

Compartment Review Presentation

Gwinn Forest Management Unit Compartment 32097 Entry Year 2017 Acreage: 2,308 County Alger Management Area: Chatham/Autrain Moraines

Revision Date: 2015-07-07

Stand Examiner: Kevin LaBumbard

Legal Description:

T45N R21W Sections 23-26, 35, 36.

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:

Area is mostly flat to gently rolling. There are some moraines and other glacial features. Notable are a series of steep north-south ridges that are the former riverbanks of the ancient river that drained glacial Lake Duluth. Soils included Chatham cobbley fine sandy loam, Shoepac-Trenary silt loam, Traunik gravelly fine sandy loam, Kalkaska sand, Kalkaska-Waiska complex, Charlevoix-Ensley complex, Eben very cobbley fine sandy loam, Charlevoix silt loam, and Carbondale, Lupton, Tawas, Chippany-Nahma mucks.

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

Year round residences and hunting camps. Some active farms nearby. Hiawatha National Forest is east of the basin.

Unique Natural Features:

Autrain Waterfowl Refuge and associated large opening complex, the Autrain Basin. A large spring appears, creates a short creek, then disappears back underground.

Archeological, Historical, and Cultural Features:

No archeological hits in our data base. MNFI has previous records for bald eagle, loon, grasshopper sparrow.

Special Management Designations or Considerations:

The Autrain Waterfowl Project Area of which includes this compartment.

Watershed and Fisheries Considerations:

Fisheries Values: Excellent

Fisheries Concerns: Johnson Creek, a designated trout stream, flows through the northern portion of this compartment. Johnson Creek contains native brook trout and also as nursery habitat for a wide variety of species from AuTrain Basin. AuTrain Basin is a very popular smallmouth bass, panfish, and walleye fishery. The stands adjacent to and in proximity to each of these waterbodies are factor limited. If work is ever decided to be completed here, the designated trout stream buffer should be adhered to and a riparian buffer would need to be maintained on AuTrain Basin.

Wildlife Habitat Considerations:

Compartment 97 is found within the Chatham/AuTrain Management Area; on a Fluted Ground Moraine in northeastern Marquette County and western Alger County. The dominant Natural Communities are mesic northern forests and poor conifer swamps. This Management Area provides one of the best opportunities in the WUP State Forest system to manage for large grasslands and associated wildlife species. Large opening management, along with sharecropped agricultural practices will continue to be a high priority here. Wildlife management issues in this management area will focus on maintaining large open land complexes; habitat fragmentation (patch size for openings); and mowing and burning practice modifications (for the eastern compartments).

The following have been identified as featured species for the Chatham/AuTrain Management Area: bobolink, Canada goose, northern goshawk, and sharp-tail grouse.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured glacial till and glacial outwash sand and gravel and post-glacial alluvium. The glacial drift thickness varies between 10 and 70 feet. The Ordovician Black River Group subcrops below the glacial drift. The Black River is quarried for stone/dolomite elsewhere in the UP. A gravel pit is located to the west in Section 28 and

there may be potential on the east side of the compartment. This compartment has never been leased for metallic mineral exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Good throughout the compartment although some access is blocked from Sept. 1-Nov. 10 in the waterfowl refuge area.

Survey Needs:

While there are limited corners in this compartment, additional monumentation is needed here.

Recreational Facilities and Opportunities:

This area is extremely popular for birding. Waterfowl hunting, upland bird and deer hunting is also popular as well.

Fire Protection:

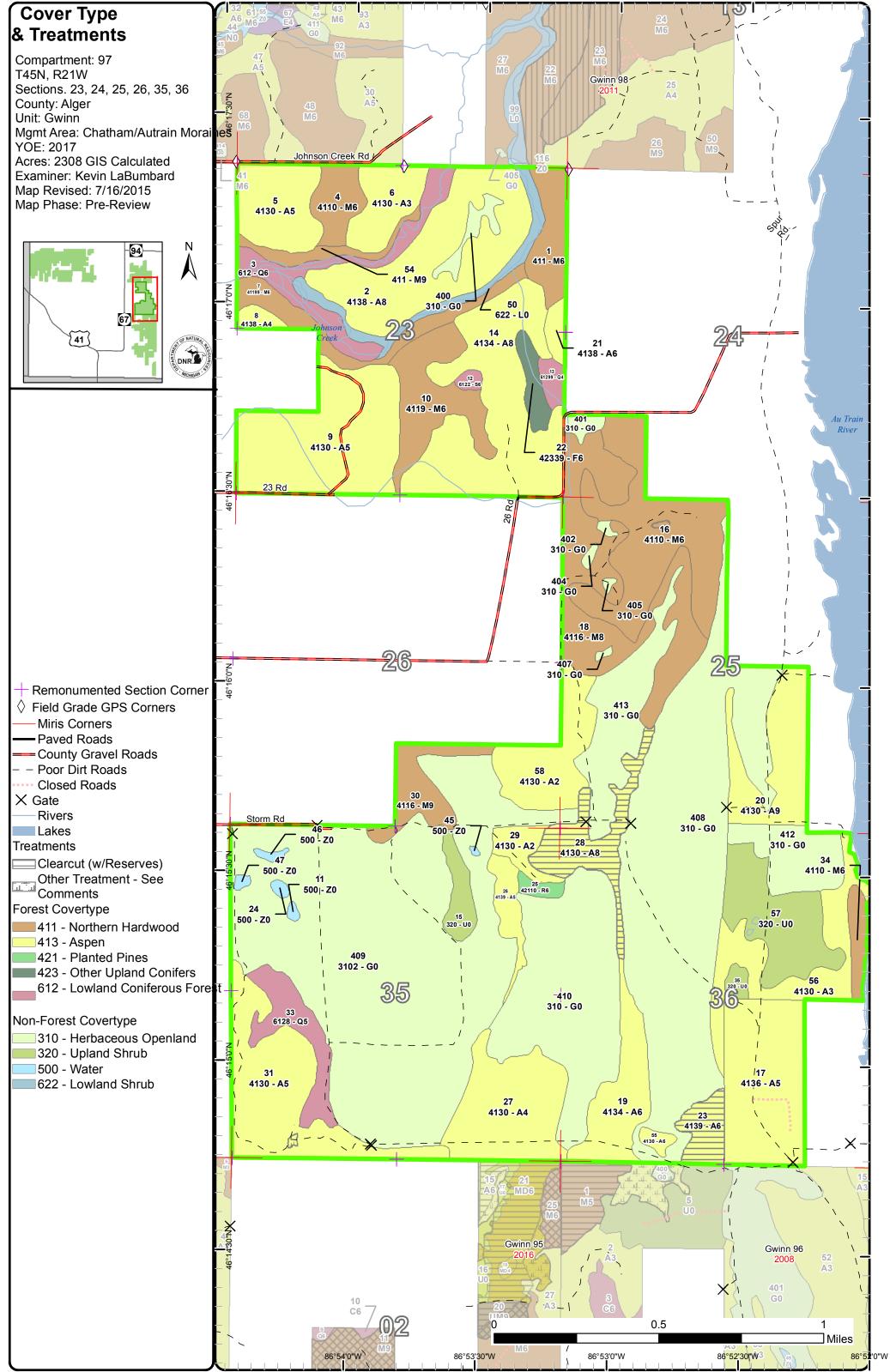
This compartment has a low risk for fire.

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

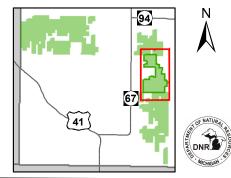
Details on the road access system

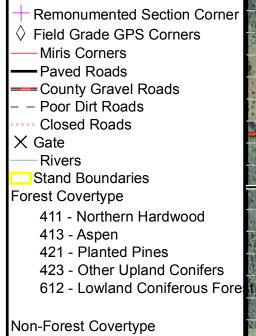




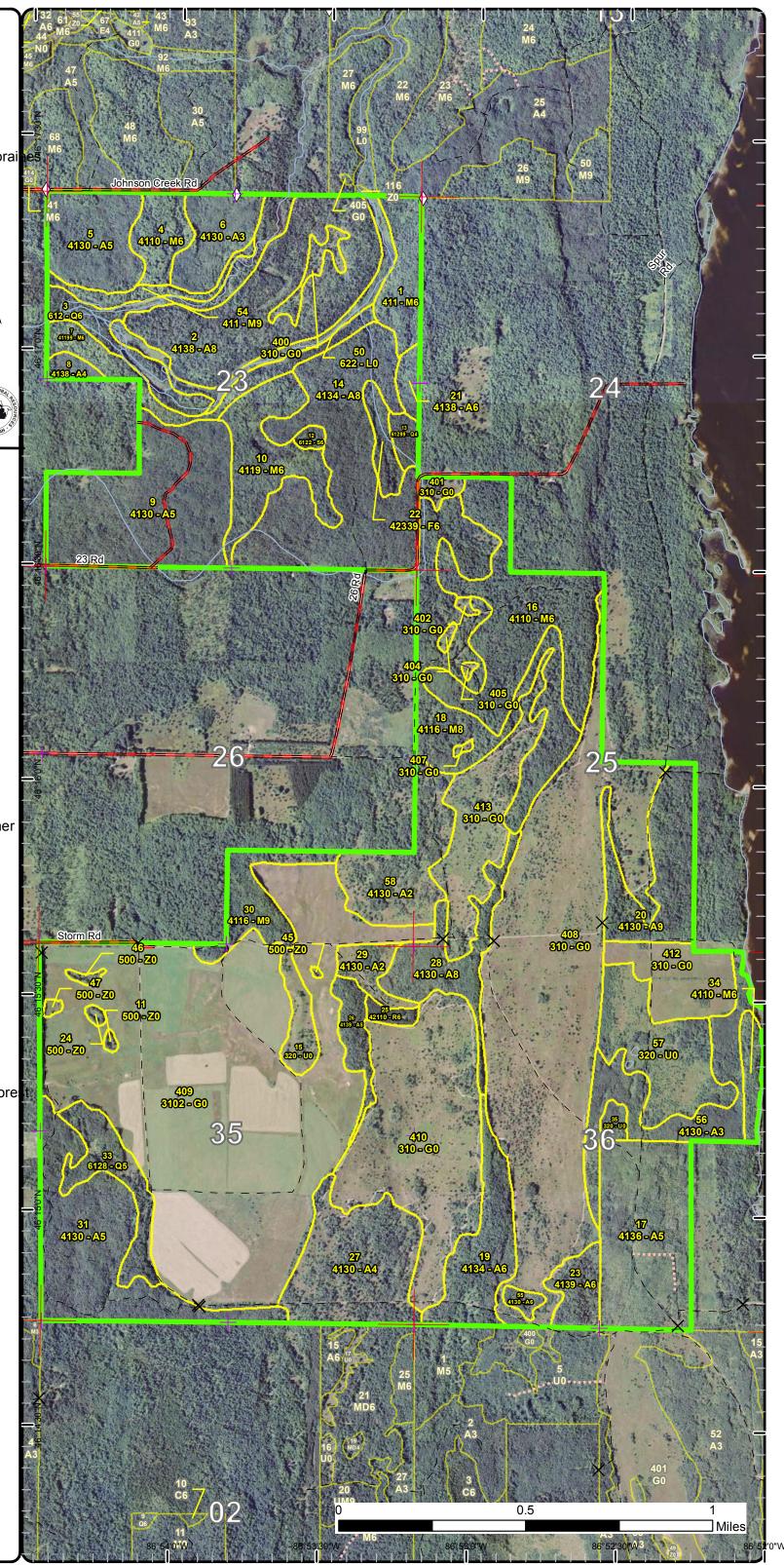
Stand Boundary Map

Compartment: 97 T45N, R21W Sections. 23, 24, 25, 26, 35, 36 County: Alger Unit: Gwinn Mgmt Area: Chatham/Autrain Morai YOE: 2017 Acres: 2308 GIS Calculated Examiner: Kevin LaBumbard Map Revised: 7/16/2015 Map Phase: Pre-Review

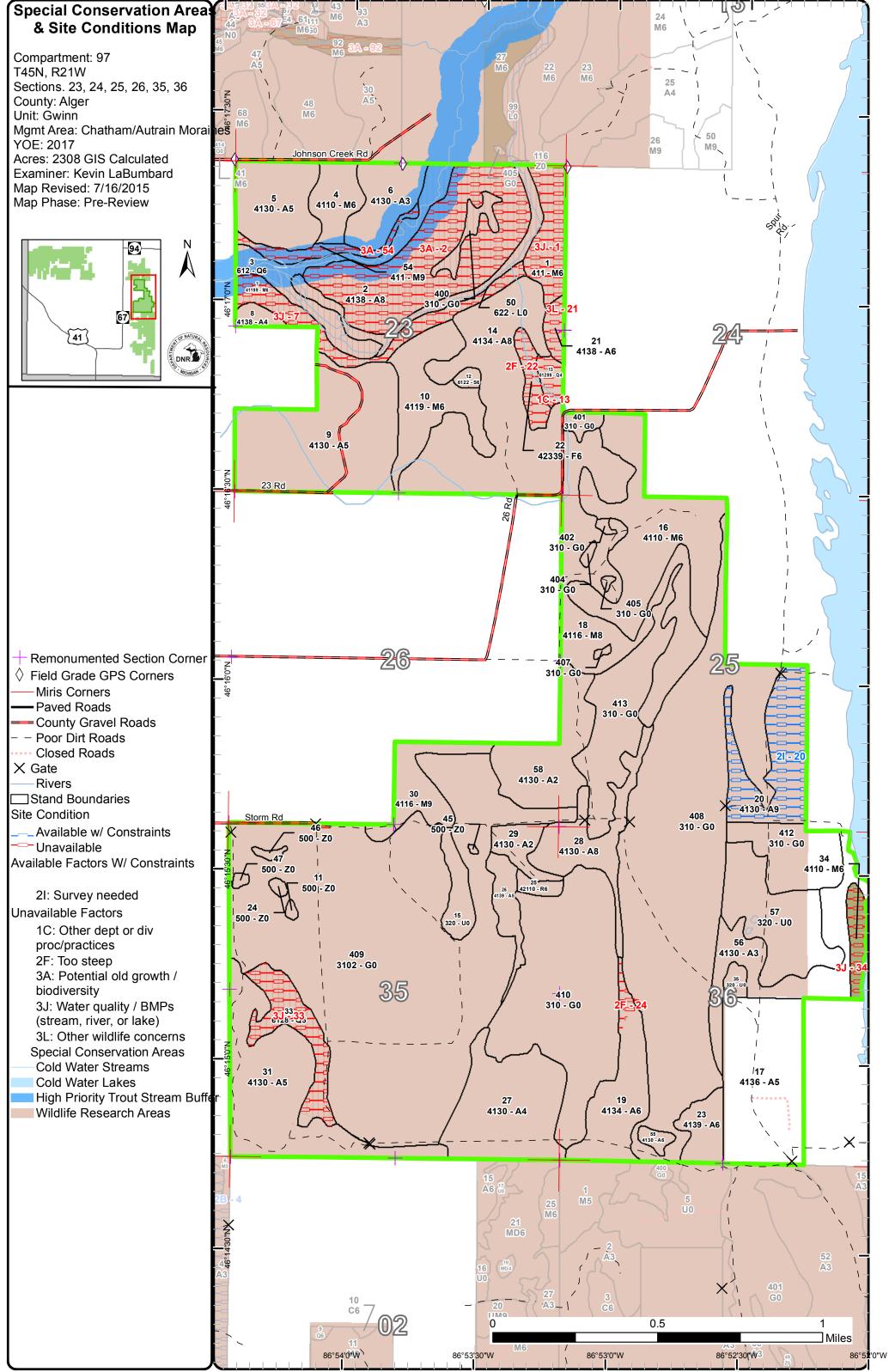




310 - Herbaceous Openland



320 - Upland Shrub 500 - Water 622 - Lowland Shrub



Gwinn Mgt. Unit

Kevin LaBumbard : Examiner





Age Class

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Aspen	0	0	27	375	234	45	51	49	0	103	0	0	0	0	0	0	0	0	884
Cropland	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304
Herbaceous Openland	592	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	592
Lowland Conifers	0	0	0	0	0	0	0	0	35	0	6	0	28	0	0	0	0	0	69
Lowland Shrub	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Northern Hardwood	0	0	0	0	25	0	0	0	0	0	0	111	0	0	0	0	0	210	346
Red Pine	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Upland Shrub	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	991	0	27	375	263	45	51	49	35	116	6	111	28	0	0	0	0	210	2307



Compartment	97
Total Compartment Acres:	2.308

Year of Entry: 2017	Acres of Harvest	Total Compartment Acres: 2,308
	Commercial Harvest - 50	
	Harvests with Site Condition - 0	
	Next Step Harvest - 0	
	Habitat Cut - 0	

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method

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Current		50	0	316	0	458	0	0	0	436	1260	
Next Step		0	0	316	0	561	401	695	0	1762	3736	
	Total	50	0	631	0	1019	401	695	0	2198	4996	

S t		Gwinn Mgt. Unit Report 4 Treatments							•	ment: 97 Entry: 2017	DRR DRR
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
15	32097015- Burn	13.1	320 - Upland Shrub	Nonstocke	0 b	Unspec ified	Burn	Opening	320 - Upland Shrub		Proposal
	<u>s:</u> succes openla	sion that nd assoc	Site Condition: e Area - a unique SG is occurring, reducin iated species, black for removal of encroact	g the suitab bear, and w	ility of s hitetaile	sharptaileo ed deer. N	d grouse habitat Mechanical treat	 Burning will enhalt tment may be used 	ance habitat and s	oft mast need	ed for
<u>Next</u> Treat	<u>Step</u> Burn, (ments:	Opening;	NonForestMgt, Brus	sh Cutting;	Monito	oring, Othe	er - Specify				
Rege Other Comr	<u>Mecha</u> <u>ment:</u>		tment may include tre	ees > 4 inch	dbh.	Old next s	tep comments:				
Propo 18	32097018-	<u>:</u> 10/1 92.5	4116 - Mixed N.	Sawtimber	101	51-80	Planting	Interplant	411 - Northern	Uneven-	Proposal
	Plant tat Cut: Yes	02.0	Hardwood - Aspen Site Condition:	Medium		01.00		merpian	Hardwood	Aged	. iopoodi
	cription Forwar	d FTP W	32-804 approved in 2	2013. Plan	ting of	hard and/o	or soft mast tree	es and/or shrubs to	benefit wildlife.		
<u>Next</u> Treat	<u>Step</u> Plantin <u>ments:</u>	ig, Interpl	ant; Monitoring, Othe	er - Specify							
<u>Acce</u> <u>Reg</u> e		tment of	a portion of the trees/	shrubs plan	ted for	the benef	it of wildlife spe	cies.			
<u>Other</u> Comr	-	ext step (comments:								
Propo	osed Start Date	<u>e:</u> 10/1	/2016								
19	32097019- Plant	41.0	4134 - Aspen, Spruce/Fir	Poletimber Well	46	81-110	Planting	Interplant	413 - Aspen	Even-Aged	Proposal
		d FTP W	Site Condition: 32-804 approved in 2		•	hard and/o	or soft mast tree	es and/or shrubs to	benefit wildlife.		
	<u>Step</u> Plantin ments:	ıg, Interpl	ant; Monitoring, Othe	er - Specify							
<u>Acce</u> <u>Rege</u>		tment of	a portion of the trees/	shrubs plan	ted for	the benef	it of wildlife spe	cies.			
<u>Other</u> Comr		ext step (comments:								
Propo	osed Start Date	<u>e:</u> 10/1	/2016								
23	32097023-Cut	15.7	4139 - Aspen, Mixed Deciduous	Poletimber Well	56	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
		arvest of	Site Condition: aspen retaining cher	ry and elm.							
<u>Next</u> Treat	<u>Step</u> ments:										
<u>Acce</u> Rege	<u>ptable</u> aspen, <u>n:</u>	sugar m	aple								
<u>Other</u> Comr	-	ext step o	comments:								
Propo	osed Start Date	<u>e:</u> 10/1	/2016								

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S t		C	Gwinn Mgt. Unit		Re	eport 4	Treatme	nts	•	tment: 97 Entry: 2017	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
		66.5 rd FTP W3	4130 - Aspen <u>Site Condition</u> 2-804 approved in			1-50 nard and/o	Planting or soft mast tre	Other - Specify es and/or shrubs to	413 - Aspen benefit wildlife.	Even-Aged	Proposal
<u>Next</u> Treat	<u>Step</u> Monito <u>ments:</u>		r - Specify; Plantin portion of the trees		-	the benef	it of wildlife spe	ecies.			
<u>Rege</u> <u>Other</u> <u>Comr</u>	<u>n:</u> <u>r</u> Old n	ext step co		·							
28	32097028-Cut	34.6	4130 - Aspen	Sawtimber Medium	50	1-50	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
Preso Spec	<u>s:</u>	arvest wit	Site Condition h retention areas a	<u>:</u>	ank.						
<u>Next</u> Treat	<u>Step</u> ments:										
<u>Acce</u> <u>Rege</u>	<u>ptable</u> Aspen <u>n:</u>										
<u>Other</u> Comr		ext step co	omments:								
Propo	osed Start Date	<u>e:</u> 10/1	/2016								
29	32097029- Plant	10.4	4130 - Aspen	Sapling Medium	20	Immatu re	Planting	Interplant	413 - Aspen	Even-Aged	Proposal
		rd FTP W3	Site Condition 2-804 approved in	-	ting of I	nard and/o	or soft mast tre	es and/or shrubs to	benefit wildlife.		
<u>Next</u> Treat	<u>Step</u> Plantir <u>ments:</u>	ıg, Interpla	nt; Monitoring, Oth	er - Specify							
<u>Acce</u> <u>Rege</u>		tment of a	portion of the trees	/shrubs plar	nted for	the benef	it of wildlife spe	ecies.			
<u>Other</u> <u>Comr</u>	<u>r</u> Old n	ext step co	omments:								
Propo	osed Start Date	<u>e:</u> 10/1	/2016								

S t										DNR MICHAE	
a n T d	reatment Name	Acres	Stand CoverType	Size Density		BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
32 3	2097032- Unit F	67.6	211 - Cropland	Nonstocke	d	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
	partne with D mowir agricu water openin habita	rd Out-of-E ership with t NR person ng, disking, litural pract treatments ngs will be t. All fores	the local agricultura inel. These openin and planting of for ices as needed. (C) are not to be used performed. In addi	2-848 appro al community gs will be ma age crops. Commercial f d. Managem ition, Wildlife will be follov	v. The anaged Other p other	work nee for forage ractices i and lives als may re on would a	eded will be done e crops or other may include her stock manure are equire replanting also like to plant	to manage these o e with the help of sh herbaceous openla bicide use, fertilizing e acceptable fertilizing of forage crops as trees or shrubs with nted. All trees, shru	arecropping, thro nd types. Mech g, mowing, frost-s er options howev needed. Annua hin these opening	ough the use o anical treatme seeding, and o er, bio-solids (al maintenance s to enhance	of contracts, or ent may include other normal (human waste e of these wildlife
Next Ste Treatme Acceptal	nts: Skidd			tMgt, Herba	ceous/C	Crop/Gras	s Planting; No	nForestMgt, Fruit T	ree/Shrub Plantir	ig; Pesticide,	,
<u>Regen:</u> <u>Other</u> <u>Commer</u>	Oldı	next step co	omments:								
	d Start Dat	<u>e:</u> 10/1	/2016								
36 3	2097036- Unit M	33.8 2	2113 - Forage Crop	s Nonstocke	d	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
Specs:	with D mowir agricu water openin habita	NR person ng, disking, Itural pract treatments ngs will be t. All fores	nel. These openin and planting of for ices as needed. (C) are not to be used performed. In additional contents of the	gs will be ma age crops. Commercial f d. Managem ition, Wildlife will be follow	anaged Other p ertilizer nent goa Divisio ved. N	for forage practices of and lives als may re on would a	e crops or other may include her stock manure are equire replanting also like to plant	e with the help of sh herbaceous openla bicide use, fertilizing e acceptable fertilizing of forage crops as trees or shrubs with nted. All trees, shru	nd types. Mech g, mowing, frost-s er options howev needed. Annua nin these opening	anical treatme seeding, and c er, bio-solids (Il maintenance gs to enhance	ent may include other normal (human waste e of these wildlife
Next Ste Treatme Acceptal Regen:	nts: Skidd	0.		rass Planting	g; Non	ForestMo	gt, Mowing; No	nForestMgt, Fruit Ti	ree/Shrub Plantir	ıg; Pesticide,	
<u>Other</u> Commer		next step co	omments:								
_	d Start Dat		/2016								
<u>Habitat</u>	partne with D mowir agricu water openin habita	rd Out-of-E ership with i NR person ng, disking, litural pract treatments ngs will be t. All fores	the local agricultura inel. These openin and planting of for ices as needed. (C) are not to be used performed. In addi	2-848 appro al community gs will be ma age crops. Commercial f d. Managem ition, Wildlife will be follov	ved in A /. The anaged Other p certilizer nent goa Divisio ved. N	ified April of 20 work nee for forage practices i and lives als may re n would a	115. The goal is ded will be done e crops or other may include her stock manure arr equire replanting also like to plant	Herbaceous/Crop /Grass Planting to manage these o e with the help of sh herbaceous openia bicide use, fertilizing e acceptable fertilizing of forage crops as trees or shrubs with hted. All trees, shru	penings for wildli arecropping, thro nd types. Mech g, mowing, frost-s er options howev needed. Annua nin these opening	ough the use o anical treatme seeding, and o er, bio-solids (al maintenance s to enhance	of contracts, or ent may include other normal (human waste e of these wildlife
<u>Next Ste</u> <u>Treatme</u> <u>Acceptal</u>	nts: Planti		er/Mechanical; No	nForestMgt,	Mowing	g; NonF	orestMgt, Herba	ceous/Crop/Grass I	Planting; NonFc	orestMgt, Fruit	Tree/Shrub
<u>Acceptai</u> <u>Regen:</u> <u>Other</u> Commer	Old	next step co	omments:								
	d Start Dat	<u>e:</u> 10/1	/2016								

			G	Swinn Mgt. Unit		Report 4	Treatme	nts	Compart	ment: 97	ALOF NATURAL PE
S t									Year of	Entry: 2017	DNR DNR
a n d		tment me	Acres	Stand CoverType	Size Sta Density Aç		Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
38		7038- iit K	30.1	31021 - Cool Season Grass	Nonstocked	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	31021 - Cool Season Grass		Proposal
		<u>ıt:</u> Yes		Site Condition							· · · · · · ·
Presc Specs		goal is with the herbace herbicic are acc replanti plant tre	to manage help of sl eous open le use, fer eptable fe ng of forage ees or shru	e these openings for harecropping, throu- land types. Mech tilizing, mowing, fro rtilizer options how ge crops as needed ubs within these op	or wildlife and to ugh the use of co anical treatment ost-seeding, and rever, bio-solids d. Annual main penings to enhar	create a par ontracts, or v may include other norma (human was tenance of t ace wildlife h	thership with the with DNR person e mowing, diskin al agricultural pra- te water treatme hese openings w abitat. All forest	Out-of-Entry Year F a local agricultural c inel. These opening g, and planting of fc actices as needed. ints) are not to be u vill be performed. In certification rules v ative or are conside	ommunity. The gs will be manage prage crops. Oth Commercial fert sed. Manageme n addition, Wildliff vill be followed.	work needed to ed for forage on her practices n ilizer and lives nt goals may n e Division wou No GMO plan	will be done rops or other hay include stock manure require ild also like to
				erbaceous/Crop/G r/Mechanical	rass Planting; E	3urn, Openir	ng; NonForest№	lgt, Mowing; NonF	örestMgt, Fruit T	ree/Shrub Pla	nting;
<u>Regei</u>											
<u>Other</u> Comr		Old ne	ext step co	omments:							
Propo	sed St	art Date:	. 10/1 /	2016							
39		7039- nit J	33.2	3102 - Grass	Nonstocked	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
Presc Specs		partners with DN mowing agricult water tr opening habitat.	ship with the IR person I, disking, ural practive eatments) gs will be p All forest	he local agricultura nel. These opening and planting of fora ces as needed. C are not to be used performed. In addi	al community. T gs will be manag age crops. Othe commercial fertili d. Management tion, Wildlife Div will be followed.	he work nee ged for forag er practices zer and lives goals may r ision would No GMO p	eded will be done e crops or other may include her stock manure are equire replanting also like to plant	to manage these o e with the help of sh herbaceous openla bicide use, fertilizing e acceptable fertilizing of forage crops as trees or shrubs with hted. All trees, shru	arecropping, thro nd types. Mech g, mowing, frost-s er options howev needed. Annua hin these opening	ugh the use o anical treatme seeding, and c er, bio-solids (I maintenance is to enhance	f contracts, or nt may include other normal human waste of these wildlife
<u>Next S</u> Treatr	<u>Step</u> ments:		le, Skidde	r/Mechanical; No	nForestMgt, Mov	wing; NonF	orestMgt, Herba	ceous/Crop/Grass I	Planting; NonFo	restMgt, Mow	ing
<u>Accep</u> <u>Rege</u> i	<u>otable</u> n:										
<u>Other</u> Comr		Old ne	ext step co	omments:							
Propo	sed St	art Date:	. 10/1 /	2016							
40		7040- nit I	33.3	31021 - Cool Season Grass	Nonstocked	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
Presc	ription				Prescribed burn a			Dut-of-Entry Year F			
Specs	2.	with the herbace herbicio are acc replanti plant tre	e help of sl eous open le use, fer eptable fe ng of forag ees or shru	harecropping, throu land types. Mech tilizing, mowing, fro rtilizer options how ge crops as needed ubs within these op	ugh the use of co anical treatment ost-seeding, and vever, bio-solids d. Annual main benings to enhar	ontracts, or v may include other norma (human was tenance of t nce wildlife h	with DNR person e mowing, diskin al agricultural pra te water treatme hese openings w abitat. All forest	e local agricultural c nel. These opening g, and planting of fo actices as needed. ints) are not to be u vill be performed. In c certification rules v ative or are conside	gs will be manage orage crops. Oth Commercial fert sed. Manageme n addition, Wildlife vill be followed.	ed for forage c her practices n ilizer and lives nt goals may n e Division wou No GMO plan	rops or other nay include stock manure require Id also like to
<u>Next S</u> Treati	<u>Step</u> ments:		pening; l	NonForestMgt, Mo	wing; NonFore	stMgt, Herba	aceous/Crop/Gra	ss Planting; NonF	orestMgt, Fruit T	ree/Shrub Pla	nting
<u>Accer</u> <u>Rege</u> i	otable_ n:										
<u>Other</u> Comr		Old ne	ext step co	omments:							
Propo	sed St	art Date:	10/1 /	2016							

S	Gwinn Mgt. Unit Report 4 Treatments Compartment: 9 Year of Entry: 2										AND PRATURAL PREMI
t									Teal Of	201 <i>1</i>	All DNR
a n ¹ d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
	32097041- Unit D	29.6		Nonstocke	d	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
	partr with mow agric wate open habit ensu	ard Out-of ership with DNR perso ing, diskin ultural pra r treatmen ings will b at. All fore re they are	Site Condition Entry Year FTP W3 h the local agricultura onnel. These openin g, and planting of for- ctices as needed. C ts) are not to be user e performed. In addi est certification rules e native or are consid	2-848 approv al community gs will be ma age crops. Commercial fo d. Managem tion, Wildlife will be follow lered non-inv	. The anaged Other p ertilizer ent goa Divisio ved. N vasive.	work nee for forage practices i and lives als may re n would a o GMO p	ded will be done e crops or other may include herk tock manure are equire replanting also like to plant lants will be plan	with the help of sh herbaceous openla picide use, fertilizing acceptable fertilize of forage crops as trees or shrubs with tred. All trees, shru	arecropping, thro nd types. Mecha g, mowing, frost-s er options howeve needed. Annua hin these opening ubs, and seed mi	ugh the use o anical treatme seeding, and c er, bio-solids (I maintenance is to enhance xes will be sel	f contracts, or nt may include ther normal human waste of these wildlife ected to
<u>Next Ste</u> Treatme	ents: Plan	,	der/Mechanical; No	nForestMgt,	Mowing	g; NonFo	orestMgt, Herba	ceous/Crop/Grass F	Planting; NonFo	restMgt, Fruit	Tree/Shrub
<u>Accepta</u> Regen:	<u>able</u>										
<u>Other</u> Comme	ent:		comments:								
	ed Start Da		1 /2016	Necestaria	-1				011 Craptor d		Dranaal
42 3	32097042- Unit A	40.3	3 211 - Cropland	Nonstocke	a	ified	NonForestivigt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
Next Sto	mow agric wate open habit ensu ep_ Nonf	ing, diskin ultural pra r treatmen ings will b at. All fore re they are	onnel. These openin g, and planting of for- ctices as needed. C ts) are not to be used e performed. In addi est certification rules e native or are consid Mowing; NonFores	age crops. Commercial fu d. Managem tion, Wildlife will be follow lered non-inv	Other p ertilizer ent goa Divisio ved. N vasive.	and lives and lives als may re n would a o GMO p	nay include herk tock manure are equire replanting Ilso like to plant lants will be plar	bicide use, fertilizing e acceptable fertilize of forage crops as trees or shrubs with tted. All trees, shru	g, mowing, frost-ser options howeve needed. Annua hin these opening ubs, and seed mi	seeding, and c er, bio-solids (I maintenance Is to enhance xes will be sel	ther normal human waste of these wildlife ected to
Treatme	<u>ents:</u> Skide	ler/Mecha	nical								
Regen:											
<u>Other</u> Comme		next step	comments:								
Propose	ed Start Da	<u>te:</u> 10/	1 /2016								
	32097043- Unit C	32.9		Nonstocke	d	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
	partr with mow agric wate open habit	ard Out-of ership with DNR perso ing, diskin ultural pra r treatmen ings will b at. All fore	Site Condition Entry Year FTP W3 h the local agricultura onnel. These openin g, and planting of for- ctices as needed. C ts) are not to be used e performed. In addi est certification rules e native or are conside	2-848 approv al community gs will be ma age crops. Commercial fu d. Managem tion, Wildlife will be follow	The anaged Other p ertilizer ent goa Divisio ved. N	work nee for forage practices i and lives als may re n would a	ded will be done e crops or other may include herk tock manure are equire replanting also like to plant	with the help of sh herbaceous openla bicide use, fertilizing acceptable fertilize of forage crops as trees or shrubs with	arecropping, thro nd types. Mecha g, mowing, frost-s er options howeve needed. Annua nin these opening	ugh the use o anical treatme seeding, and c er, bio-solids (I maintenance is to enhance	f contracts, or nt may include ther normal human waste of these wildlife
<u>Next Ste</u> Treatme			der/Mechanical; No	nForestMgt,	Mowing	g; NonFo	orestMgt, Herba	ceous/Crop/Grass F	Planting; NonFo	restMgt, Fruit	Tree/Shrub
<u>Accepta</u> <u>Regen:</u>	able_										
<u>Other</u> Comme		next step	comments:								
Propose	ed Start Da	<u>te:</u> 10/	1 /2016								

S t		C	Gwinn Mgt. Unit		Re	eport 4	Treatme	ents	•	ment: 97 Entry: 2017	DRR DRR C
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
44	32097044- Unit B	34.8	211 - Cropland	Nonstocke	d	Unspec ified	NonForestMgt	t Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
	<u>s:</u> partne with I mowi agricu water openi habita	ard Out-of-E ership with t DNR person ng, disking, ultural practi treatments ngs will be p at. All fores	he local agricultura nel. These openin and planting of for ces as needed. C) are not to be used performed. In addi	2-848 appro l community gs will be ma age crops. commercial f d. Managen tion, Wildlife will be follow	v. The anaged Other p other	work nee for forage practices i and lives als may re on would a	ded will be don e crops or other may include he tock manure a equire replantin also like to plan	s to manage these of e with the help of sh r herbaceous openla rbicide use, fertilizing re acceptable fertiliz g of forage crops as t trees or shrubs with inted. All trees, shru	arecropping, thro nd types. Mech g, mowing, frost-s er options howev needed. Annua hin these opening	ugh the use of anical treatme seeding, and o er, bio-solids (I maintenance is to enhance	f contracts, or nt may include ther normal human waste of these wildlife
<u>Next</u> Treat	<u>Step</u> Pestio <u>ments:</u> Planti		er/Mechanical; No	nForestMgt,	Mowing	g; NonFo	orestMgt, Herba	aceous/Crop/Grass I	Planting; NonFo	restMgt, Fruit	Tree/Shrub
<u>Acce</u> <u>Rege</u>	<u>otable</u> n:										
<u>Other</u> Comr		next step co	omments:								
Propo	osed Start Dat	<u>e:</u> 10/1	/2016								
57	32097057- Plant	52.1 3	320 - Upland Shrub	Nonstocke	d 0	Unspec ified	Planting	Interplant	320 - Upland Shrub		Proposal
			Site Condition	-	iting of	hard and/	or soft mast tre	es and/or shrubs to	benefit wildlife.		
<u>Next</u> Treat	<u>Step</u> Planti ments:	ng, Interpla	nt; Monitoring, Oth	er - Specify							
<u>Acce</u> <u>Rege</u>		iitment of a	portion of the trees	/shrubs plar	nted for	the bene	fit of wildlife spe	ecies.			
<u>Other</u> Comr		next step co	omments:								
Propo	osed Start Dat	<u>e:</u> 10/1 /	/2016								
58	32097058- Plant	44.6	4130 - Aspen	Sapling Medium	20	Immatu re	Planting	Interplant	413 - Aspen	Even-Aged	Proposal
			Site Condition		iting of	hard and/	or soft mast tre	ees and/or shrubs to	benefit wildlife.		
<u>Next</u> Treat	<u>Step</u> Planti ments:	ng, Interpla	nt; Monitoring, Oth	er - Specify							
<u>Acce</u> <u>Rege</u>		iitment of a	portion of the trees	/shrubs plar	nted for	the bene	fit of wildlife spe	ecies.			
<u>Other</u> Comr		next step co	omments:								
<u>Propo</u>	osed Start Dat	<u>e:</u> 10/1 /	/2016								

S t		G	winn Mgt. Unit	R	eport 4	Treatmer	nts		tment: 97 Entry: 2017	DRR DR REAL
a n d	Treatment Name	Acres	Stand CoverType	Size Stand Density Age		Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
401	32097401- Plant	4.6	310 - Herbaceous Openland	Nonstocked	Unspec ified	Planting	Interplant	3102 - Grass		Proposal
		d FTP W3	Site Condition: 2-804 approved in 2	2013. Planting of	f hard and/c	or soft mast tree	es and/or shrubs to	benefit wildlife.		
	<u>Step</u> Plantin tments:	g, Interplar	nt; Monitoring, Othe	er - Specify						
<u>Acce</u> <u>Rege</u>		ment of a	portion of the trees/	shrubs planted fo	r the benefi	t of wildlife spe	cies.			
<u>Othe</u> Com	<u>r</u> Old ne ment:	ext step co	mments:							
Prop	osed Start Date	<u>:</u> 10/1 /	2016							
402	32097402- Plant	1.2 🗧	310 - Herbaceous Openland	Nonstocked	Unspec ified	Planting	Interplant	3102 - Grass		Proposal
		d FTP W3	Site Condition: 2-804 approved in 2	013. Planting of	f hard and/c	or soft mast tree	es and/or shrubs to	benefit wildlife.		
	<u>Step</u> Plantin tments:	g, Interplar	nt; Monitoring, Othe	er - Specify						
<u>Acce</u> <u>Reg</u> e		ment of a	portion of the trees/	shrubs planted fo	r the benefi	t of wildlife spe	cies.			
<u>Othe</u> Com	<u>r</u> Old ne ment:	ext step co	mments:							
Prop	osed Start Date	<u>:</u> 10/1 /	2016							
404	32097404- Plant	1.3 3	310 - Herbaceous Openland	Nonstocked	Unspec ified	Planting	Interplant	3102 - Grass		Proposal
		d FTP W3	Site Condition: 2-804 approved in 2	2013. Planting of	f hard and/c	or soft mast tree	es and/or shrubs to	o benefit wildlife.		
	<u>Step</u> Plantin tments:	g, Interplar	nt; Monitoring, Othe	er - Specify						
<u>Acce</u> Rege		iment of a	portion of the trees/	shrubs planted fo	r the benefi	t of wildlife spe	cies.			
	ment:	ext step co	mments:							
Prop	osed Start Date	<u>:</u> 10/1 /	2016							
405	32097405- Plant	0.8 3	310 - Herbaceous Openland	Nonstocked	Unspec ified	Planting	Interplant	3102 - Grass		Proposal
		d FTP W3	Site Condition: 2-804 approved in 2	013. Planting of	f hard and/c	or soft mast tree	es and/or shrubs to	benefit wildlife.		
Next		g, Interplar	nt; Monitoring, Othe	er - Specify						
Treat	inchis.		.,							
Treat	ptable Recruit	ment of a	portion of the trees/s	shrubs planted fo	r the benefi	t of wildlife spe	cies.			
Treat Acce Rege Othe	<u>ptable</u> Recruit <u>en:</u>	tment of a period	portion of the trees/	shrubs planted fo	r the benefi	t of wildlife spe	cies.			

S t			Gwinn Mgt. Unit		Re	eport 4	Treatme	nts	•	tment: 97 Entry: 2017	DRR DR
	eatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
	2097407- Plant	0.7	310 - Herbaceous Openland	Nonstocke	d	Unspec ified	Planting	Interplant	3102 - Grass		Proposal
	<u>Cut:</u> Yes ion Forward	d FTP W	Site Condition 32-804 approved in		ting of	hard and/o	or soft mast tre	es and/or shrubs to	benefit wildlife.		
<u>Next Step</u> Treatment		g, Interpla	ant; Monitoring, Oth	er - Specify							
<u>Acceptabl</u> <u>Regen:</u>	<u>le</u> Recruit	ment of a	a portion of the trees	/shrubs plar	nted for	the benef	it of wildlife spe	ecies.			
<u>Other</u> Comment	<u>t:</u>		omments:								
Proposed	Start Date:	10/1	/2016								
	2097408- Burn <u>Cut:</u> Yes	263.1	310 - Herbaceous Openland Site Condition		d	Unspec ified	Burn	Opening	3102 - Grass		Proposal
Prescription Specs: Next Step Treatment	success openlar or if me <u>o</u> Burn, C	sion that nd associ chanical	Area - a unique SG is occurring, reducir ated species, black removal of encroad NonForestMgt, Bru	ng the suitab bear, and w chment will in	hitetaile ncrease	sharptaile ed deer. N e the effec	d grouse habita Mechanical trea tiveness of the	it. Burning will enh atment may be use	ance habitat and	soft mast need	ded for
<u>Acceptabl</u> <u>Regen:</u>	<u>le</u>										
<u>Other</u> Comment	<u>t:</u>		tment may include to	rees > 4 incl	n dbh.	Old next s	step comments	:			
Proposed	Start Date:	10/1	/2016								
, i	2097409- Unit H	39.2	211 - Cropland	Nonstocke	d	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
	goal is with the herbace herbicic are acc replanti plant tre	to manage help of seous ope de use, fe eptable f ng of fora ees or sh	Site Condition lum to FTP32-683 p ge these openings for sharecropping, throu nland types. Mecha ertilizer, mowing, fro ertilizer options how age crops as needed rubs within these op es, shrubs, and seed	rescribed bu or wildlife an ugh the use anical treatn ost-seeding, ever, bio-so d. Annual n oenings to en	d to cre of contr nent ma and oth lids (hu nainten nhance	ate a part acts, or w ay include ner norma man wast ance of th wildlife ha	nership with the rith DNR persor mowing, diskir I agricultural pr e water treatme ese openings v abitat. All fores	e local agricultural nnel. These openir ng, and planting of f actices as needed. ents) are not to be will be performed. t certification rules	community. The ogs will be manage orage crops. Oth Commercial fert used. Manageme In addition, Wildlif will be followed.	work needed ed for forage on her practices n tilizer and lives nt goals may e Division wou No GMO plan	will be done crops or other nay include stock manure require ild also like to
<u>Next Step</u> Treatment	<u>)</u> Burn, C <u>its:</u> Skidder		NonForestMgt, Mo ical	wing; NonF	ForestM	gt, Herba	ceous/Crop/Gra	ass Planting; Non	ForestMgt, Mowin	g; Pesticide,	
<u>Acceptabl</u> <u>Regen:</u>	<u>le</u>										
<u>Other</u> Comment		ext step c	omments:								
Proposed	Start Date:	10/1	/2016								

S t			Gwinn Mgt. Unit		Re	eport 4	Treatme	nts	-	tment: 97 Entry: 2017	DRR DRR
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
410	32097410- Burn	128.7	310 - Herbaceous Openland	Nonstocke	ed	Unspec ified	Burn	Opening	3102 - Grass		Proposal
	<u>s:</u> succes openla	sion that nd assoc	Site Condition: e Area - a unique SG is occurring, reducir iated species, black I removal of encroac	A with over g the suitat bear, and w	oility of a	sharptaile ed deer. N	d grouse habita Mechanical trea	at. Burning will enhatment may be used	ance habitat and	soft mast need	ded for
<u>Next :</u> Treati	<u>Step</u> Burn, (<u>ments:</u>	Opening;	NonForestMgt, Brus	sh Cutting							
<u>Accep</u> <u>Rege</u> i	<u>otable</u> n:										
<u>Other</u> Comr		nical trea	tment may include tr	ees > 4 inc	h dbh.	Old next s	step comments	:			
Propo	sed Start Date	<u>:</u> 10/1	/2016								
412	32097412-NF	33.6	310 - Herbaceous Openland	Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	211 - Cropland		Proposal
	tat Cut: Yes		Site Condition: Entry Year FTP W32	-							
Specs	with DI mowin agricul water t openin habitat	NR perso g, disking tural prac reatment gs will be . All fore	the local agricultura nnel. These opening and planting of fora- trices as needed. C s) are not to be used performed. In addit st certification rules native or are consid	gs will be mage crops. ommercial f I. Managem ion, Wildlife will be follow	anaged Other p fertilizer nent go Divisic wed. N	l for forage practices r r and lives als may re on would a	e crops or other nay include her tock manure ar equire replanting Iso like to plant	herbaceous openla rbicide use, fertilizin re acceptable fertiliz g of forage crops as t trees or shrubs wit	and types. Mech lg, mowing, frost-s zer options howev s needed. Annua thin these opening	anical treatme seeding, and c er, bio-solids al maintenance gs to enhance	ent may include other normal (human waste e of these wildlife
<u>Next S</u> Treati	<u>Step</u> Pestici <u>ments:</u> Plantin		der/Mechanical; Nor	nForestMgt,	Mowin	g; NonFo	orestMgt, Herba	aceous/Crop/Grass	Planting; NonFo	orestMgt, Fruit	Tree/Shrub
<u>Accep</u> <u>Rege</u> i	<u>otable</u> n:										
<u>Other</u> Comr		ext step o	comments:								
Propo	sed Start Date	<u>:</u> 10/1	1 /2016								
413	32097413- Burn	53.4	310 - Herbaceous Openland	Nonstocke	ed	Unspec ified	Burn	Opening	3102 - Grass		Proposal
	<u>s:</u> succes openla	sion that nd assoc	Site Conditions e Area - a unique SG is occurring, reducir iated species, black removal of encroad	A with over the suitat bear, and w	oility of a	sharptaile ed deer. N	d grouse habita Mechanical trea	at. Burning will enhatment may be used	ance habitat and s	soft mast need	ded for
<u>Next S</u> Treatr	<u>Step</u> Burn, C <u>ments:</u>	Opening;	NonForestMgt, Bru	sh Cutting;	Monito	oring, Natu	ural Regen (Inte	ermediate)			
<u>Accer</u> Reger	<u>otable</u> n:										
<u>Other</u> Comr		nical trea	tment may include tr	ees > 4 inc	h dbh.	Old next s	step comments	:			
Propo	sed Start Date	<u>:</u> 10/1	I /2016								
Ac	Total Treatme creage Propos		258.9								

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 97 Year of Entry: 2017

Availability for Management

Total	Acres	Acres Avail	Acres	Γ	Dominai	nt Site	e Cono	ditions	6	
Acres	Available	With Condition	Not Available		21	1C	2F	ЗA	3J	3L
882	726	49	106	Aspen	49		4	96		7
304	304	0	0	Cropland						
592	591	0	0	Herbaceous Openland			0			
70	37	0	33	Lowland Conifers		6			27	
20	20	0	0	Lowland Shrub						
3	3	0	0	Lowland Spruce/Fir						
346	272	0	75	Northern Hardwood				11	64	
4	4	0	0	Red Pine						
69	69	0	0	Upland Shrub						
10	0	0	10	Upland Spruce/Fir			10			
6	6	0	0	Water						
2,306	2,032	49	225	Total Forested Acres	49	6	15	107	90	7
-	88%	2%	10%	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 ond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
I	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	25	3G: Other Influence zones - See comments	2F: Too steep	Unspecified	Unspecified
Co	mments:						
2	Unavailable	3A: Potential old growth / biodiversity	96	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3G: Other Influence zones - See comments	3J: Water quality / BMPs (stream, river, or lake)	Unspecified
Cor	mments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	28	3G: Other Influence zones - See comments	2F: Too steep	Unspecified	Unspecified
Со	mments:						

_		Gwinn Mgt. Unit nbard : Examiner		Report 5 – Site Co	nditions	Compartment: 97 Year of Entry: 2017	
13	Unavailable	1C: Other dept or div proc/practices	6	2G: Too wet (sensitive soils, does not include access issues)	4A: No Markets Available for these Forest Products	Unspecified	Unspecified
	Comments:						
20	Available	2I: Survey needed	49	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
21	Unavailable	3L: Other wildlife concerns	7	1D: Interest Group / Neighbor	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified
	Comments:						
22	Unavailable	2F: Too steep	11	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
	Comments:						
24	Unavailable	2F: Too steep	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
33	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	27	3G: Other Influence zones - See comments	3J: Water quality / BMPs (stream, river, or lake)	3K: Rare or unique landforms	Unspecified
	Comments:						

		Gwinn Mgt. Unit mbard : Examiner		Report 5 – Site Cond	litions	Compartment: 97 Year of Entry: 20	
34	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
C	comments:						
37	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	11	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
40	Unavailable	3A: Potential old growth / biodiversity	10	3G: Other Influence zones - See comments	2F: Too steep	Unspecified	Unspecified
C	comments:						
41	Unavailable	3A: Potential old growth / biodiversity	30	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
C	comments:						
42	Unavailable	3A: Potential old growth / biodiversity	12	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
C	comments:						
43	Unavailable	3A: Potential old growth / biodiversity	17	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
C	comments:						

		Gwinn Mgt. Unit mbard : Examiner		Report 5 – Site Cond	itions	Compartment: 97 Year of Entry: 20	
54	Unavailable	3A: Potential old growth / biodiversity	11	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
С	omments:						



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
Basin hardwoods	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	11
Comments				
Trees are large with a lot of edge. Regeneration is 8' tall	rot, cankers and other defects. Muc well-stocked sugar maple.	ch pulp and low quality logs. Goo	d den trees here. Hardwood rig	ht to basin
Johnson Creek and tributary	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	35
Comments				
Scattered trees not thickly s Most is protected by static ri	tocked. Mix of F,Q,E types. Moxtly parian SCA, but not all.	Q. Alder in some areas. High ripa	arian values. Big cedar west alc	ng creek.
Johnson Creek bluff hardwoods	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	25
Comments				
	d but has steep hills and a ridge do ligh riparian values. Only about 1/3			stream
Johnson Creek brush	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	20
Comments				
Lowland brush with some m	arsh along Johnson creek.			
Johnson Creek island	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	96
Comments				
	o forks and rejoins downstream. Th creek. Not well-stocked mostly due			tream in
Johnson Creek island grass	Habitat Areas or Corridors	Other Habitat Area	Proposed SCA	8
Comments				
grass opening filling in a little	e bit but some beaver activity as we	ell on island between forks of Joh	nson creek.	
Johnson Creek tributary buffer	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	28
Comments				
	Some of this stand had aspen rem nardwood but sprout clumps of bas			t spots
Johnson hardwood removal 1	Other SCA		SCA Removal	11
Comments				
	was cut, buffer stand for Johnson C s protected by static riparian SCA.	reek. Large aspen. Some areas i	mostly aspen but most hardwoo	od. Thick fir
Storm Road Seep	Spring-Seeps, Riparian Areas	Spring Seep	Proposed SCA	27
Comments				
Beaver flooded area in past	but now drained(spring 2005). Dea und. Large flow of several gallons/n			lows south



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.

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 conditions stocked trout populations and those of other coldwater fish spect 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	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 cond stocked trout populations and those of other coldwater fish spec 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.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for include the 5,847 acre Forest Fire Experiment Station, the 12,00 Area, the Beaver Islands Archipelago Wildlife Research Area (th High and Hog Islands, all state owned land on Beaver, South Fo Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Re Nursery, and over 144,000 acres of Military Lands.	0 acre Houghton Lake Wildlife Research nat includes most of Garden Island, all of ox and North Fox Islands), the Cusino
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 o 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	Gwin	n Mgt. Unit		Report 8	- Forested	Stands Compartment: 97 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	411 - Northern Hardwood	Poletimber Well	24.5	178	81-110	OPIC - FMD: Part of area is nice hardwood but has steep hills and a ridge down to creek. Some aspen especially north along creek. Feeder stream southwest. Diffficult to log. High riparian values. Only about 1/3 of the stand is loggable if access could be had from private land. Mixed hardwood contains minor amounts of cherry,yellow birch,basswood. Softwood is mostly spruce and fir.
2	4138 - Aspen (OI)	Sawtimber Medium	95.8	85	51-80	OPIC - FMD: Johnson creek splits into two forks and rejoins downstream. This stand is in the center. There is also a spring fed or drainage stream in stand which joins Johnson creek. Not well-stocked mostly due to long-term beaver activity. Some patches of A6 however. Most aspen mature or overmature but some trees look a little younger and will last for a couple decades yet. Hawthorn and hazel in the understory and some open areas, some areas quite thick and inpenetrable. Grass openings throughout stand. Aspen has some hypoxylin. Some Spruce/fir type along stream where beaver have eliminated all aspen. High riparian values. Difficult and economically unfeasible to log. The small amount of hardwood here is mostly scrub cherry or red maple.
3	612 - Lowland Coniferous Forest	Poletimber Well	35.5	70	51-80	OPIC - FMD: Scattered trees not thickly stocked. Mix of F,Q,E types. Moxtly Q. Alder in some areas. High riparian values. Big cedar west along creek.
4	4110 - Sugar Maple Association	Poletimber Well	18.7	101	81-110	OPIC - FMD: Thinned under contract #36-97-01 in 1999. Some sparse areas where the aspen was cut out. Most of the stand has good quality timber and potential. Good regeneration in spots of 6' tall. Also minor amounts of yellow birch in this stand. Some ironwood especially in the regeneration. 2015-lots of trillium, pockets of older higher stocked timber. More sugar saps further south. Occasional wb,aspen, balsam fir. Lots of doubles and triples.
5	4130 - Aspen	Poletimber Medium	39.2	30	1-50	OPIC - FMD: 4"-5" average well-stocked. A lot of 2" dbh sugar maple mixed in. A few conifer. Some areas pure M3. Most of stand is 4" A3 Some F4F3 on the wetter sites especially southwest. Leeks, trillium, sm seedlings on forest floor.
6	4130 - Aspen	Sapling Well	27.2	16	Immature	OPIC - FMD: Cut under permit #36-97-01 in 1999. A3 well- stoocked 1"dbh. A few conifers mostly east. Some beaver activity converting to conifer east F2F1. Mixed hardwood,mostly cherry west mixed with the aspen. Some residual hardwood 3" sugar maple and some sugar maple seeding in as well mostly near the hardwood stands 2015-1-3" aspen over fir.
7	41199 - Northern Hardwood (OI)	Poletimber Well	28.1	178	81-110	 OPIC - FMD: Johnson creek buffer stand. Some of this stand had aspen removed in a harvest 20 years ago, mostly NW. Steep bank in most spots down to river. Good quality hardwood but sprout clumps of basswood and sugar maple are throughout. In gaps aspen is 2" also ironwood and sugar 1" in some spots. Bottom near creek has a mix of green ash and maple plus a few cedar and other softwoods. Near creek more black ash and big cedar. This stand due to it's steepness and proximity to Johnson creek is in biodiversity stewardship to protect the riparian values.
8	4138 - Aspen (OI)	Poletimber Poor	5.4	27	51-80	OPIC - FMD: A4 almost A6 well-stocked 4" dbh, some larger. Some older residual hardwood 6"dbh. Scattered sp/fir smaller 2".

S t	Gwinr	n Mgt. Unit		Report 8	- Forested	I Stands Compartment: 97 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
9	4130 - Aspen	Poletimber Medium	100.8	27	1-50	OPIC - FMD: A4 almost A6 well-stocked 4" dbh, some larger. Some older residual hardwood 6" dbh. Scatterd sp/fir 2". 2015- converting to sugar mapleaspen falling out of the stand.
10	4119 - Mixed Northern Hardwoods	Poletimber Well	44.9	178	81-110	OPIC - FMD: Cut in 1988. Thinned plus elm salvage left low BA areas then. Some areas could do a light thinning but most of stand, over 3/4, BA below 100. M3 2" dbh throughout stand and 2 stick in gaps, mostly sugar maple. Most hardwoods still crown room. Good potential. Some steep slopes especially NE. Ironwood, red maple, and aspen are most of the rest of the hardwood species here. Some softwood. 2015-stand contains large vernal pond.
12	6122 - Black Spruce	Poletimber Well	2.7	80	51-80	OPIC - FMD: S3 and up to 3-Stick spruce. Small pothole bog. vernal swale connects this with bog east.
13	61299 - Mixed Swamp Conifer (OI)	Poletimber Poor	6.2	97	1-50	OPIC - FMD: Flooded stand. Beaver sign but not present now. Scattered trees. Lowland brush in most areas.
14	4134 - Aspen, Spruce/Fir	Sawtimber Medium	114.0	39	51-80	OPIC - FMD: A6 3-4 stick average. Patches of fir 1-2 stick. Scattered balsam poplar, elm, cherry. Most of stand has 1- 2"dbh sugar maple understory. 2015-Very high site quality, trillium, may apple, cohosh. Lots of aspen going down, let convert to sugar maple. A4M3
16	4110 - Sugar Maple Association	Poletimber Well	90.2	101	51-80	OPIC - FMD: Thinned 1987. Thinned 2009 permit #31-07-01 premier logging. Steep hills in stand especially NW so those will not be marked. Stand will be reduced to about 80-90 sq ft BA leaving trees of all sizes but emphasizing opening up the good quality crop trees. At least 2 wildlife trees per acre will be left. All cedar and white pine will left. Underplant hemlock to increase diversity post harvest by wildlife division.
17	4136 - Aspen, Mixed Conifer	Poletimber Medium	79.8	27	51-80	A4T4A3 Stand was heavily defoliated 1-2 years ago and showing some stress. Natural aspen with tamarack planted in the open areas. A recent purchase from Plum Creek.
18	4116 - Mixed N. Hardwood - Aspen	Sawtimber Medium	92.5	101	51-80	OPIC - FMD: M5M2F1. Semi-open areas throughout stand. Some fully stocked areas but smaller trees on average. Former open areas seeding in. Possible to clearcut and manage for aspen in 20 years. Aspen is 4 stick and larger in spots. Hardwood is 2-3 stick and poor timber quality generally. Mostly red maple and some poor quality cherry. Some areas more pure aspen. If cut now too much poor quality residual small hardwood would be left. Recommend manage stand for aspen but check in 10-20 years. 2015 old opening that has converted to hardwoods. Also some fir in clumps and scattered.
19	4134 - Aspen, Spruce/Fir	Poletimber Well	41.0	46	81-110	OPIC - FMD: A bit more well-stocked than stand west but still not completely stocked. Semi-open areas. Mostly 3-5 stick aspen. Young yet and not good quality aspen. Some hypoxylin. Some w. pine and j. pine in stand especially SE. Cut in 10-20 years. 2015- Long ridge. Variable stand, semi open in places, heavily stocked in others. Site quality improves moving north. Much heavier to spruce/fir north. Scattered large hardwood. Stand contains approximately 4 acres of dense northern hardwoods north tip. Very steep, ancient river bank. Possibly select cut when the aspen is cut. Final harvest of aspen retaining large spruce and hardwood.

S t	Gwini	n Mgt. Unit		Report 8	– Forested	Stands	Compartment: 97 Year of Entry: 2017	DIR DATURAL PROVINCE
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	A. MICHIGAN
20	4130 - Aspen	Sawtimber Well	49.1	65	51-80	Patches of asper smaller and young 3" dbh throughout hardwood. A lot of If stand cannot b stick overmatur Occasional large	ed land survey for this stand. This a mostly mature esp. east but son ger aspen. Thick sugar maple reg so if cut some parts of stand ma this stand is A5 only. Some semi the cut, it will hold as aspen. 2015- e aspen over dense sugar maple ws, elm, basswood. Leeks, trilliu converting to northern hardwoods	ne areas of leneration 1- y convert to -open areas. Large 4-5 saplings. m, cohosh.
21	4138 - Aspen (OI)	Poletimber Well	6.7	85	81-110	convert to hardwoo looks unfeasible state has wet a contend with. We stand convert to	Iside not too steep in spots. Aspe od. Access would be good throug there due to development. Acces rea with intermittant stream and h will defer this stand this entry pe hardwood naturally and revisit fo 2017. Aspen will decline and prov and other values here.	h private but ss through nillside to riod and let or possible
22	42339 - Upland Spruce/Fir (OI)	Poletimber Well	10.5	85	51-80	hillside mostly, do	ffer stand left when stand 14 was wn to immediately wet ground. C nd possible to log. High riparian v	ouple acres
23	4139 - Aspen, Mixed Deciduous	Poletimber Well	15.7	56	81-110	hold since age is aspen is 5 stick hardwood and so smaller trees. B	s stand is merchantible and could not quite there for harvest, but is put some smaller. Diverse areas ftwood component. Some sparse asswood, balsam poplar, and rec m fir. 2015-final harvest on asper cherry, and most elm.	close. Most with heavy areas with I maple in
25	42110 - Planted Red Pine	Poletimber Well	4.3	38	141-170	by roy nelson pe	ly 3-5 stick red pine plantation. T rmit #33-07-01 Some porcupin tand will be left for diversity. 5-6	e damage.
26	4139 - Aspen, Mixed Deciduous	Poletimber Medium	13.7	36	51-80	understory. Cherry	ly 3-5 stick young aspen. 1" dbh ,sugar maple, ironwood,elm mixe wards hardwood. 2015-trillium, n	d in. Diverse
27	4130 - Aspen	Poletimber Poor	66.5	35	1-50	years. Most are aspen showin	arse in areas. Grass areas filling a trees 3-4 stick, some larger. Po g hypoxylen. Some white pine, fir , and red maple in stand. 2015-A	oor quality , cherry,
28	4130 - Aspen	Sawtimber Medium	34.6	50	1-50	M3 in most areas quality. Some c younger aspen by	stick aspen. Hypoxylen in most a red maple with some sugar. Asp f stand is hillside(ancient riverbar about 10 years. 2015- 3-5' asp classes11" and up and 6-8"	en not good nk) and is
29	4130 - Aspen	Sapling Medium	10.4	20	Immature	Some of stand is east and more	areas is coming into aspen from s scattered cherry. More well-stoc e scattered cherry or upland brush n clones with upland brushmost	ked aspen h west.

S t	Gwin	n Mgt. Unit		Report 8	- Forested	Stands	Compartment: 97 Year of Entry: 2017	TOP NATURAL PRODUCT
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	A MICHIGAN
30	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	25.4	37	81-110	of 2-3" dbh sugar mar a young hardwood st potential here for hard and manage for aspe	M6M3 just coming into pole siz ole. Some aspen on east edge and. A lot of sprout origin tree dwood management. Possible n too. Will take more than one ent. BA low in poles and overa yet for any cut.	e but mostly es but good e to clearcut e thinning to
31	4130 - Aspen	Poletimber Medium	84.8	26	51-80	except for some nor cherry. Some area residual hardwood. Fi	average 4-6" dbh well-stocke I-stocked wet swales and a fe s are 2" dbh sugar maple. So r mixed in spots. Some white ome areas still A3 4". Rubus g	w areas of me older birch on old
33	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	28.0	115	51-80	drained(spring 200 emerges from ground underground. Large settlers modified spri stream here protected C6 and Q6 south in a	eaver flooded area in past bu 05). Dead trees in those areas I north and flows south to disa flow of several gallons per mi ing origin with pipes still in pla d by biodiversity stewardship of few areas. Couple acres of up ide included. Overall stand is	s. Spring appear back nute. Early ce. Unique designation. bland 5-stick
34	4110 - Sugar Maple Association	Poletimber Well	11.1	101	81-110	defects. Much pulp a Hardwood right to l stocked sugar maple. biodiversity maintenan or hooded mergansers	e large with a lot of rot, canke nd low quality logs. Good den basin edge. Regeneration is 8 Decided to add to potential o ice to provide good habitat for s next to the basin. 2015-retai r the above habitat reasons.	trees here. 3' tall well- 1d growth or 9 wood ducks
54	411 - Northern Hardwood	Sawtimber Well	10.9	178	81-110	for Johnson Creek. La most hardwood. Tl	ood left when aspen was cut, b rrge aspen. Some areas most hick fir understory in areas. St tenance for protecting riparian	ly aspen but tand is in
55	4130 - Aspen	Poletimber Well	3.6	46	111-140	Mostly 3-5 stick aspe Some hypoxylin. Sor SE. Cut in 10-20 ye	and immediately west. Semi-c n. Young yet and not good qu ne w. pine and j. pine in stanc ars. 2015-stand small, still no t now transitioning to pole sta	ality aspen. I especially It ready to
56	4130 - Aspen	Sapling Well	49.9	25	Immature	back well-stocked asp	Ind harvested 1990 and this p en 1" dbh but some areas are ar maple site, with trillium, lea	more poorly
58	4130 - Aspen	Sapling Medium	44.6	20	Immature	Some of stand is sca east and more scatt	as is coming into aspen from fattered cherry. More well-stoc ered cherry or upland brush w nes with upland brushmostly	ked aspen vest. 2015-

Gwinn Mgt. Unit

Compartment: 97 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
11	500 - Water	1.1	No	
15	320 - Upland Shrub	13.1	No	OPIC - FMD: Cherry and maple brush coming in. Cut 1990 to provide larger area of young forest or opening for wildlife. Some sparse areas but mostly well-stocked. Some trees up to 4" dbh, but mostly 10' tall. Stand was burned as part of FTP W32- 713 on September 9, 2011. Total burn was 53 acres.
24	500 - Water	1.4	No	
32	211 - Cropland	67.6	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit F.
35	320 - Upland Shrub	4.1	No	OPIC - FMD: thick patch of hawthorn
36	2113 - Forage Crops	33.8	Yes	OPIC - FMD: This area is intensively managed by Wildlife Division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit M.
37	211 - Cropland	26.2	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit E.
38	31021 - Cool Season Grass	30.1	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit K.
39	3102 - Grass	33.2	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit J.
40	31021 - Cool Season Grass	33.3	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit I.
41	211 - Cropland	29.6	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit D.
42	211 - Cropland	40.3	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit A.
43	211 - Cropland	32.9	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit C.

Compartment: 97 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
44	211 - Cropland	34.8	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit B.
45	500 - Water	0.4	No	OPIC - FMD: DNR made pond 1980's holds water most of year.
46	500 - Water	1.6	No	OPIC - FMD: DNR made pond 1980's, holds water most of the year.
47	500 - Water	1.2	No	OPIC - FMD: DNR made pond, holds water most of the year.
50	622 - Lowland Shrub	20.3	No	OPIC - FMD: Lowland brush with some marsh along Johnson creek.
57	320 - Upland Shrub	52.1	No	OPIC - FMD: This area harvested in 1990 was mostly hardwood. Regeneration is poorly stocked cherry and red maple clumps with a few sugar maple sprouts. A few aspen clones included all about 1" dbh. Stand was harvested to provide wildlife values closer to waterfront.
400	310 - Herbaceous Openland	7.9	No	OPIC - FMD: grass opening filling in a little bit but some beaver activity as well on island between forks of Johnson creek.
401	310 - Herbaceous Openland	4.6	No	OPIC - FMD: Open area probably old pasture or other agricultural field from homestead days. Filling in with trees on edges.
402	310 - Herbaceous Openland	1.2	No	Small opening filling in.
404	310 - Herbaceous Openland	1.3	No	Small forest opening filling in.
405	310 - Herbaceous Openland	0.8	No	OPIC - FMD: OI Stand Year Origin was
407	310 - Herbaceous Openland	0.7	No	Small forest opening.
408	310 - Herbaceous Openland	263.1	Yes	OPIC - FMD: Mostly scattered cherry. Other trees invading. Would like to burn this some time this next entry period to maintain in an open condition. Central area of stand (Burn Unit 4) was treated with a Rx Burn (FTP #F32-648) on September 10, 2011. Three other burn units within this stand remain unburned (Units 1, 2 and 5), though control lines are in place. Mop-up and monitoring occurred on September 11, 2011. 2015-Grass opening converting to upland brush. Knapweed throughout. Additional burning of this stand will only hasten the conversion to brush.
409	211 - Cropland	39.2	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit H.

Compartment: 97 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
410	310 - Herbaceous Openland	128.7	Yes	OPIC - FMD: Mostly scattered cherry. Other trees invading. Would like to burn this some time this next entry period to maintain in an open condition. 2015-Grass opening converting to upland brush. Knapweed throughout. Additional burning of this stand will only hasten the conversion to brush.
412	310 - Herbaceous Openland	33.6	Yes	OPIC - FMD: This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. AuTrain Wildlife Refuge South Unit L. Very poor soils with soils described as cobbly.
413	310 - Herbaceous Openland	53.4	Yes	OPIC - FMD: Mostly scattered cherry. Other trees invading. Would like to burn this some time this next entry period to maintain in an open condition. 2015-Grass opening converting to upland brush. Knapweed throughout. Additional burning of this stand will only hasten the conversion to brush.