

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32045 Entry Year 2020 Acreage: 1,682

County Marquette

Management Area: Chain Lakes Moraine

Revision Date: 2018-08-06

Stand Examiner: Ben Travis

Legal Description:

T. 44N, R. 25W, Sections 27, 28, 29

Identified Planning Goals:

Promoting sustainable forest management of timber resources and forest regeneration. Maintenance and/or improvement of quality wildlife habitat. Monitoring forest health, road system, recreational use, and public usage of this land. Implementing proper best management practices along stream corridors. Ensuring that proper, wise land use is not being jeopardized by non-timber trespass issues.

Soil and topography:

Sites range from lowland, poorly drained swamps to well drained upland forests. Topography is flat overall.

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

This compartment is within a very large, contiguous block of state ownership. There is one 40 acre private parcel within the compartment. Otherwise the state owns all the land within compartment. Forest management of the timber resources, forest recreation, and wildlife habitat management are the major land uses.

Unique Natural Features:

Bob's creek, Wilson creek, and the Escanaba River flow through the compartment.

Archeological, Historical, and Cultural Features:

None known at this time.

Special Management Designations or Considerations:

Normal forest management.

Watershed and Fisheries Considerations:

Southern regions of this compartment border Wilson Creek which serves as a tributary to Bobs Creek. Wilson Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Wilson Creek in riparian areas susceptible to Aspen regeneration (specifically stand 23). For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices (specifically stand 16).

Eastern regions of this compartment contain Bobs Creek and the Main Branch of the Escanaba River. Additionally, this compartment borders an unnamed stream which serves as a tributary to the east side of the Main Branch of the Escanaba River. Bobs Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Bobs Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices. The Main Branch of the Escanaba River is a designated Type 1 trout stream greater than 50' width. A 100' plus 5' per 1% increase in slope buffer is recommended to protect riparian areas adjacent to the Main Branch of the Escanaba River. The unnamed stream, located on the east side of the Main Branch of the Escanaba River, is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the unnamed stream in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 045 is found within the Chain Lakes Moraine Management Area; on a Disintegration Moraine in Southwestern Marquette County. The dominant Natural Communities are dry mesic northern forests, poor conifer swamps, and mesic northern forests. This management area offers opportunities to increase diversity and perhaps long-term oak sustainability through under planting white and red pine. Another priority is to maintain or increase wildlife corridors especially along riparian corridors. Wildlife management issues in the management area are: mast (hard and soft); habitat fragmentation; mature forest conditions; mesic conifer; course woody debris; and retention or development of large living and dead standing trees (for cavities). This management area represents approximately ¼ of the oak resource

on WUP state forest.

The following have been identified as featured species for the Chain Lakes Management Area: black bear, gray jay, pileated woodpecker, Northern goshawk, red crossbill.

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located in this area. There is some sand & gravel within the compartment on the uplands, but there are numerous wetlands in the area, which could inhibit development. There is no known metallic mineral potential beneath the compartment. However, state minerals within the compartment were previously leased for metallic mineral exploration. There is no potential for economical oil and gas production in the UP. The state does not own the mineral rights beneath much of the compartment. Private mineral rights owners must be allowed reasonable access to the land should they choose to explore and/or develop the minerals.

Vehicle Access:

County Road 557, a paved all season road, is the main access corridor for the compartment. Crooked Pine road and Bob's Creek road (both DNR roads) provides good access for the west and northern portions of the compartment. Access is limited in the central and southeastern portions of the compartment due to very poorly drained soils and a lack of roads. Bob's creek road provides access to numerous private camps situated to the southeast of this compartment.

Survey Needs:

DNR survey work is currently being conducted around the 40 acre private parcel. Establishing survey monuments here will allow timber sale boundaries to be ran and a non-timber trespass issue (private gate) to be resolved.

Recreational Facilities and Opportunities:

Dispersed camping sites, hunting, trapping, fishing, boat usage on the Escanaba river, snowmobile use, and off-road vehicle usage. There are no designated recreation facilities within this compartment.

Fire Protection:

The dryer, more upland western portion of the compartment supports more fire prone cover types than other portions of this block, but the DNR road access system is extensive enough here to provide adequate fire control vehicle operations if needed.

Additional Compartment Information:

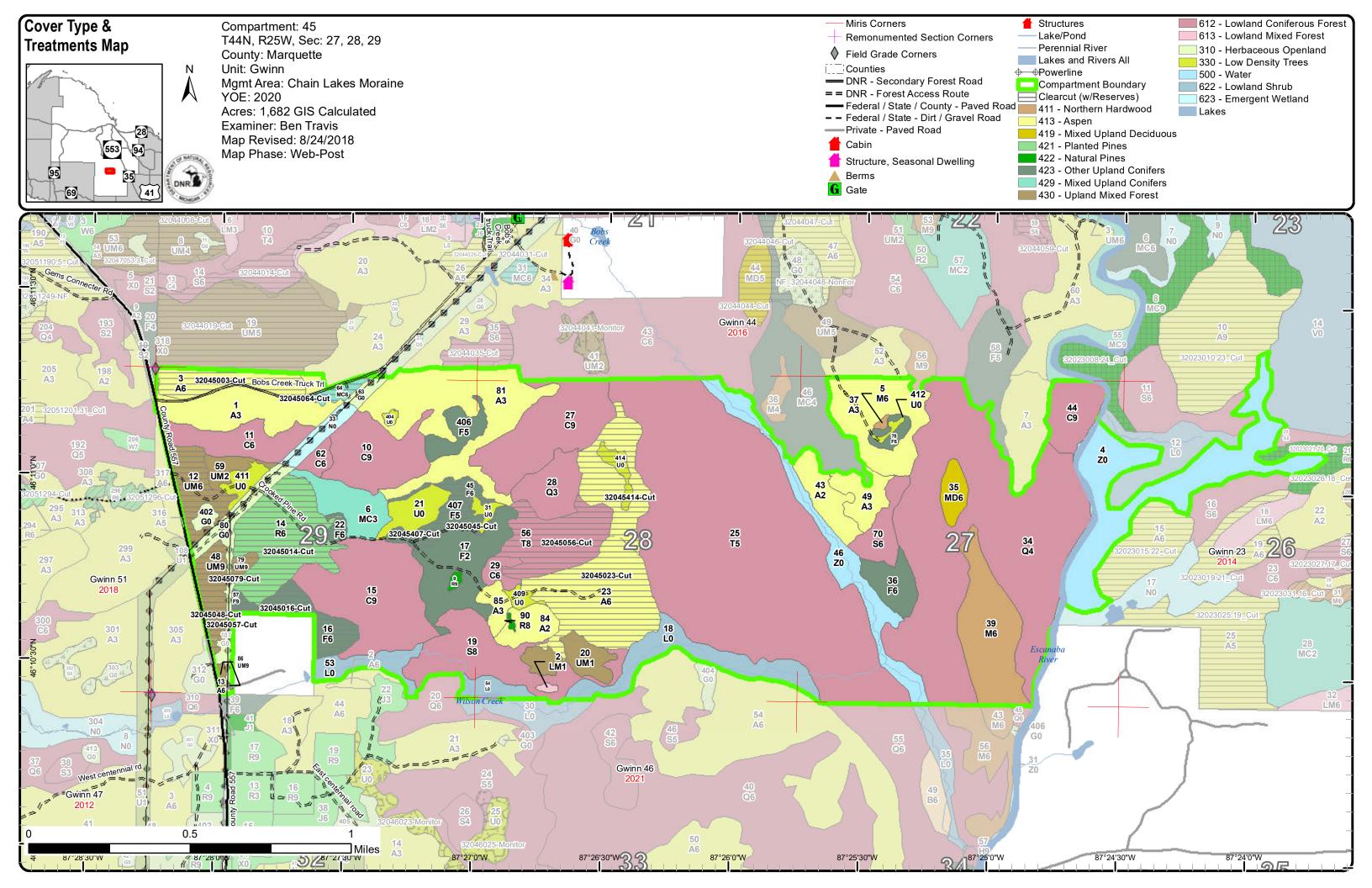
Large Powerline corridor ROW passes through the northwest part of compartment.

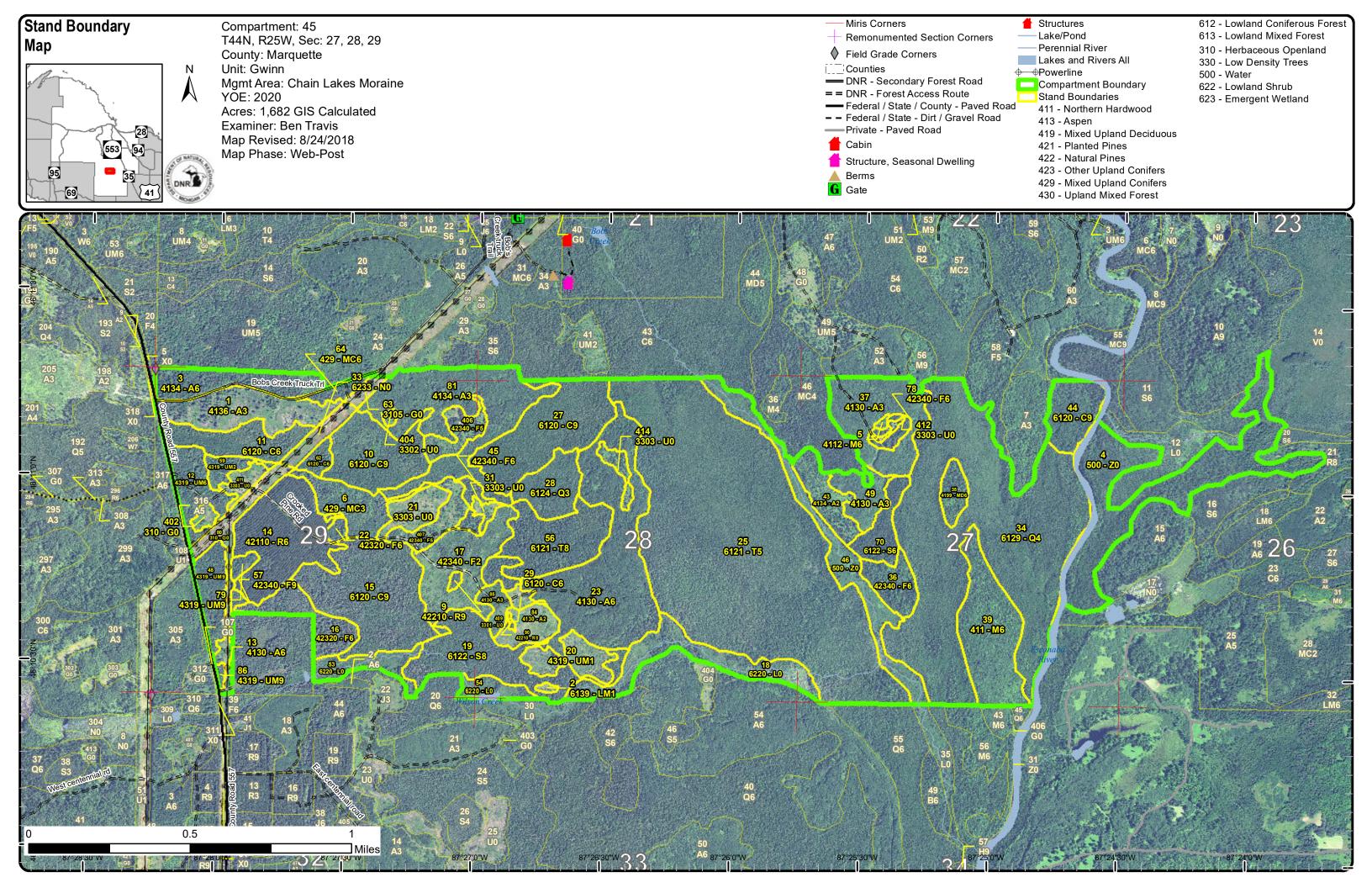
The following reports from the Inventory are attached:

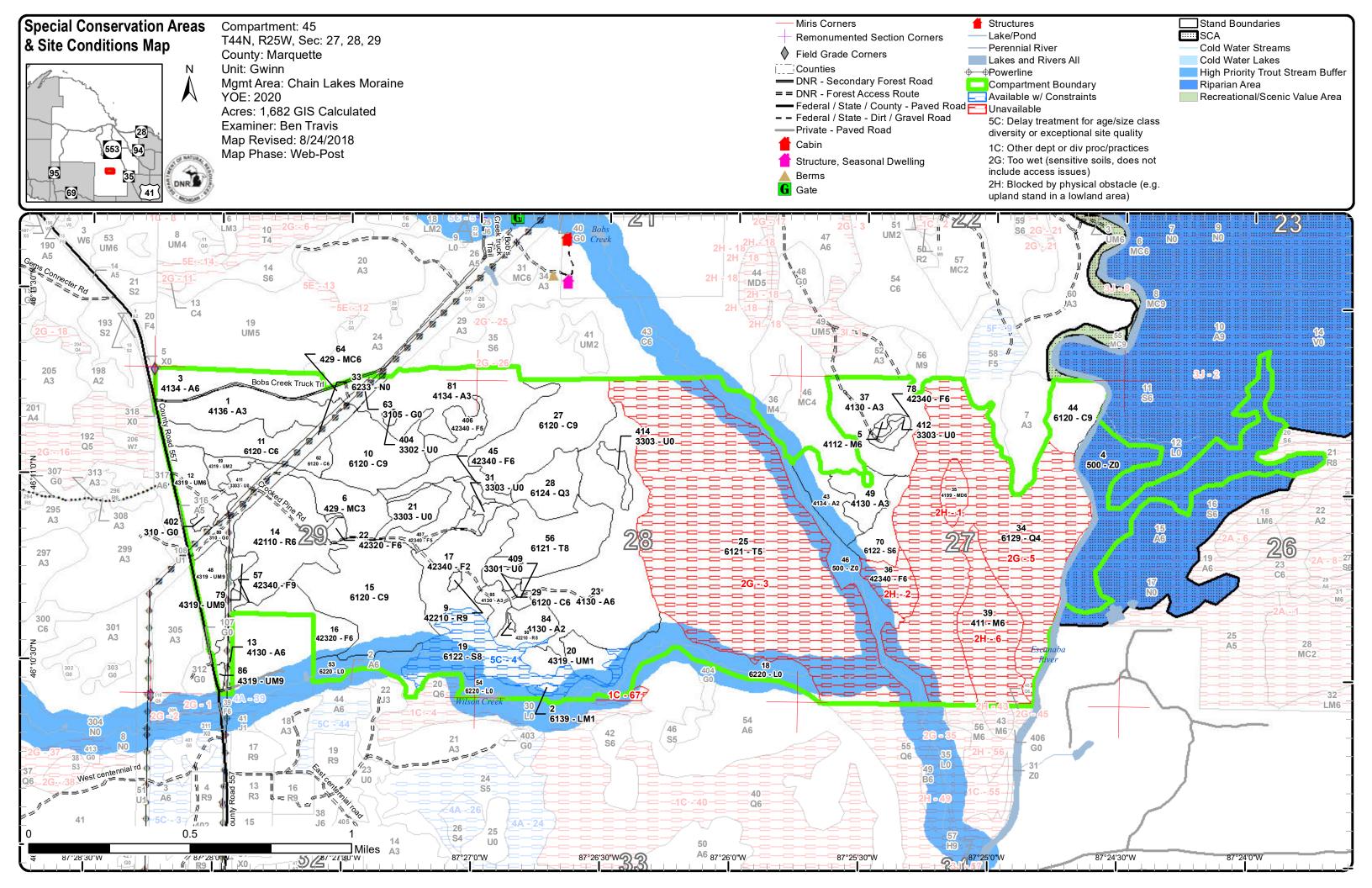
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

The following information is displayed, where pertinent, on the attached compartment maps:

Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system







Gwinn Mgt. Unit

Compartment 45 Year of Entry 2020



Ben Travis : Examiner

Age Class

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Aspen	0	45	36	108	90	0	24	0	0	0	0	0	0	0	0	0	0	0	303
Cedar	0	0	0	0	0	0	0	0	0	36	65	28	25	0	50	0	0	0	204
Herbaceous Openland	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Low-Density Trees	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Lowland Conifers	0	0	0	0	19	0	0	0	0	0	0	0	0	212	0	0	0	0	231
Lowland Mixed Forest	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Shrub	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	59
Marsh	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
Northern Hardwood	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	46	47
Red Pine	0	0	0	0	51	0	0	0	2	0	0	0	0	0	0	0	0	0	52
Tamarack	0	0	0	0	0	0	0	0	0	0	37	0	0	296	0	0	0	0	333
Upland Conifers	0	0	0	19	0	0	5	0	0	0	0	0	0	0	0	0	0	0	24
Upland Mixed Forest	0	16	0	7	0	19	20	0	0	0	0	0	0	0	0	0	0	0	62
Upland Spruce/Fir	0	0	37	11	5	5	30	3	0	0	0	0	19	0	0	0	0	0	108
Water	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
Total	247	62	73	145	165	24	79	3	61	37	102	36	44	508	50	0	0	46	1679



Report 2 – Treatment Summary

Gwinn Mgt. Unit

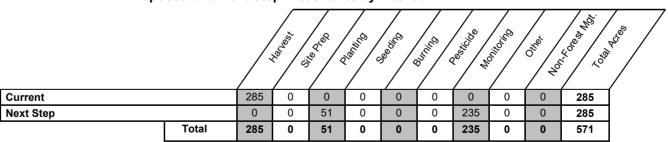
Compartment 45 Year of Entry: 2020 **Acres of Harvest Total Compartment Acres: 1,682**

> Commercial Harvest - 285 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

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		/		To T	To the second second		O O O O	Outrie Soot	A CONTRACTOR OF THE PROPERTY O	85		Se /
Aspen		110	0	0	0	0	0	0	0	0	110	ĺ
Low-Density Trees		5	0	0	0	0	0	0	0	0	5	
Red Pine		51	0	0	0	0	0	0	0	0	51	
Tamarack		37	0	0	0	0	0	0	0	0	37	
Upland Conifers		5	0	0	0	0	0	0	0	0	5	
Upland Mixed Forest		38	0	0	0	0	0	0	0	0	38	
Upland Spruce/Fir		40	0	0	0	0	0	0	0	0	40	
	Total	285	0	0	0	0	0	0	0	0	285	

Proposed and Next Step Treatments by Method



This sale should include first entry, third row thinning on stands 294 and 295 within Cmpt 51 just to west, across Co rd 557. These stands are far Other Comment:

past stand development/stocking level/age for their first thinning to have occurred

10/01/2019 **Proposed Start Date:**

32045016-Cut Poletimber 119 42330 - Upland 18.6 42320 - Upland 111-Harvest Clearcut with Even-Aged Proposal

Retention

Well 140 Spruce

Site Condition: Habitat Cut: No

Prescription Remove spruce, fir, tamarack, balsam poplar, maple, and aspen. Leave white pine, cedar, hemlock, yellow birch, and white birch. Use area

retention method. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Black spruce, white spruce, fir, tamarack, cedar, aspen, birch, red maple, and balsam poplar.

Regen:

Will need to request survey corners be placed. Stand is more of a mixed upland/lowland to northwest, and does get quite wet in patches to <u>Other</u>

southeast. Will likely want to make a frozen condition cutting. Comment:

Wildlife: Retention should include some larger spruce for cone production- red crossbill as well as older tamarack -Gray Jay - Game Fund

Purchased

Proposed Start Date: 10/01/2019 S

Compartment: 45 Year of Entry: 2020

d	Name	Acres	CoverType	Density	Age	Range	Type	Method	Objective	Structure	Status
23	32045023-Cut	90.1	4130 - Aspen	Poletimber Well	36	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No Site Condition:

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

oak. Use area retention technique.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen:

Specs:

t

Other Not sure if age reliable? Idea for sale name - "Tote Road Grouse Sale".

Comment:

Wildlife: Retention should include white spruce (5%) for cone production- red crossbill - Game Fund Purchased

10/01/2019 **Proposed Start Date:**

5.4 42340 - Upland Poletimber 45 51-80 42330 - Upland 32045045-Cut Harvest Clearcut Even-Aged Proposal Fir

Well Spruce/Fir

Habitat Cut: No Site Condition:

Prescription Remove all merchantable trees except white pine, red pine, birch, and oak.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Spruce, fir, aspen, balsam poplar, birch, red maple, and black cherry.

Regen:

Other Early entry due to negative SBW impacts.

Comment:

Wildlife: Retention should include some white spruce (10%) for cone production and wildlife cover- red crossbill. Also, look for opportunities to

include older aspen in retention - northern goshawk. Game Fund Purchased

10/01/2018 **Proposed Start Date:**

15.8 4319 - Mixed 32045048-Cut Sawtimber 55 81-110 Harvest Clearcut with 4319 - Mixed Even-Aged Proposal **Upland Forest** Well Retention **Upland Forest**

Habitat Cut: No Site Condition: Prescription Overstory removal of all tree species except white pine, red pine, birch, oak, hemlock, and cedar. Use two small wetland inclusions for core of

Specs: retention patches.

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

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

Regen:

Other Wildlife: Wetland inclusions will capture wildlife aspects-State Game Fund Purchased

Comment:

Proposed Start Date: 10/01/2018

612 - Lowland 32045056-Cut 36.7 Sawtimber 96 81-110 Clearcut with Even-Aged 6121 - Tamarack Harvest Proposal Medium Retention Coniferous

Forest

Site Condition: **Habitat Cut: No**

Prescription Remove tamarack, aspen, fir, spruce, balsam poplar, and maple. Leave cedar, white pine, and birch.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Tamarack, spruce, fir, birch, aspen, balsam poplar, and maple.

Regen:

Other Enter early due to SBW negative impacts.

Comment:

Wildlife: Retention should include some larger spruce for cone production- red crossbill as well as older tamarack -Gray Jay - Game Fund

Purchased

Proposed Start Date: 10/01/2018

Compartment: 45 Year of Entry: 2020

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
57	32045057-Cut	2.1	42340 - Upland Spruce/Fir	Sawtimber Well	55	81-110	Harvest	Clearcut	42330 - Upland Fir	Even-Aged	Proposal

Site Condition: Habitat Cut: No

Prescription Overstory removal of all tree species except white pine, red pine, oak, birch, hemlock, and cedar. No patch retention.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Fir, spruce, aspen, pine, red maple, balsam poplar, birch, and black cherry.

Regen:

Other Need survey monuments placed on private 40.

Comment:

Wildlife: Small Stand leave some scattered white spruce -State Game Fund Purchased

10/01/2018 **Proposed Start Date:**

4.9 429 - Mixed Upland Poletimber 55 81-110 429 - Mixed 32045064-Cut Harvest Clearcut Even-Aged Proposal **Upland Conifers** Conifers

Habitat Cut: No Site Condition:

Prescription Remove all trees except leave white pine, red pine, birch, cedar, oak, and hemlock.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, fir, spruce, red maple, and pine.

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

2.8 4319 - Mixed 55 32045079-Cut Sawtimber 111-Harvest Clearcut 4319 - Mixed Even-Aged Proposal **Upland Forest** Well 140 Upland Forest

Habitat Cut: No Site Condition:

Prescription Overstory removal of all tree species except white pine, red pine, birch, oak, hemlock, and cedar. No patch retention.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen: Other

Wildlife: (Small Stand) Retain red maple (5%) for stand diversity and seed production

Comment:

10/01/2018 **Proposed Start Date:**

407 32045407-Cut 13.8 42340 - Upland Poletimber 55 1-50 Harvest Clearcut 320 - Upland Proposal Spruce/Fir Medium Shrub

Habitat Cut: No Site Condition:

Prescription Harvest all fir, spruce, maple, aspen, and balsam poplar.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Aspen, fir, oak, and spruce.

Regen: Other

Comment:

Early entry due to SBW concerns. Possible Rx fire following harvest? Also wildlife may want to oak even if no Rx fire?

Wildlife: Retention should also include some larger Aspen look for trees with forked crown for raptor nesting sites - Northern Goshawk. Also

retain black cherry (5%) mast production- black bears -State Game Fund Purchased

Proposed Start Date: 10/01/2018 Gwinn Mgt. Unit

Size

Density

Stand

Age

Report 3 -- Treatments Compartment: 45

Year of Entry: 2020 **Cover Type** Age **Approval** Objective Structure **Status**

414 32045414-Cut

4.9 3303 - Mixed Low Nonstocked

Stand

CoverType

Unspec Harvest

Treatment

Type

Clearcut with

Treatment

Method

320 - Upland

Proposal

Treatment

Name

Density Trees

ified

BA

Range

Retention

Shrub

Habitat Cut: No **Site Condition:**

Prescription Harvest all trees except for oak, white birch, yellow birch, white pine, red pine, cedar, and hemlock.

Specs:

s

t а

n

d

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Acres

Regen: <u>Other</u>

Wildlife: It is listed as low density stand and will be harvested with stand 23 bears -State Game Fund Purchased

Comment:

Proposed Start Date: 10/01/2019

Total Treatment Acreage Proposed:

285.4

Gwinn Mgt. Unit

Ben Travis : Examiner

Compartment: 45
Year of Entry: 2020

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	Cond	ditions
Acres	Available	With Condition	Not Available		5C	2G	2H	3J
304	304	0	0	Aspen				
206	206	0	0	Cedar				
25	25	0	0	Herbaceous Openland				
31	31	0	0	Low-Density Trees				
232	19	0	212	Lowland Conifers		212		
1	1	0	0	Lowland Mixed Forest				
55	55	0	0	Lowland Shrub				
59	14	45	0	Lowland Spruce/Fir	45			
8	8	0	0	Marsh				
8	0	0	8	Mixed Upland Deciduous			8	
47	1	0	46	Northern Hardwood			46	
52	52	0	0	Red Pine				
333	37	0	296	Tamarack		296		
24	24	0	0	Upland Conifers				
61	61	0	0	Upland Mixed Forest				
109	95	0	14	Upland Spruce/Fir			14	
128	40	0	88	Water				88
1,682	972	45	664	Total Forested Acres	45	509	68	88
	58%	3%	40%	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.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 - Site Conditions

Gwinn Mgt. Unit Compartment: 45 Year of Entry: 2020 Ben Travis: Examiner 2 Unavailable 2H: Blocked by physical Unspecified Unspecified Unspecified 14 Unspecified obstacle (e.g. upland stand in a lowland area) Comments: 3 3J: Water quality / Unspecified Unspecified Unspecified Unavailable 2G: Too wet (sensitive 296 BMPs (stream, river, or soils, does not include lake) access issues) Comments: Unspecified Unspecified Unspecified Unspecified 4 **Available** 5C: Delay treatment for 45 age/size class diversity or exceptional site quality Comments: 5 3J: Water quality / Unspecified Unspecified Unavailable 2G: Too wet (sensitive 212 5D: Unproductive Forest soils, does not include BMPs (stream, river, or Land lake) access issues) Comments: 6 Unspecified Unspecified Unspecified Unspecified Unavailable 2H: Blocked by physical 46 obstacle (e.g. upland stand in a lowland area) Comments: 1C: Other dept or div 67 Unspecified Unavailable 2 Unspecified Unspecified Unspecified

Comments:

proc/practices

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: 45
Year of Entry 2020



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.

Conservation 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	es 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 condistocked trout populations and those of other coldwater fish speci 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.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
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 d communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well

S t	Gwinn	n Mgt. Unit		Report 7	Forested	Stands Compartment: 45 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4136 - Aspen, Mixed Conifer	Sapling Well	33.2	3	Immature	Some small open patches, but overall A2/A3. Sparse residual red pine. Red maple and black spruce saplings found.
2	6139 - Mixed Lowland Forest	Sapling Poor	0.9	4	Immature	Timber sale #32- 005-10. Cut winter of 2014.
3	4134 - Aspen, Spruce/Fir	Poletimber Well	24.2	56	81-110	Stand under sale contract #32-016-16, "Bob's Creek West SBW" - clearcut with retention. Move this stand into adjacent compartment 44 to north once it is cut.
5	4112 - Maple, Beech, Cherry Association	Poletimber Well	8.0	83	81-110	Stand left for retention pocket.
6	429 - Mixed Upland Conifers	Sapling Well	19.3	23	Immature	Higher conifer component to the north. Tamarack, white pine, and black cherry saplings present.
9	42210 - Natural Red Pine	Sawtimber Well	1.1	76	51-80	
10	6120 - Lowland Cedar	Sawtimber Well	36.4	89	111-140	Variable mixed species composition in overstory across stand. Also some areas of lowland brush.
11	6120 - Lowland Cedar	Poletimber Well	23.5	108	141-170	White birch and tamarack in overstory.
12	4319 - Mixed Upland Forest	Poletimber Well	19.3	49	81-110	Aspen are on average 4 stick tall. Aspen past prime as far as condition/health. SBW impacts. White pine,white birch, and jack pine saplings present. Sparse jack pine in overstory.
13	4130 - Aspen	Poletimber Well	0.2	40	51-80	to 2 merchantable sticks in aspen stems. Aspen is good nurse canopy for nice white pine regeneration. Jack pine and black spruce are overstory associates. Black spruce saplings present.
14	42110 - Planted Red Pine	Poletimber Well	50.7	39	141-170	Planted in 1978 and replanted in 1980, thus obtaining adequate stocking. During last entry period, harvest consisted of thinning two rows out of five to give room for logging machinery. Harvested under permit #32-015-10-1. Cutting completed August, 2010. Tops were chipped and removed from stand.
						Fairly high frequency of low and high forks, double/triple stumps, heavy whorls of lower dead branches, and sweep in butt stems. On average, 1/3 of tree heights are live canopy. Also very rapid taper in top stick.
15	6120 - Lowland Cedar	Sawtimber Well	65.3	96	111-140	Cedar saplings less than 5 ft tall present at low levels.
16	42320 - Upland Spruce	Poletimber Well	18.6	119	111-140	Will be pockets with higher water table, and more tamarack and tag alder. 4 to 6 stick black spruce. Some black spruce 12 inch Dbh.

S	Gwinr	Gwinn Mgt. Unit			– Forested	Stands Compartment: 45 Year of Entry: 2020
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	42340 - Upland Spruce/Fir	Sapling Medium	36.5	14	Immature	Red maple, white birch, and black cherry saplings present. Residual sporadic cedar and white pine in overstory. Patches of A3 to east. Small patches of C5 to east. Cut under permit #32- 18-00-01. Few 1 and 2 stick spruce and fir left for seed trees.
19	6122 - Black Spruce	Sawtimber Medium	45.1	79	51-80	Spruce ranges from 3 to 6 merchantable sticks. Look at treating in 10 years.
20	4319 - Mixed Upland Forest	Sapling Poor	15.5	4	Immature	Areas with blueberry and bracken fern groundcover.
22	42320 - Upland Spruce	Poletimber Well	2.9	65	51-80	2 to 6 stick merchantable height to spruce. Aspen is 1 to 2 stick in merchantable height.
23	4130 - Aspen	Poletimber Well	90.1	36	81-110	3 and 4 stick aspen. Aspen snags common. Developing conks on aspen boles. Top-dieback on proportion of aspen. Balsam poplar, white birch, black and cherry are uncommon overstory associates. Tamarack, white pine, sugar maple, and black spruce saplings present. Small patches of hazel. Stand harvested in 1982.
25	6121 - Tamarack	Poletimber Medium	296.4	125	1-50	Areas below 50% canopy cover. Cedar seedlings found.
27	6120 - Lowland Cedar	Sawtimber Well	50.4	133	111-140	Small pockets of heavier black ash stocking (1/2 to 1 stick low grade stems). Infrequent fir poles.
28	6124 - Lowland Spruce- Fir	Sapling Well	19.3	36	1-50	Stand clearcut in 1982. Very widely scattered 1 stick tamarack poles.
29	6120 - Lowland Cedar	Poletimber Well	5.3	119	81-110	1 and 2 stick cedar. Sparse tamarack poles.
34	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	212.3	124	1-50	
35	4199 - Other Mixed Upland Deciduous	Poletimber Well	8.2	109	81-110	
36	42340 - Upland Spruce/Fir	Poletimber Well	13.8	55	81-110	
37	4130 - Aspen	Sapling Well	38.9	26	Immature	
39	411 - Northern Hardwood	Poletimber Well	45.9	85	111-140	
43	4134 - Aspen, Spruce/Fir	Sapling Medium	16.1	15	Immature	Stand cut under permit #32-017-00.
44	6120 - Lowland Cedar	Sawtimber Well	20.1	119	171-200	

S	Gwini	Gwinn Mgt. Unit				Stands Compartment: 45 Year of Entry: 2020
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
45	42340 - Upland Spruce/Fir	Poletimber Well	5.4	45	51-80	Scattered white pine in overstory. Black cherry and balsam poplar saplings present.
48	4319 - Mixed Upland Forest	Sawtimber Well	15.8	55	81-110	4 to 5 merchantable sticks in aspen stems. Seeing top die-back and aspen snags. Black cherry, white birch, red pine, cedar, and tamarack are infrequent overstory associates. White pine, black cherry, and red pine saplings present. Small inclusion of black ash along 557.
49	4130 - Aspen	Sapling Well	13.6	15	Immature	Cut under permit #32-017-00.
56	6121 - Tamarack	Sawtimber Medium	36.7	96	81-110	5 stick tamarack. Variable overstory closure. Sporadic white birch poles present.
57	42340 - Upland Spruce/Fir	Sawtimber Well	2.1	55	81-110	4 to 5 sticks of merchantable height in aspen stems. 4 sticks of merchantable height in fir stems. Black cherry and white pine are uncommon overstory associates.
59	4319 - Mixed Upland Forest	Sapling Medium	6.7	23	Immature	Small inclusion of F6.
62	6120 - Lowland Cedar	Poletimber Well	4.8	108	111-140	stick cedar. Site is borderline too wet to be a productive cedar site. White birch and tamarack are overstory associates.
64	429 - Mixed Upland Conifers	Poletimber Well	4.9	55	81-110	Average of 4 merchantable sticks in aspen boles. Red pine and jack pine are uncommon overstory associates. White pine saplings present.
70	6122 - Black Spruce	Poletimber Well	13.7	75	81-110	
78	42340 - Upland Spruce/Fir	Poletimber Well	4.5	36	81-110	
79	4319 - Mixed Upland Forest	Sawtimber Well	2.8	55	111-140	4 to 5 stick aspen. Black cherry in overstory. White pine, black cherry, and red pine saplings found.
81	4134 - Aspen, Spruce/Fir	Sapling Well	69.4	26	Immature	Some scattered white pine supercanopy trees. Black cherry, white pine, black spruce, red maple, red pine, and tamarack saplings found.
84	4130 - Aspen	Sapling Medium	11.5	4	Immature	Small groups of spruce left for retention within the stand, and a 100 foot buffer left along Wilson Creek. Harvested under permit #32-005-10 "Bob Wilson Spruce" winter of 2014. Black spruce regenerating in Sphagnum moss area.Tamarack saplings present. Alder patches. Very mixed composition due to microsite difference.
85	4130 - Aspen	Sapling Well	6.4	17	Immature	Stand age older to north 1/2 of stand.

S t	Gwini	n Mgt. Unit		Report 7	– Forested	I Stands Compartment: 45 Year of Entry: 2020	E PORT
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	2
86	4319 - Mixed Upland Forest	Sawtimber Well	1.3	55	81-110	4 to 6 merchantable sticks in fir stems. 3 to 4 merchantable sticks in aspen stems. 5 to 6 merchantable sticks in spruce stems. White pine, white birch, black cherry, and red maple are overstory associates. Red pine saplings present.	е
90	42210 - Natural Red Pine	Sawtimber Medium	0.5	79	81-110	Residual retention patch from surrounding clearcut.	
406	42340 - Upland Spruce/Fir	Poletimber Medium	11.1	25	1-50	Old opening closing in. Tamarack and white birch poles found. Jack pine, tamarack, and red pine saplings present.	-
407	42340 - Upland Spruce/Fir	Poletimber Medium	13.8	55	1-50	Site herbicided with Tordon, and seeded to herbaceous cover 1980. Roller Chopped as well. Red pine poletimber and white pine sawtimber-sized trees present. Small patches of blueberry Network of patches of pole-size spruce and fir. Heavier F type stocking along perimeter of stand. Patches of cherry and balsar poplar brush. Also red pine and white spruce saplings present Pole-size red pine and black spruce present.	y. e m

Compartment: 45 Year of Entry: 2020



Cover Type	Acres	Managed Site	General Comments:
500 - Water	91.7	No	Escanaba river.
6220 - Alder/willow	33.9	No	Stream and riparian corridor.
3303 - Mixed Low Density Trees	11.9	No	Site herbicided with Tordon and then seeded in 1980. Portions roller chopped as well. Small patches of blueberry. Stand is approximately 90% open, with patches of pole-size spruce and fir. Patches of cherry brush. Also red pine and white spruce saplings present. Pole-size red pine and black spruce present.
3303 - Mixed Low Density Trees	2.8	No	Tordon herbicide/Seeded 1980, Roller Chopped in past to create brushland. Small patches of blueberry. Stand is approximately 90% open, with some pole-size spruce and fir. Patches of cherry brush.
6233 - Wet Meadow	8.1	No	Power line ROW, Recently sprayed with herbicide so saplings dead.
500 - Water	36.0	No	Stream and riparian corridor.
6220 - Alder/willow	13.1	No	Stream and riparian corridor.
6220 - Alder/willow	7.9	No	Stream floodplain.
3105 - Mixed Upland Herbaceous	3.4	No	Powerline ROW.
310 - Herbaceous Openland	18.9	No	Power Line ROW. Area outside ROW has white pine saplings and black cherry brush present. Unauthorized private gate on forest road providing access to private 40. Trespass case created.
310 - Herbaceous Openland	2.9	No	
3302 - Low Density Conifer Trees	1.1	No	White pine, fir, and black spruce saplings along edge of stand. More black spruce and fir within stand.
3301 - Low Density Deciduous Tree	3.0	No	Was herbicided and seeded in 1980.
3303 - Mixed Low Density Trees	6.0	No	Scattered cherry brush and fir/spruce saplings.
3303 - Mixed Low Density Trees	1.2	No	
3303 - Mixed Low Density Trees	4.9	No	
	500 - Water 6220 - Alder/willow 3303 - Mixed Low Density Trees 3303 - Mixed Low Density Trees 6233 - Wet Meadow 500 - Water 6220 - Alder/willow 3105 - Mixed Upland Herbaceous 310 - Herbaceous Openland 310 - Herbaceous Openland 3302 - Low Density Conifer Trees 3301 - Low Density Deciduous Tree 3303 - Mixed Low Density Trees	500 - Water 91.7 6220 - Alder/willow 33.9 3303 - Mixed Low Density Trees 11.9 6233 - Wet Meadow 8.1 500 - Water 36.0 6220 - Alder/willow 7.9 3105 - Mixed Upland Herbaceous 3.4 310 - Herbaceous Openland 18.9 310 - Herbaceous Openland 2.9 3302 - Low Density Conifer Trees 1.1 3303 - Mixed Low Density Trees 6.0 3303 - Mixed Low Density Trees 1.2	Cover Type Acres Site 500 - Water 91.7 No 6220 - Alder/willow 33.9 No 3303 - Mixed Low Density Trees 11.9 No 6233 - Wet Meadow 8.1 No 500 - Water 36.0 No 6220 - Alder/willow 13.1 No 6220 - Alder/willow 7.9 No 3105 - Mixed Upland Herbaceous 3.4 No 310 - Herbaceous Openland 18.9 No 310 - Herbaceous Openland 2.9 No 3302 - Low Density Conifer Trees 1.1 No 3301 - Low Density Deciduous Tree 3.0 No 3303 - Mixed Low Density Trees 6.0 No 3303 - Mixed Low Density Trees 1.2 No