

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32096 Entry Year 2018 Acreage: 1,710

County Alger

Management Area: Chatham-Autrain Moraines

Revision Date: 2016-08-09 Stand Examiner: Ben Travis

Legal Description:

T44N, R21W, Sections 1, 12, and 13.

Identified Planning Goals:

Planning will focus on integrated timber management, forest recreation, fisheries management, and wildlife habitat management. Increasing public access to state lands is a high priority. Forest road monitoring/maintenance, trespass issues, forest regeneration, forest health, forest fire control, BMPs associated with watershed issues, and any resource damage incidents are all critical assessments considered during the forest cover type mapping, forest stand exams/inventory, collaborative development of proposed forest treatments, public comment documentation, and sustainable forest management planning processes.

Soil and topography:

Terrain ranges from mainly level to some north south running low ridges. Soils are predominantly upland and well drained.

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

Compartment is nearly all state ownership, with a few seasonal camps and permanent residences. A large expanse of the Hiawatha National Forest lies to the east of this compartment. The north edge of Section 1 forms a portion of the south boundary of the DNR AuTrain Waterfowl Refuge.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

State of Michigan Autrain Waterfowl Refuge is located to the immediate north of this Compartment.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Compartment 96 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.

Note: I would like to see this Compartment move out of this MA and into the Dead Horse Moraines MA

Mineral Resource and Development Concerns and/or Restrictions

Sections 1, 12, and 13, T44N R21W, Alger County

Surface sediments consist of glacial outwash sand and gravel, postglacial alluvium, and peat and muck. The glacial drift thickness varies between 0 and 50 feet. The Ordovician Trenton and Black River formations subcrop below the glacial drift. The Trenton and Black River have been quarried for stone/dolomite elsewhere in the UP. No active sand/gravel pits are located in the area. There appears to be good gravel potential but shallow bedrock may limit development. This compartment has never been leased for metallic mineral exploration and development. There is no economic oil and gas

production in the UP.

Vehicle Access:

Access is good throughout the compartment with main access provided off Trout Lake Road (plowed county gravel road), Storm Road (plowed county gravel road), and Paulson Road (plowed county gravel road). Numerous poor quality forest roads branch throughout the compartment. Stand 33 is an old gravel/sand pit off Trout Lake Road.

Survey Needs:

Numerous survey needs have recently been completed by Paul Bressette, DNR surveyor out of Gwinn.

Recreational Facilities and Opportunities:

Hunting, ORV use, snowmobiling and horseback riding are recreational pursuits.

The Autrain Waterfowl Refuge and Wildlife Management Area are located to the immediate north of this compartment.

Fire Protection:

Wildfire frequency is low in this compartment.

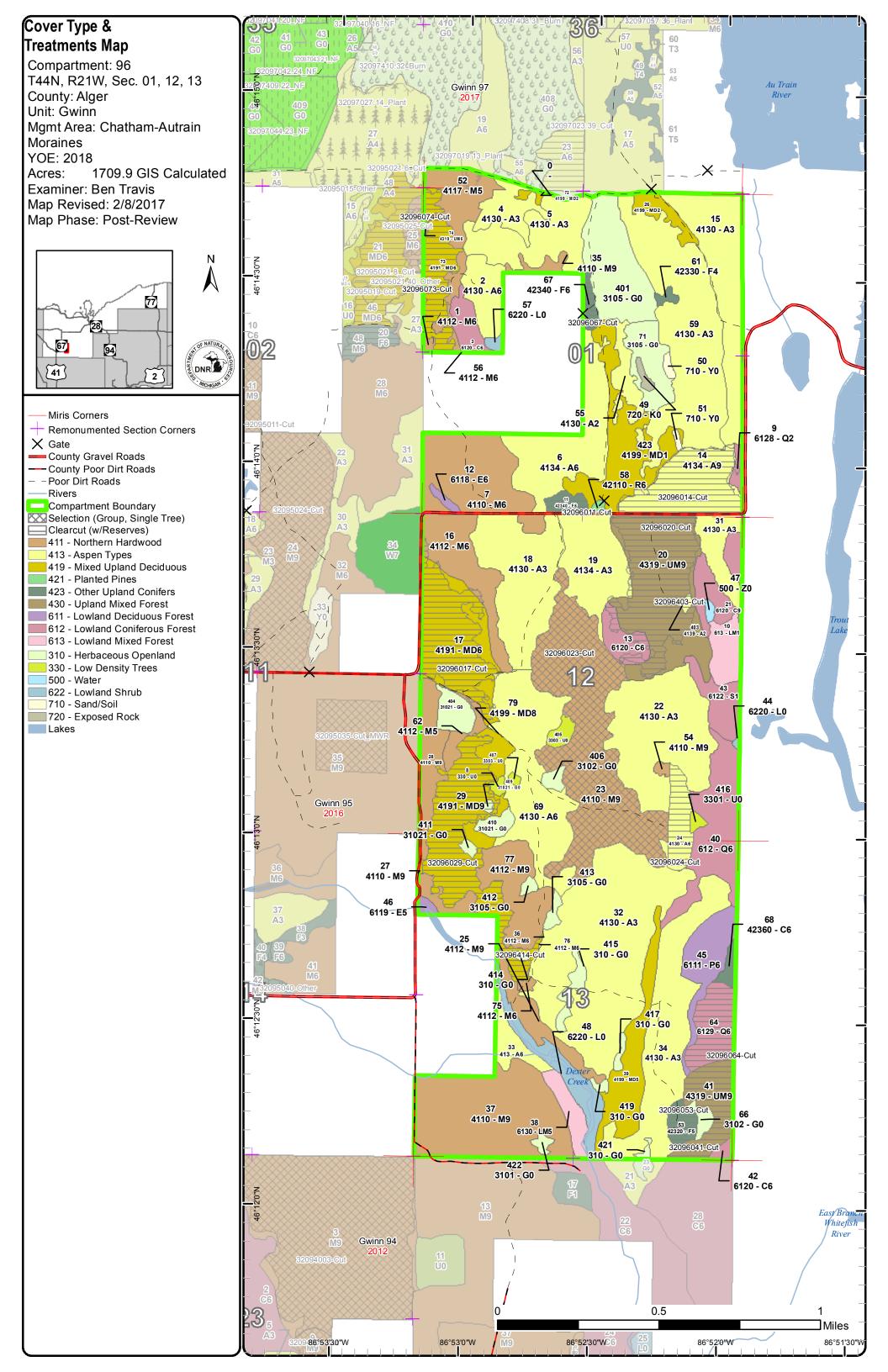
Additional Compartment Information:

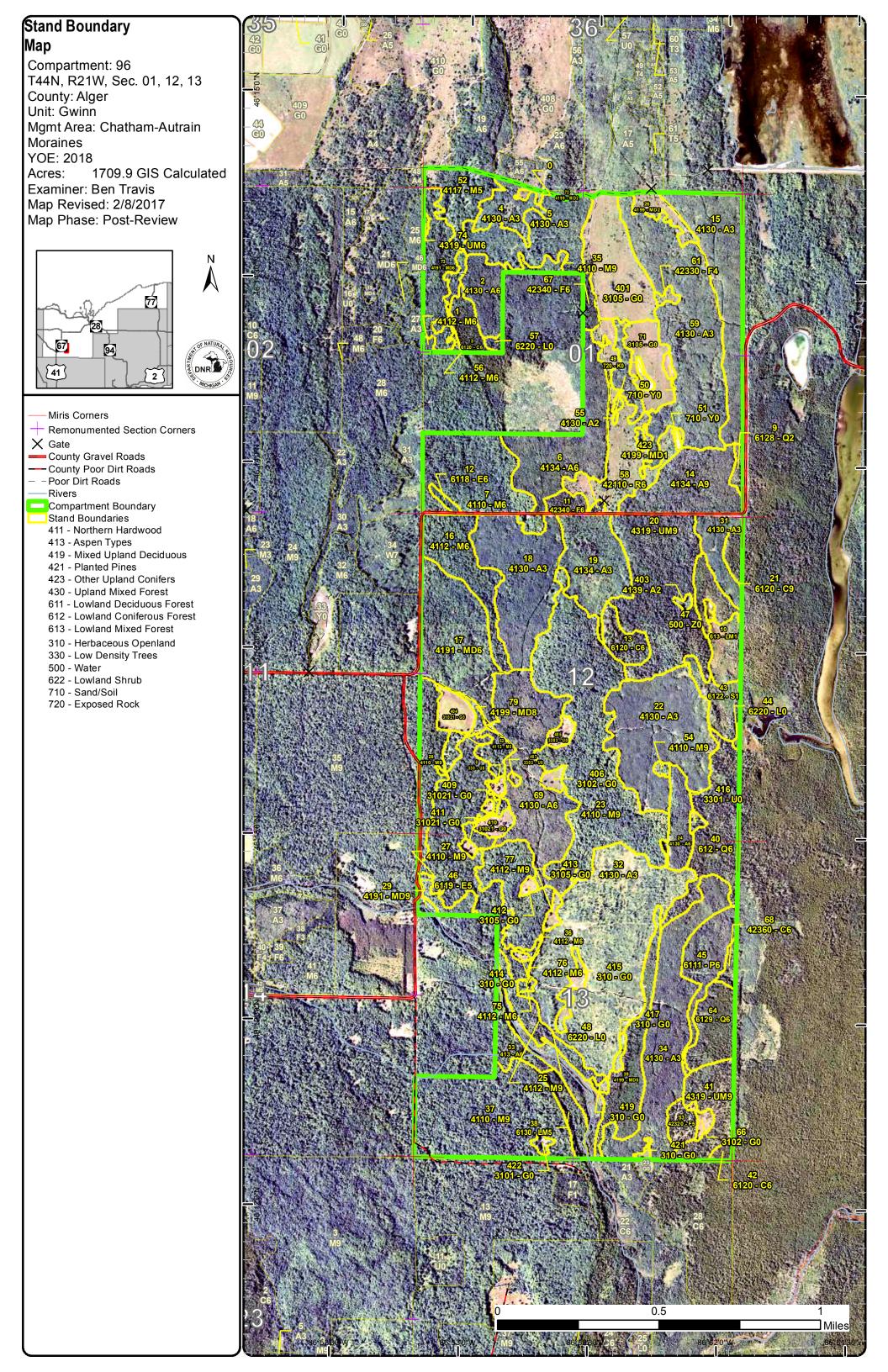
The following reports from the Inventory are attached:

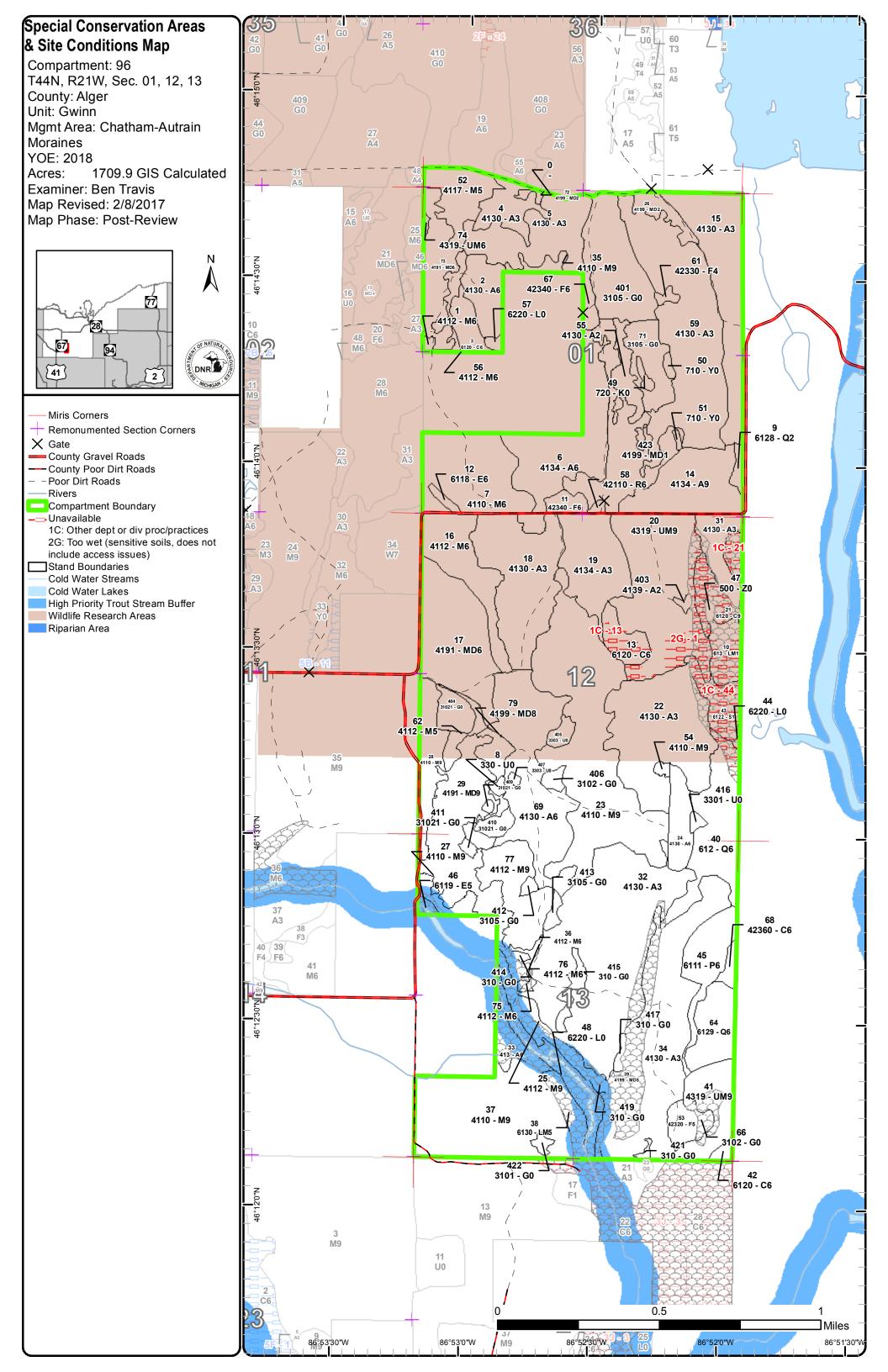
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 96

Year of Entry 2018



Gwinn Mgt. Unit Ben Travis : Examiner

Age Class

			,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	/ > /
	No.	to s				§ / &	Na Ca	, 3 / &					, Za, Za,	,			, kg	Sx Jue	See To
Aspen	0	191	226	218	0	68	36	0	0	0	0	0	0	0	0	0	0	0	738
Cedar	0	0	0	0	0	0	0	0	0	22	16	3	0	0	0	0	0	0	41
Exposed Rock	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Herbaceous Openland	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Aspen/Balsam Poplar	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Conifers	0	0	0	3	0	0	39	0	0	0	0	19	0	0	0	0	0	0	61
Lowland Deciduous	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4
Lowland Mixed Forest	0	0	0	0	0	12	9	0	0	0	0	0	0	0	0	0	0	0	21
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	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Mixed Upland Deciduous	0	38	9	0	0	51	66	50	0	0	0	0	0	0	0	0	0	0	213
Northern Hardwood	0	0	0	0	25	7	0	0	42	0	0	0	0	0	0	0	0	293	367
Red Pine	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Mixed Forest	0	0	0	0	0	0	23	72	0	0	0	0	0	0	0	0	0	0	95
Upland Spruce/Fir	0	0	0	2	0	11	0	5	0	0	0	0	0	0	0	0	0	0	18
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	120	229	235	244	25	163	173	129	44	22	16	22	0	0	0	0	0	293	1713



Report 2 – Treatment Summary

Gwinn Mgt. Unit Year of Entry: 2018

Acres of Harvest

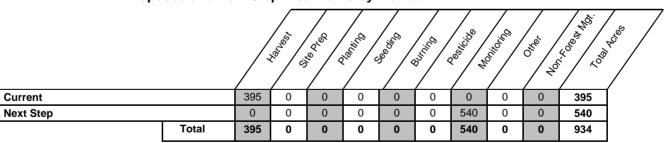
Compartment 96
Total Compartment Acres: 1,710

Commercial Harvest - 395 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

	-											
		/'	#100 00 00 00 00 00 00 00 00 00 00 00 00		#DUSD 0		DOM CON DO	Oricin' Sol	Key Cor	86 / 86 / 86 / 86 / 86 / 86 / 86 / 86 /		Rick /
Aspen		49	0	0	0	0	0	0	0	0	49	
Herbaceous Openland		1	0	0	0	0	0	0	0	0	1	
Lowland Conifers		19	0	0	0	0	0	0	0	0	19	
Mixed Upland Deciduous		119	0	0	0	0	0	0	0	0	119	
Northern Hardwood		0	109	0	0	0	0	0	0	0	109	
Upland Mixed Forest		81	1	0	0	0	0	0	0	0	81	
Upland Spruce/Fir		16	0	0	0	0	0	0	0	0	16	
	Total	285	110	0	0	0	0	0	0	0	395	

Proposed and Next Step Treatments by Method



s	
t	
а	



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
11	32096011-Cut	4.9	42340 - Upland Spruce/Fir	Poletimber Well	62	81-110	Harvest	Clearcut	42330 - Upland Fir	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Harvest all trees with the exception of elm, pine, birch, cedar, hemlock, and black cherry.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Fir, spruce, aspen, maple, black cherry, and birch.

Regen:

Other Provide for protection of Bearing Trees. Treatment to be implemented in 2016. Attempt to leave some large aspen for potential goshawk nest

Comment: sites.

Proposed Start Date: 06/20/2016

32096014-Cut 34.5 4134 - Aspen. Sawtimber 56 81-110 Clearcut with 413 - Aspen Field Harvest Even-Aged Well Boundary -Spruce/Fir Retention Ready for **VMS**

Habitat Cut: No Site Condition:

Prescription Harvest all aspen, fir, spruce, and black cherry. Only remove maple needed for logging operability. Leave any red pine, white pine, hemlock,

Specs: birch, elm, and cedar if present.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, fir, spruce, birch, and maple.

Regen:

Other Move treatment period to 2016.

Comment:

Proposed Start Date: 06/20/2016

32096017-Cut 41 8 4191 - Mixed Poletimber 67 81-110 Clearcut with 4199 - Other Field Harvest Even-Aged **Upland Deciduous** Well Retention Mixed Upland Boundary with Conifer Deciduous Ready for **VMS**

Habitat Cut: No Site Condition:

Prescription Harvest aspen, spruce, fir, maple, and black cherry. Leave some scattered cherry and maple. Leave any elm, hemlock, cedar, birch, white pine,

Specs: and red pine.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, black cherry, maple, birch, fir, spruce and pine.

Regen:

Other Exclude or partially leave some patches with higher maple stocking. Stand will be highly susceptible to spruce budworm damage, so expedite

Comment: harvest.

Proposed Start Date: 06/20/2016

20 32096020-Cut 58.0 4319 - Mixed Sawtimber 62 81-110 Harvest Clearcut with 4319 - Mixed Even-Aged Field

Upland Forest Well Retention Upland Forest

Boundary -Ready for VMS

Habitat Cut: No Site Condition:

Prescription Cut aspen, fir, spruce, and black cherry. Leave maple unless needed for logging operability. Leave elm, birch, white pine, red pine, hemlock,

Specs: and cedar.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, birch, fir, spruce, and maple.

Regen:

Other May exclude any patches found that are primarily maple. Move treatment period into 2016 due to spruce budworm damage risk. Retention should

<u>Comment:</u> include some larger aspen for cavity nesters and future drumming logs.

Proposed Start Date: 06/20/2016

Compartment: 96 Year of Entry: 2018



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
23	32096023-Cut	109.4 4	1110 - Sugar Maple Association	Sawtimber Well	86	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary

Site Condition: Habitat Cut: No

Prescription Remove most mature aspen. Select appropriate trees for removal to reach residual target basal area of between 70 and 90 square feet. Strive to maintain existing diversity of overstory species and stand structure. Specs:

Monitoring, Natural Regen (Re-Inventory); Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Maple, birch, and basswood.

Regen: Other Comment:

10/01/2017 **Proposed Start Date:**

Poletimber 413 - Aspen 24 32096024-Cut 13.0 4130 - Aspen 47 81-110 Harvest Clearcut with Even-Aged Draft Field Well Retention Boundary

Habitat Cut: No Site Condition:

Prescription Harvest aspen, maple, spruce, and fir. Leave white pine, red pine, hemlock, cedar, and elm. May want to leave some maple along edge of stand

23. May exclude small patches of more homogenous maple. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory): Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, fir, spruce, birch, and maple.

Regen:

Other Comment:

Proposed Start Date: 10/01/2017

32096029-Cut 55.5 4191 - Mixed 56 81-110 Clearcut with 4199 - Other Field Sawtimber Harvest Even-Aged Retention Mixed Upland **Upland Deciduous** Well Boundary -Deciduous Ready for with Conifer VMS

Habitat Cut: No Site Condition:

Prescription Harvest aspen, fir, spruce, black cherry, and maple. Leave elm, white pine, red pine, hemlock, and cedar. Leave scattered maple and black

cherry. Exclude or partially leave some trees within patches where maple is at a higher stocking level. Buffer Dexter creek. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Fir, spruce, aspen, black cherry, birch, and maple.

Regen:

Accelerate harvesting due to spruce budworm damage/loss concerns. Leave some larger aspen for potential nest sites for Goshawk and future Other

Comment: drumming logs.

06/20/2016 **Proposed Start Date:**

Draft Field 32096041-Cut 22.8 4319 - Mixed Sawtimber 52 81-110 Clearcut with 4319 - Mixed Even-Aged Harvest Well Retention **Upland Forest** Boundary

Upland Forest Site Condition:

Prescription Harvest spruce, red maple, fir, aspen, and balsam poplar. Leave white pine, cedar, yellow birch, and hemlock.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory); Monitoring, Natural Regen (Re-Inventory)

Treatments:

Habitat Cut: No

Acceptable Aspen, birch, spruce, fir, and balsam poplar.

Regen:

Other Private property to east being cut in winter 2017. Leave some larger aspen for potential nest sites for Goshawk and future drumming logs.

Comment:

Proposed Start Date: 06/20/2016

Treatments:

Acceptable Fir, spruce, aspen, maple, and birch.

Regen: Other

Move treatment into 2016.

Comment:

06/20/2016 **Proposed Start Date:**

32096073-Cut 22.1 4191 - Mixed Poletimber 81-110 Harvest Clearcut with 4199 - Other Even-Aged Field **Upland Deciduous** Well Retention Mixed Upland Boundary -Deciduous Ready for with Conifer VMS.

Habitat Cut: No Site Condition:

Prescription Harvest all fir, spruce, red maple, sugar maple, black cherry, balsam poplar, and aspen. Retain all white pine, red pine, yellow birch, white birch, Specs:

hemlock, cedar, oak, and elm. In addition, mark scattered leave tree black cherry and maple. Stand will be very susceptible to spruce budworm

impacts.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, birch, aspen, fir, black cherry, spruce, pine

Regen:

Other Change entry of this stand to YOE 2016.

Comment:

Proposed Start Date: 07/19/2016 Report 3 -- Treatments

Habitat Cut: No Site Condition:

Prescription Individual tree selection method to reduce basal area to between 60 and 80 square feet. May mark harder in patches with poor quality overstory Specs: trees and/or to make larger regeneration gaps for establishment and survival of shade mid-tolerant tree species. All pine, hemlock, elm, white

birch, and yellow birch will be retained.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, fir, spruce, black cherry, pine, hemlock, and birch.

Gwinn Mgt. Unit

Regen:

s

t а

n

d

74

Other This stand will be marked in conjunction with stand 25 in Cmpt 95 to immediate west. Move treatment period to 2016.

Comment:

Proposed Start Date: 06/20/2016

403 32096403-Cut 4139 - Aspen, Sapling 16 Immatu Harvest Clearcut 413 - Aspen Uneven-Field Boundary -Mixed Deciduous Medium Aged re Ready for **VMS**

Habitat Cut: No Site Condition:

Prescription Remove any merchantable trees except maple, birch, white pine, red pine, hemlock, cedar, and elm.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Aspen, fir, spruce, and maple.

Regen:

Other Stand will be used as landing area.

Comment:

Proposed Start Date: 10/01/2017

414 32096414-Cut 0.8 310 - Herbaceous Nonstocked Clearcut 330 - Low-Draft Field Unspec Harvest Boundary

Openland

ified **Density Trees**

Habitat Cut: No Site Condition:

Prescription Remove merchantable trees except birch.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, birch, maple, black cherry, fir, and spruce.

Regen:

Area will primarily function as landing area.

Other Comment:

Proposed Start Date: 10/01/2017

Total Treatment Acreage Proposed:

394.6

Ready for **VMS**

Gwinn Mgt. Unit

Ben Travis : Examiner

Compartment: 96
Year of Entry: 2018

Availability for Management Total Acres Acres Avail Acres **Dominant Site Conditions** Available With Condition Not Available 2G Acres 1C Aspen Cedar **Exposed Rock** Herbaceous Openland Low-Density Trees Lowland Aspen/Balsam Poplar **Lowland Conifers Lowland Deciduous Lowland Mixed Forest Lowland Shrub** Lowland Spruce/Fir **Mixed Upland Deciduous** Northern Hardwood **Red Pine** Sand, Soil **Upland Mixed Forest** Upland Spruce/Fir Water 1,710 1,650 **Total Forested Acres**

Relative Percent

4%

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

1 Unavailable	2G: Too wet (sensitive soils, does not include	14	Unspecified	Unspecified	Unspecified	Unspecified
	access issues)			•	,	Споросто
Comments:						

96%

Report 4 – Site Conditions

Gwinn Mgt. Unit Ben Travis : Examiner Compartment: 96 Year of Entry: 2018

13	Unavailable	1C: Other dept or div proc/practices	6	3J: Water quality / BMPs (stream, river, or lake)	3G: Other Influence zones - See comments	Unspecified	Unspecified
С	comments:						
21	Unavailable	1C: Other dept or div proc/practices	16	3A: Potential old growth / biodiversity	3G: Other Influence zones - See comments	3J: Water quality / BMPs (stream, river, or lake)	Unspecified
С	comments:						
44	Unavailable	1C: Other dept or div proc/practices	25	3J: Water quality / BMPs (stream, river, or lake)	3G: Other Influence zones - See comments	3A: Potential old growth / biodiversity	Unspecified
С	comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Gwinn Mgt. Unit Compartment: 96
Year of Entry 20:



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish specific 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 specified 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 use 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 (the High and Hog Islands, all state owned land on Beaver, South Fow Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Renursery, and over 144,000 acres of Military Lands.	0 acre Houghton Lake Wildlife Research at includes most of Garden Island, all of x 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 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	Gwinr	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 96 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4112 - Maple, Beech, Cherry Association	Poletimber Well	1.0	46	81-110	
2	4130 - Aspen	Poletimber Well	15.9	27	81-110	Average of two sticks per aspen stem. Sugar maple saplings found. Scarce black cherry and cedar poles.
3	6120 - Lowland Cedar	Poletimber Well	9.1	87	201+	Mostly Cedar but pockets of spruce with tag alder. Over 1/2 of cedar boles have bad sweep. Alder on edge where aspen/cedar was harvested in 1990. Not much cedar cover in this compartment. Poor timber quality, but excellent wildlife habitat.
4	4130 - Aspen	Sapling Well	13.5	22	Immature	Overall good stocking with some small openings. Small portion treated with skidder and roller chopper last entry, but less than 10% of stand as skidder broke down. Allow stand to mature into poletimber aspen. Serviceberry. Some small patches of Washington hawthorn.
5	4130 - Aspen	Sapling Well	35.8	7	Immature	Few mature cedar left from prior harvest. Some patches of hardwood along south edge were excluded (stand 35 now). Timber sale #013-08 "Neighbor Ben sale" (38 acs)- cut Sept - Dec., 2009. Left all elm, small spruce/fir, marked green leave white spruce, pine, hemlock, cedar, cherry, and paper birch. Residual black cherry canopy somewhat heavy in patches, but even here adequate aspen reproduction.
6	4134 - Aspen, Spruce/Fir	Poletimber Well	45.5	41	81-110	
7	4110 - Sugar Maple Association	Poletimber Well	47.5	81	51-80	Stand thinned as "Basin Fir Hardwood" #015-08-01 - cut Fall, 2009. Average diameter of trees increases to east. Scattered yellow birch and white spruce in canopy. White spruce and ironwood saplings present. Some small patches of A2 in understory.
9	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Medium	2.9	26	51-80	Lot of standing water. Cedar saplings found. Flowing stream in stand. Mostly cedar near road, more lowland conifers, aspen, balm farther upstream.
10	613 - Lowland Mixed Forest	Sapling Poor	12.1	47	Unspecified	Drained beaver pond filling in. Stream going through stand. Scattered trees left on hummocks and seeding in. Some lowland brush (alder) but mostly wetand grasses. Stream buffer stand put in biodiversity maintenance to protect riparian values. Stream about 10 feet wide.
11	42340 - Upland Spruce/Fir	Poletimber Well	4.9	62	81-110	Shallow soil in spots. This stand was held for age/class distribution last entry. stand high risk for SBW damage.
12	6118 - Lowland Deciduous with Cedar	Poletimber Well	1.9	67	51-80	Ponded water. White spruce, aspen, and white pine are infrequent overstory associates.
13	6120 - Lowland Cedar	Poletimber Well	10.2	82	51-80	Springs found in north portion of stand and flow south as a small stream, eventually disappearing back underground. Unsure if it is a seasonal or permanent stream. Recommend leaving stand for diversity and water quality protection.

S	Gwinr	n Mgt. Unit		Report 7	Forested	Stands Compartment: 96 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4134 - Aspen, Spruce/Fir	Sawtimber Well	35.8	56	81-110	All over-story species declining in condition ad vigor.
15	4130 - Aspen	Sapling Well	48.8	28	Immature	Aspen well-stocked. Heavier fir concentrations to east and south. Sugar maple saplings found. Pockets of basswood and maple poles to south near Trout Lake Rd.
16	4112 - Maple, Beech, Cherry Association	Poletimber Well	29.1	86	81-110	Good quality potential for timber. Stand harvested as "Basin Fir/Hardwood" #015-08-01 - thinned Fall, 2009.
17	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	49.8	67	81-110	5 stick aspen. Poor timber quality red maple. Some parts of stand has fair to good quality northern hardwood small 2-3 stick.Retain any of these small areas of better quality hardwood.
18	4130 - Aspen	Sapling Well	54.9	15	Immature	Cut 2000-2002 south to north under permit #33-98-01. Some residual hardwood 2-4" dbh left in stand. All white pine were left (only a few).
19	4134 - Aspen, Spruce/Fir	Sapling Well	34.2	7	Immature	Stand harvested as "Thomas Camp Aspen" #014-08 - cut F/W, 2009-10. Adequate aspen stocking. Residual, scattered black cherry and fir poles. Raspberry.
20	4319 - Mixed Upland Forest	Sawtimber Well	70.9	62	81-110	Mostly 4-6 stick aspen. Balsam poplar and white birch are infrequent overstory associates, Stand was held for another 10 years for balancing age/class distribution.
21	6120 - Lowland Cedar	Sawtimber Well	15.5	97	111-140	SCA. Stand is mostly cedar and is a buffer stand around large spring-fed ponds. Some cedar 16" dbh or larger but smaller and more sparse south below ponds. Stand is in biodiversity maintenance to protect springs. Found some cedar seedlings.
22	4130 - Aspen	Sapling Well	67.5	16	Immature	Cut 2001 under permit #34-98-01.Well stocked stand. Very homogenous overstory. Balsam poplar saplings present.
23	4110 - Sugar Maple Association	Sawtimber Well	109.5	86	111-140	Moderate to good quality hardwood for timber management. Cut 2001 under logging permit # 34-98-01. Over-mature aspen scattered about canopy. Widely scattered fir poles. White spruce reproduction present.
24	4130 - Aspen	Poletimber Well	13.0	47	81-110	Aspen healthy, boles clear. 4 stick aspen. Should cut now to give aspen best chance to compete with advanced maple regeneration.
<u></u> 25	4112 - Maple, Beech, Cherry Association	Sawtimber Well	13.9	76	81-110	
26	4199 - Other Mixed Upland Deciduous	Sapling Medium	7.2	16	Immature	Prescribed burn occurred on May 5, 2011. Cherry brush has proliferated. Allow to revert to forested condition. Semi-open upland brush stand. Single stems and clumps of Washington hawthorn.
27	4110 - Sugar Maple Association	Sawtimber Well	6.4	79	81-110	

S	Gwinn	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 96 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4110 - Sugar Maple Association	Sawtimber Well	18.9	86	81-110	Thinned in 1988. Managed with larger stand within compartment 95 to west. Cut in 2009 permit #22-06-01. Overall stand timber quality is improving with thinning by releasing crop trees and removing poor quality trees such as those with disease, low forks, etc. Good quality overall. Sparse supercanopy white spruce and white pine found. Seasonal road portions of Paulson road are in very bad shape - large water holes and extremely rough.
29	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	55.2	56	81-110	Stand was held for size/age class diversity last entry. Harvest as soon as possible due to SBW and over-mature condition of aspen.
30	4112 - Maple, Beech, Cherry Association	Poletimber Well	0.0	86	81-110	4-5 stick fir. Spruce 5-6 stick tall. Pockets with higher overstory fir densities.
31	4130 - Aspen	Sapling Well	14.4	18	Immature	Aspen clearcut under contract #031-98-01. Cut 1999. Well stocked aspen stand. Fir seeding in especially on swamp edge. Some areas of F3 there. Scattered residual cedar left in stand. Forest Service property to east.
32	4130 - Aspen	Sapling Well	120.9	6	Immature	The prior mature stand had a lot of blowdown patches. Stand harvested as "Old Landfill Aspen" #016-08-1 - cut Fall, 2011. Stand fully stocked. Spruce leave trees still standing.
33	413 - Aspen	Poletimber Well	9.5	46	51-80	Dexter creek riparian corridor. Mature aspen that contains a lot of blowdown from 2 years ago. Big cedar in center swale in stand has a seasonal stream. Steep hill north from hardwood downhill into stand. Part of stand being converted to fir due to beaver activity. Sugar 2" under parts of stand.
34	4130 - Aspen	Sapling Well	66.0	26	Immature	Heavy soils. Roads really retain water so problem areas. Stand transitioning to small poles. Tamarack, sugar maple, and elm saplings present. A few wetter/vernal pond areas contain willow or alder and are not well-stocked. Higher stocking of white spruce in overstory to south. More exposed bedrock to south.
35	4110 - Sugar Maple Association	Sawtimber Well	3.9	76	81-110	Patch of hardwood retained from past aspen clearcut (sale #013-08 "Neighbor Ben Sale") cut Sept - Dec., 2009. Scattered aspen and white spruce in overstory.
36	4112 - Maple, Beech, Cherry Association	Poletimber Well	0.0	86	81-110	4-5 stick fir. Spruce 5-6 stick tall. Pockets with higher overstory fir densities.
37	4110 - Sugar Maple Association	Sawtimber Well	75.5	86	81-110	Cut under permit # 035-98-01, around 2000. Average BA runs around 85 sq. ft Good quality hardwood. Excellent sugar maple regeneration from 20 years ago but not much new regeneration from last cut. Steep bank to creek. M3 areas east near old opening.
38	6130 - Fir, Aspen, Maple	Poletimber Medium	9.4	53	51-80	Mostly a fir stand with areas of balsam poplar mostly low. Converting to hardwood south on higher ground. Biodiversity maintenance stand and buffer to protect riparian values of Dexter creek. Alder in spots close to creek. Steep bank in areas.

S t	Gwinn Mgt. Unit			Report 7	- Forested	Stands Compartment: 96 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	4199 - Other Mixed Upland Deciduous	Poletimber Medium	27.5	47	51-80	Stand flooded. Fir and spruce saplings present. Better stocked North end but ash and most other trees are small. Some slight raised areas in stand contain cedar and spruce. Mostly 1-2 stick trees. Dead tops on larger ash. Wetland flow to creek, Some Q and C areas near creek and south narrow part, but most of the main stand is small black ash. This stand is put in biodiversity maintenance to protect riparian and wetland values, and headwater flow for Dexter creek.
40	612 - Lowland Coniferous Forest	Poletimber Well	38.9	52	81-110	OIPC - FMD: Narrow strips cut out and other parts cut in past. Cut parts and other open parts have F3 in them along with balsam poplar, w. birch, and aspen 2-4"dbh. Blowdown in spots, but overall stand is Q6 with cedar, tamarack, and spruce 8" dbh. Areas of upland have more aspen but most of stand thick with cedar and is lowland.
41	4319 - Mixed Upland Forest	Sawtimber Well	22.8	52	81-110	Very shallow soil with limestone bedrock. Stand in decline with many snags.
42	6120 - Lowland Cedar	Poletimber Well	2.4	87	171-200	
43	6122 - Black Spruce	Sapling Poor	12.9	47	Unspecified	Old beaver pond with encroaching trees. Stream going through stand. Scattered trees left on hummocks and seeding in. Some wetand grasses. Stream buffer stand put in biodiversity maintenance to protect riparian values. Stream about 10 feet wide.
45	6111 - Lowland Balsam Poplar	Poletimber Well	20.7	26	81-110	Mostly well-stocked balsam poplar stand with alder and willow. A few wetland areas poorly stocked with trees.
46	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	1.8	77	51-80	Mostly a fir and mixed hardwood stand with areas of balsam poplar. Steep bank down to Dexter Creek. This is a buffer stand protecting riparian corridor.
52	4117 - Mixed N. Hardwood - Pine	Poletimber Medium	19.1	36	1-50	05/23/2013 - a total of 10 red oak trees was planted in this stand. May want to plant more oaks in open areas of this stand in the future. Cherry savanna or maturing upland brush. Openings interspersed with low stocking of trees. Large crowned mast producing cherry good for wildlife. Still open areas where spruce/fir continues to seed in. Long north-south running ridge along west side of stand.
53	42320 - Upland Spruce	Poletimber Medium	6.6	46	51-80	Shallow soil over limestone bedrock. Trees filling in old opening. Aspen poles in overstory. Found aspen saplings. Clumps of hawthorn from old wildlife division plantings.
54	4110 - Sugar Maple Association	Sawtimber Well	1.2	80	81-110	Good quality hardwood. Cut in 2001 under permit # 34-98-01. Small island left in large, surrounding aspen clearcut.
55	4130 - Aspen	Sapling Medium	9.8	27	Immature	Some sparse areas. Allow to mature.
56	4112 - Maple, Beech, Cherry Association	Poletimber Well	5.9	41	51-80	

S	Gwinr		Report 7	– Forested	Stands Compartment: 96 Year of Entry: 2018	
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
58	42110 - Planted Red Pine	Poletimber Well	1.1	44	81-110	Red pine plantation which was planted by road commission to create windbreak.
59	4130 - Aspen	Sapling Well	87.7	17	Immature	Very scarce conifer in understory. Heavy raspberry. Stand has been seriously impacted by large aspen tortrix defoliation for 2 out of 3 last years (had abated this past summer).
61	42330 - Upland Fir	Poletimber Poor	1.6	21	Immature	Mosaic of fir and openings.
62	4112 - Maple, Beech, Cherry Association	Poletimber Medium	5.7	31	51-80	This stand is adjacent to the closed Twsp dump on state land. Fence around east and south sides of dump. Serviceberry present. White pine, white spruce, and fir saplings present. Fir poles present. Small patch of blueberry. Some small clumps of hazel. Semi-open in areas. Thicker canopy to south.
64	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	19.4	101	81-110	Very tall tamarack. Tamarack snags. Did not encounter pools of water. Balsam poplar component of canopy. Cedar is patchy in distribution.
67	42340 - Upland Spruce/Fir	Poletimber Well	4.1	41	81-110	Stand at high risk for spruce budworm infestation. Should treat in conjunction with other SBW high-risk stands in this compartment, so small acreage not an issue
68	42360 - Upland Cedar	Poletimber Well	3.4	101	81-110	White birch saplings and willow present.
69	4130 - Aspen	Poletimber Well	63.6	27	51-80	Some 1 stick aspen. Widely scattered white pine poles. Elm poles. Sugar maple saplings present. Light hazel patches.
72	4199 - Other Mixed Upland Deciduous	Sapling Medium	1.3	11	Immature	Area was roller-chopped in last 10 years. Aspen reproduction plentiful. Black cherry poles.
73	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	22.6	46	81-110	Some patches with higher stocking of red maple. Pockets of mature fir. Aspen mainly 2 to 3 stick, with some 4 stick. Elm, yellow birch, red pine, and white pine infrequent overstory components. White spruce very tall.
74	4319 - Mixed Upland Forest	Poletimber Well	0.6	67	81-110	East stand line parallels long ridge, which descends to east into stand 52. Stand at high risk for SBW damage.
75	4112 - Maple, Beech, Cherry Association	Poletimber Well	1.3	86	81-110	4-5 stick fir. Spruce 5-6 stick tall. Pockets with higher overstory fir densities.
76	4112 - Maple, Beech, Cherry Association	Poletimber Well	0.0	86	81-110	4-5 stick fir. Spruce 5-6 stick tall. Pockets with higher overstory fir densities.
77	4112 - Maple, Beech, Cherry Association	Sawtimber Well	27.8	76	81-110	
79	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	10.9	56	51-80	

S t	Gwinn Mgt. Unit			Report 7	- Forested	Stands Compartment: 96 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
403	4139 - Aspen, Mixed Deciduous	Sapling Medium	1.1	16	Immature	Will possibly use for landing/decking area when harvesting stand 20.
423	4199 - Other Mixed Upland Deciduous	Sapling Poor	37.6	6	Immature	Prescribed burn occurred in early May, 2011. Mosaic of linear open areas interspersed with thickets of cherry brush. Old farm field. Several rock windrows. Scattered white spruce saplings present. Introduced flowering crabapples and autumn olive found to west side of two-track. Some serviceberry. Allow to transition to fir/spruce/aspen stand.

Compartment: 96 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
8	330 - Low-Density Trees	1.3	No	
44	6220 - Alder/willow	0.8	No	OIPC - FMD: Drained beaver pond filling in. Stream going through stand. Scattered trees left on hummocks and seeding in. Lowland brush (alder) but marsh. Stream about 10 feet wide.
47	500 - Water	1.1	No	Spring fed pond with very clear water. Old trout structures? built in pond and resting on the bottom. Stream leaving pond is about 10' wide. Very scenic.
48	6220 - Alder/willow	18.0	No	SCA. Areas of balsam poplar and fir thickets, but mostly low. Riparian zone along Dexter creek. Steep banks in areas, and series of banks in others. Some areas poorly stocked due to drained beaver ponds and other beaver activity. Open grassy areas in drained beaver ponds. Some cedar especially along creek northwest, but scattered throughout.
49	720 - Exposed Rock	1.6	No	Wildlife Division excavated large depression to create pond. Water is often present from snowmelt until early June, then dry rest of year.
50	710 - Sand, Soil	1.3	No	Wildlife Division excavated depression but does not hold water.
51	710 - Sand, Soil	0.7	No	Wildlife Division excavated depression but has never held water. Sand and chunks of limestone.
57	6220 - Alder/willow	1.5	No	Very dense willow. Sparse cedar poles. Some aspen saplings in patches.
66	3102 - Grass	2.7	No	Limestone bedrock with very shallow soil. Trees seeding in on edges do not get large and eventually blow over while small.
71	3105 - Mixed Upland Herbaceous	16.5	Yes	Some low cherry brush invading stand (10 to 15%), with some scattered white spruce. Prescribed burn occurred on May 5, 2011. Stands 55 and 423 were also treated with this burn for a total of 101 acres. Reference the Prescribed Burn Completion Report for additional details. Scattered patches of wild parsnip. Would suggest using herbicide to kill-back the re-sprouting cherry. Former grazing or farm field (rock piles and better grass). Nice wildlife opening.
401	3105 - Mixed Upland Herbaceous	37.7	Yes	Cherry brush invading stand, with some scattered white spruce. Prescribed burn occurred on May 5, 2011. Stands 55 and 423 were also treated with this burn for a total of 101 acres. Reference the Prescribed Burn Completion Report for additional details. Additional means will be required to control encroaching cherry as prescribed fire caused cherry to proliferate. Would suggest using some type of herbicide to set-back the re-sprouting cherry before too late. Some small aspen clones. 2 old apple trees. Stand will transition into upland brush by next entry. May want to allow to transition to semi-open stand and plant scattered oak? Occasional Washington haws. Site surface rough.
404	31021 - Cool Season Grass	8.1	No	This is the old Mathias Twsp dump. DEQ has been monitoring surface vegetation and fencing/gates within last two years. Mathias Twsp still has several years left on their obligation to keep woody vegetation from filling in and having fence posted along perimeter. Nice grass. Many PVC pipes venting old dump. No new dumping.

Compartment: 96 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
405	3303 - Mixed Low Density Trees	3.4	No	
406	3102 - Grass	2.4	No	Cherry brush. Sparse white spruce and aspen poles. Site surface rough. 75% to 80% open. Moderate quality grass forage.
407	3303 - Mixed Low Density Trees	0.7	No	
409	31021 - Cool Season Grass	0.7	No	
410	31021 - Cool Season Grass	4.2	No	
411	31021 - Cool Season Grass	1.2	No	
412	3105 - Mixed Upland Herbaceous	1.4	No	Stand approximately 85% open. Some cherry brush, fir saplings, and red maple saplings. Poor soils.
413	3105 - Mixed Upland Herbaceous	2.3	No	Some encroaching cherry brush, white spruce saplings, and trembling aspen reproduction. Poor site nutrients. St. John's Wort present.
414	310 - Herbaceous Openland	0.8	No	Stand is being invaded by sugar maple saplings and cherry brush. Areas of sandy, infertile soil. Not a stand to be maintained over long-term in an open condition.
415	310 - Herbaceous Openland	5.2	No	Aspen whips encroaching along perimeter. Not very fertile soil. Allow to revert to forested condition.
416	3301 - Low Density Deciduous Tree	1.4	No	Cherry brush prevalent. Site will fill in and be forested by next entry. Rough ground and little forage value. Fringe of mature aspen and fir.
417	310 - Herbaceous Openland	1.5	No	OPIC - FMD: OI Stand Year Origin was
419	310 - Herbaceous Openland	1.0	No	
421	310 - Herbaceous Openland	1.0	No	OPIC - FMD: OI Stand Year Origin was
422	3101 - Poverty Grass, Cladonia	1.7	No	Heavy maple reproduction along edges. Moss, lichen, and clubmoss.
				