in decline, stand breaking up. Very good quality 1-4" sugar maple saplings in the understory. Fire scarring on the remnant sugar maple with the aspen established after the fire. The stand is now converting back to the northern hardwood type.
16	4110 - Sugar Maple Association	Sawtimber Well	96.3	99	81-110	OPIC - FMD: Cut permit # 36-00-01. About 2001. Good quality stand with 2' ironwood understory. Some maple coming in some areas. Stand is about 60% sugar and 40% basswood. Even age pole stand and small log size mostly.
17	4110 - Sugar Maple Association	Sawtimber Well	55.4	99	111-140	OPIC - FMD: cut permit #025-97-01 in 2000. Good quality stand. Some tight spots but not quite ready for another thinning. Mostly evenage 8-12" dbh. 1/3 basswood the rest mostly sugar maple. 20105-moving toward uneven-aged. Variable ba from 90-130. Regeneration after selective harvest doubtful.
18	4130 - Aspen	Poletimber Medium	22.7	26	51-80	OPIC - FMD: Cut permit #8-87-01. Just starting to be merchantible. 4-5 stick average. North of road fir is mixed in and south hardwood mixed in and is larger there due to better soil. 2015-Aspen healthy over excellent hardwood regeneration. Let this stand convert to the northern hardwood type.
19	4130 - Aspen	Sapling Poor	3.4	6	Immature	OPIC - FMD: This was half the original stand left last time. Aspen is large. Some blowdown has occurred in the wetter areas. Some swales here will have to be watched for excessive rutting during harvest. All dead trees will be left. There is apparently adequate dead wood currently on site and it will be retained during and after harvest. ***Stand harvested as "Hilltop Sale" # 022-07 - cut September, 2009. Several hardwood trees were left as retention, as well as some larger aspen along edge of cut. 2015-aspen doing well.

S t	Gwinn	Mgt. Unit		Report 8	– Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	42350 - Upland Hemlock	Sawtimber Well	24.4	125	111-140	OPIC - FMD: Nice looking stand of big hemlock. Poor timber quality and hemlock not used for age because of that. The hemlock seems healthy although some porky damage in stand. Stand has some low area but mostly high ground and comes up into hardwood stand east. Some hemlock over 20" dbh. Recommend putting into biodiversity stewardship. because of rarity of this type in this area. 2015-recommend Type 2 old growth.
22	6120 - Lowland Cedar	Poletimber Well	33.5	101	111-140	OPIC - FMD: Well-stocked cedar. Mix of large and small trees. 2015- cedar with associated swamp conifers.
23	4130 - Aspen	Sapling Medium	9.5	7	1-50	OPIC - FMD: combined with stand 17 compartment 70 sale in 2005 contract 32-014-05-01 logger LaFleur cut permit 14-05-1 in 2008 winter. Some damage to hardwood. 2015-Fully stocked A3 under M7. Aspen the featured stand.
24	61119 - Lowland Aspen/Balsam Poplar (OI)	Poletimber Well	20.0	81	81-110	OPIC - FMD: Blow down areas. Birch dying and being replaced by cedar. Cedar mostly small but well stocked. Lone pine creek tributary is about 4 foot wide here. Mix of P,Q, and C probably converting to C. High riparian value stand.
25	4134 - Aspen, Spruce/Fir	Sawtimber Well	1.2	52	81-110	OPIC - FMD: Small island in opening. Probably high widlife value. Just started to become merchantible. 2015 - retain
27	4110 - Sugar Maple Association	Sawtimber Well	8.2	99	81-110	OPIC - FMD: Cut in 1999 , Permit #26-97-1. Some tight areas in about 1/3 the stand, the rest is ok. Not enough to justify another thinning yet. 2015- good quality hardwoods, manage with stand 19 to the north.
29	42320 - Upland Spruce	Poletimber Well	3.6	47	81-110	OPIC - FMD: edge of aspen about same age 3-4 stick spruce/fir average with some smaller and some larger. 2015-fire origin F6A4. No sign of budworm but could harvest.
30	4110 - Sugar Maple Association	Sawtimber Well	15.1	99	111-140	OPIC - FMD: Cut permit #024-97-01. Some thick areas yet but not worth thinning again yet. Good quality 2/3 maple and about 1/3 basswood. No regeneration except Ironwood. 2015-high site index ready to cut again but sugar maple regeneration doubtful. Browsing on ironwood!
31	4110 - Sugar Maple Association	Sawtimber Well	321.7	99	111-140	OPIC - FMD: Cut permit #024-97-01in 2000. Good quality mostly sawlog size stand. About 1/3 basswood and 2/3 sugar maple. Some areas of pole size. 2015-Higher percentage of sugar maple due to last harvest. Retain most of the basswood this cutting for species diversity.
32	6120 - Lowland Cedar	Poletimber Well	6.8	101	81-110	OPIC - FMD: Mostly cedar south and becomes more P or Q north. Bigger cedar crooked but not overstocked. 2015-deer yard
33	6139 - Mixed Lowland Forest	Sawtimber Medium	15.7	73	81-110	OPIC - FMD: Small 2-3 stick trees. Somewhat sparse in areas with alder but overall adequately stocked. Factor limit too wet.

S t	Gwin	ո Mgt. Unit		Report 8	Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	6121 - Tamarack	Sapling Poor	13.7	65	1-50	OPIC - FMD: some small tamarack and spruce seeding in 2" dbh. Alder too and marsh grass. Riparian area with pond and lone pine creek protected with biodiversity stewardship stand. 2015-agreed.
37	4130 - Aspen	Sapling Medium	12.1	6	Immature	OPIC - FMD: Mix of Fir and Aspen. This stand looks like it can hold and there are areas of sight under-mature aspen but most is mature. Fir and spruce larger than average. Fades to ecotone east along opening and becomes wetter.*** Stand harvested as "Food Plot Sale" # 023-07 - cut September, 2009. 2015-regenerating to aspena little thin in areas so A2.
38	6120 - Lowland Cedar	Sawtimber Well	30.0	113	111-140	OPIC - FMD: Mostly cedar with some fir and spruce in the open areas.Larger trees along upland. More twisted and small interior of stand. Well-stocked but not thick. Spruce seeding into open areas of stand. 2015 Areas of dense tag alder in the understory. Deer yard. Large cedar stand with mixed swamp conifers and lowland hardwoods. Areas of dense tag alder in the understory, especially along Co. Rd. 557. Deer yard.
39	42350 - Upland Hemlock	Sawtimber Well	5.8	141	81-110	OPIC - FMD: Narrow stand of mostly hemlock along road. Some hardwood mixed in mostly larger and low timber quality. Very nice scenic stand at entrance of busy woods road. Also stream influence. Hemlock looks healthy. 2015-no changes.
40	4319 - Mixed Upland Forest	Poletimber Well	4.0	79	111-140	OPIC - FMD: Mostly white birch 6-10"dbh over thick fir 2-8". Aspen over about 1/3 the stand scattered so if clearcut only 1/2 the stand will re-stock to aspen. Birch not dying although is mature. Would need to freeze in a road and cut during winter. Stand may be A or F after harvest. Possible to leave seed trees of white birch although scarification is difficult in winter and would be impossible to get in scarification equipment in snow free times. Prescription is to leave patches of advanced fir regeneration and clearcut. Birch may reseed in areas but most of stand will be F or A after harvest. We will leave all dead trees during harvest and also insure adequate unmerchantible dead wood left on site. Many large pine stumps on site from original harvest although no pine is here now. We will hold this stand 10 years until 2017 to balance out size and ages of stands west of the road. 2015-stand is small in acreage, and quite steep. Access difficult for low volume. Birch still looking good with fir dying out. Factor limit.
41	4119 - Mixed Northern Hardwoods	Sawtimber Well	7.2	99	81-110	OPIC - FMD: Island in a cedar swamp 5-10 chains from nearest high ground. Sugar maple in the center with red maple and yellow birch on the edge. Fully stocked but some sparse areas from past fir mortality. Large patch of hemlock 3 acres mostly NW part of stand and fades down to cedar. Upland larger cedar throughout stand. Probably 1/2 of stand lower than 90 sq ft BA. Timber quality poor but soil is good and potential is there. Many den trees and good conifer mix along with untouched larger size make wildlife values high in this stand. Remoteness as well lends this stand high value for biodiversity stewardship. Existing old growth in upland cedar and hemlock. Even though stand is separate from riparian corridors, this stand is a good candidate for potential old growth designation for the above reasons.

S t	Gwini	Gwinn Mgt. Unit			- Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	4110 - Sugar Maple Association	Poletimber Well	10.2	99	51-80	OPIC - FMD: This is a ridge that contains hardwood of fair to good quality. Aspen, spruce and fir is mixed in and will be removed in a harvest to convert the stand totally to hardwood management. Stand may not need marking but basal area may be reduced adequately by removing aspen and softwoods. May mark if time permits. Some blowdown has occurred in the large aspen especially adjacent to the clearcut west and north. ***Stand harvested as "Hilltop Sale" #022-07 - cut September, 2009. 2015-trace of yellow birch. Heavy ironwood regeneration.
43	6120 - Lowland Cedar	Poletimber Well	120.2	91	111-140	OPIC - FMD: This a mix of cedar and white birch scattered over alder. Some areas are P type but overall stand is cedar due to cedar mixed throughout stand and patches of pure cedar. Birch is dying back and so stand is converting to more pure cedar but sparse in areas. Cedar is mostly small and twisted but some areas have high BA larger trees. Alder thick and tall 6-8' in most of stand.
45	4130 - Aspen	Sapling Well	16.6	14	Immature	OPIC - FMD: stand was cut in 2001, permit #23-97-01. Some residual hardwood left. Some of that has blown down. 2015-Most of stand is well-stocked aspen 2" 30-40' tall.
47	4130 - Aspen	Sapling Medium	2.9	6	Immature	Stand thinned as "Food Plot Sale" #023-07 in Sept., 2009. 2015-A3 under scattered sugar maple saplings.
50	4110 - Sugar Maple Association	Poletimber Well	8.0	99	111-140	OPIC - FMD: High quality small stand ready to thin. Some areas not much BA over 90 sq ft but most of stand is ready for thinning. ***Stand thinned as "Food Plot Sale" #023-07 in Sept., 2009. 2015-stand ready to cut again with some areas 120-130 ba. Sedge increasing. Understory of 2"-3" sapling sugar maple craplings. Surprisingly low stocking of ironwood seedlings and saps. Harvest with adjacent stand 76 cmpt 64 fiscal year 2011.
52	4130 - Aspen	Poletimber Well	20.8	53	81-110	OPIC - FMD: 3-4 stick average well-stocked aspen. Some smaller only 4"dbh yet. Some fir and hardwood mixed in. 2015-Mixed quaking and big-tooth aspen over high quality sugar maple saps, poles, and an occasional large sawtimber tree. This is a high quality hardwood site with leeks and leatherwood. Allow conversion to northern hardwoods. North couple acres consists of old stand 70. Soil and site change here, fir dead and down, more red maple, white birchan M5B5F4A4F2M1 stand.
53	4110 - Sugar Maple Association	Poletimber Well	4.6	99	81-110	OPIC - FMD: Overall good quality poles but quite a bit of sprout origin maple and basswood. Ready for thin and should concentrate on promoting single stem quality trees, removing twins and clumps where possible while maintainting BA 70 sq ft. Will insure adequate dead wood and all dead trees will remain at harvest. ***Stand thinned as "Food Plot Sale" #023-07 - cut 9/09. 2015-trace of elm, wb. Starting to get a heavy sedge layerdid not see any small seedlings on the floor. The sugar maple understory consists of 2"-3" craplings.
54	4110 - Sugar Maple Association	Sawtimber Well	25.8	99	111-140	OPIC - FMD: Part of this stand is an old wildlife cut that has regenerated to sprout origin trees and cherry. Most of that area moved into anther stand(79). Center of stand good quality hardwood thinned last time. Stand is now combined and can be all thinned together next time. 2015-doubles and triples with an occasional basswood. Select cut hardwoods retaining minor species.

S t	Gwinn Mgt. Unit			Report 8	– Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	4130 - Aspen	Poletimber Well	19.1	47	51-80	OPIC - FMD: Smaller trees 4-5 stick well-stocked mostly. Thick hardwood 3-5"dbh under east, F1 west. 2015-Quaking aspen on the lower portion, big- tooth on the hill side. Trace of elm. Conifers are associated with the quaking aspen while the big-tooth was relative free of conifers. No budworm seen. Hold the stand 10 years before harvest.
57	4110 - Sugar Maple Association	Poletimber Well	10.7	178	81-110	OPIC - FMD: High quality pole stand . Stand harvested as "Hilltop Sale" #022-07 - cut September, 2009. Doing well.
60	4130 - Aspen	Sapling Medium	13.0	28	1-50	OPIC - FMD: Aspen cut permit 8-87-01.2"dbh average well- stocked. F2 west and wet in spots. Good conifer component throughout. 2015-stand starting to transition to a pole stand.
62	6120 - Lowland Cedar	Sawtimber Well	37.9	101	111-140	OPIC - FMD: Mostly cedar south and becomes more P or Q north. Bigger cedar but not overstocked. Lone pine creek buffer stand. Riparian values important in this stand.
64	4134 - Aspen, Spruce/Fir	Poletimber Medium	8.2	28	Immature	OPIC - FMD: A3 2"dbh mostly well-stocked but some open areas although stand is considered fully stocked. Some sp/fir component seeding in especially in the semi-open areas. Cut permit 7-87-01. 2015-3-5" aspen transitioning to a pole stand. A4A3F4F2
65	4134 - Aspen, Spruce/Fir	Sawtimber Medium	36.4	51	51-80	OPIC - FMD: 3-5 stick. Just coming into merchantibility. Some sparse areas. Thick hazel and red maple coming in spots under. Some areas only A5 and seem to be wetter soil. Some willow. Mostly north are the sparse areas.
67	4130 - Aspen	Sawtimber Well	14.0	51	81-110	2015-Tamarack along SE edge turns to narrow band of 3-4" aspen sapsexclude these areas from the sale. Stand is quite variable and made up of several clones of aspen. Final harvest retaining young clones, and cedar if present.
69	4110 - Sugar Maple Association	Sawtimber Well	3.5	99	81-110	OPIC - FMD: A small stand ready for another thinning. Good potential but some large trees have poor timberquality. A lot of basswood. Some big aspen to come out. ***T. sale #024-07 "Camp 19 Sale" - cut December, 2009.
72	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.0	99	111-140	OPIC - FMD: Mostly poor timber quality. Island in a cedar swamp 1/4 mile from nearest accessible high ground. Mostly red maple type with frost cracks and other defects. It appears substantial fir has died in the last 20 years and left the stand poorly stocked in the overstory in many areas. Thich 10' red maple has regenerated in these areas. A few higher BA spots but most of stand is less than 90 sq. ft. BA. The remoteness combined with the high quality den and other wildlife trees and being high ground adjacent to a riparian corridor lend this stand to biodiversity maintenance area. 2015 SCA.
73	4134 - Aspen, Spruce/Fir	Poletimber Well	17.1	55	81-110	OPIC - FMD: This stand is mostly A6. Aspen is 4-6 stick just coming into merchantibility. Lots of fir in the understory. 2015-Lots of fir dead and down. Leave buffer both east and west of the main ridge, staying on the upland. Retain the entire western peninsula for retention and as a riparian/wildlife corridor.

S t a n d	Gwinn Mgt. Unit			Report 8	– Forested	d Stands Compartment: 69 Year of Entry: 2017	RESOURCE
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	18)
74	6121 - Tamarack	Poletimber Poor	13.8	65	1-50	OPIC - FMD: seeding in with small conifers mostly tamarack and spruce. Alder scattered, not thick. A few small pole size cedar, tamarack, fir and spruce Riparian corridor of lone pine creek protected by the biodiversity maintenance designation.	_
79	4319 - Mixed Upland Forest	Poletimber Medium	13.9	99	51-80	OPIC - FMD: This is an old wildlife cut in late 70's where all hardwood was harvested except some larger yellow birch and sugar maple. Also white pine and hemlock were left. Understory M3F2 is close to 1-2 stick and well-stocked. Mostly that is sprout origin and low quality. Stand has good potential but will take two or more thinnings to reach high timber quality production. Good wildlife area. First thinning will be in 10 or 20 years. Part of stand may be better under evenage management especially NE where it is more fir and w.birch mixed. 2015- harvest with stand 54 removing fir and a limited amount of hardwoods. Budworm just starting here.	



Stand	Cover Type	Acres	Managed Site	General Comments:
6	622 - Lowland Shrub	15.6	No	OPIC - FMD: Mix of mostly smaller cedar with some areas of larger cedar. Well-stocked but not real thick in most areas. Understory of fir and hardwood in some areas. 2015-cedar dead from beaver floodingwillow and whatever wetland grasses filling in.
7	310 - Herbaceous Openland	1.0	No	OPIC - FMD: 4-5 stick aspen mostly well-stocked.Merchantible but young. Areas of 2-3 stick. Some areas with raspberry and some hazel understory. Scattered fir and cherry. Also spruce, basswood and sugar maple in stand.
21	623 - Emergent Wetland	3.3	No	OPIC - FMD: Q6 but parts of stand are Q5 or Q4 Also E and P type. Patches of well-stocked cedar mixed with P or Q type small and alder. Ash is 1-stick mostly with alder and red maple thick understory. Overall trees are small.Somewhat sparse in poles but seddlings 10 feet tall of red maple, ash. 2015 beaver flooding that drained.
26	6299 - Lowland Shrub (OI)	3.2	No	OPIC - FMD: Mostly alder. A very few scattered small lowland conifers.
36	62399 - Marsh (OI)	2.9	No	OPIC - FMD: This is mostly drained beaver pond with recent drowned and older drowned trees. Non-stocked riparian area with a few scattered cedar that escaped drowning.
63	6299 - Lowland Shrub (OI)	2.1	No	OPIC - FMD: Lowland brush along lone pine creek. Riparian values protected with biodiversity stewardship coding for this stand.
75	62399 - Marsh (OI)	9.6	No	OPIC - FMD: Power line row next to 557. This part is wet and kept free of trees and shrubs by the power line owner.
78	510- Water (OI)	0.5	No	OPIC - FMD: Location Section 30-NESE. Small pond does not appear to be beaver origin. Pond on lone pine creek possibly headwater spring.
400	310 - Herbaceous Openland	9.5	No	
401	310 - Herbaceous Openland	1.5	No	
402	310 - Herbaceous Openland	1.7	No	
404	310 - Herbaceous Openland	14.9	No	
405	310 - Herbaceous Openland	4.1	No	
406	710 - Sand, Soil	0.5	No	Old gravel pit filling in.
414	310 - Herbaceous Openland	36.8	No	OPIC - FMD: some oak planted here in past but poor survival.

Gwinn Mgt. Unit

Report 9 - Nonforested Stands

Compartment: 69 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
418	31029 - Grass (OI)	2.0	No	
419	31029 - Grass (OI)	10.9	No	
420	31029 - Grass (OI)	3.3	No	
421	310 - Herbaceous Openland	0.8	No	
422	310 - Herbaceous Openland	1.7	No	
423	310 - Herbaceous Openland	6.9	No	
424	310 - Herbaceous Openland	8.3	No	
425	310 - Herbaceous Openland	12.7	No	Mostly grass under powerline.
426	31029 - Grass (OI)	12.2	No	Under powerline.