

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32046 Entry Year 2021 Acreage: 1,688

County Marquette

Management Area: Chain Lakes Moraine

Revision Date: 2019-08-05

Stand Examiner: Rankin Smith

Legal Description:

T44N R25W Sections 32, 33, 34

Identified Planning Goals:

Vegetative management in the Chain Lake management area will provide a variety of forest products; maintain or enhance wildlife habitat; protect areas with unique characteristics; and provide for forest based recreational uses. Timber management objectives for the 10-year planning period include improving the age-class distribution of aspen, lowland conifer and lowland spruce/fir; maintaining the conifer component in northern hardwood stands; maintaining the presence of minor cover types on the landscape; and maintaining non-forest vegetation types. Wildlife management objectives include increasing diversity and long-term oak sustainability through under planting white and red pine; and to maintain or increase wildlife corridors especially along riparian areas. Management activities may be constrained by site conditions and the skewed age-class distributions. Balancing age classes and oak regeneration will be priority issues in this 10-year planning period.

Soil and topography:

Rubicon sand, Croswell Sand, Rousseau fine sand, Emmet-Escanaba complex, Croswell-Deford complex, Carbondale and Tawas muck, Tawas-Deford muck. Flat to rolling topography.

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

Private land used mostly for hunting camps in areas south and west. State ownership north and east except for a 40 acre parcel north along C.R. 557.

Unique Natural Features:

None

Archeological, Historical, and Cultural Features:

Some old logging camps are located in this compartment. None will be affected this YOE.

Special Management Designations or Considerations:

River buffers are managed to protect cold water fisheries values.

Watershed and Fisheries Considerations:

The northern region of this compartment borders Wilson Creek and Bobs Creek. Wilson Creek is designated a Type 1 trout stream less than 50' width and serves as a tributary to Bobs Creek. A 300' buffer is recommended for Wilson 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. Bobs Creek is designated a Type 1 trout stream less than 50' width and serves as a tributary to the Main Branch of the Escanaba River. 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 eastern region of this compartment borders the Main Branch of the Escanaba River. The Main Branch of the Escanaba River is designated a Type 1 trout stream greater than 50' width. 100' plus 5' per 1% increase in slope; buffers are recommended for the Main Branch of the Escanaba River to protect shoreline areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 046 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 ½ 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

Active sand/gravel pits do not exist in the vicinity, but there appears to be some sand & gravel potential within the compartment. Much of the surface is covered by wetlands, however, which could inhibit any potential surface mining. Bedrock appears to be too deep here to have significant non-metallic mineral value. Abandoned iron mines are located six miles to the north. Historically, there has been metallic mineral leasing within and around the compartment but little to no exploration. Approximately 1,300 acres southwest of the compartment were recently nominated for metallic mineral leasing by Weyerhaeuser Company. Any potential metallic mineral bearing formations are likely at least 300 feet beneath the surface in this area. There is no known potential for economic hydrocarbon production in the UP. The state does not own all mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

Vehicle Access:

The west side has good access. The east side is blocked by private land and bounded by the Escanaba river which results in poor vehicle access.

Survey Needs:

No survey request needed for 2021 YOE.

Recreational Facilities and Opportunities:

General forest recreation. No developed recreational facilities.

Fire Protection:

Fire frequency is low. In the pine dominated types, access is good for fire equipment.

Additional Compartment Information:

This compartment contains the Sesquicentennial Plantation (stand 13). Tamarack is planted within the red pine in the shape of 150.

The following reports from the Inventory are attached:

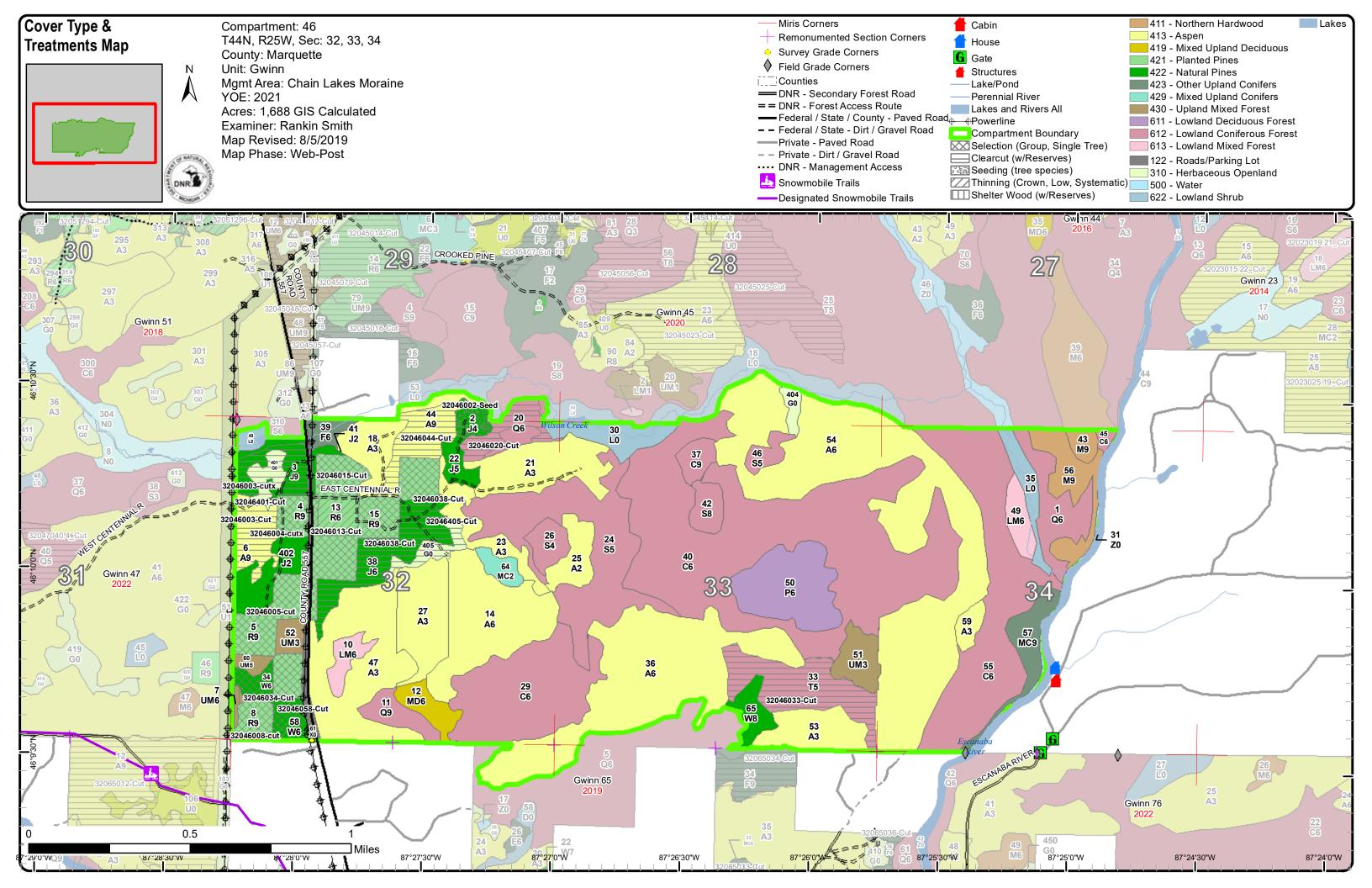
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

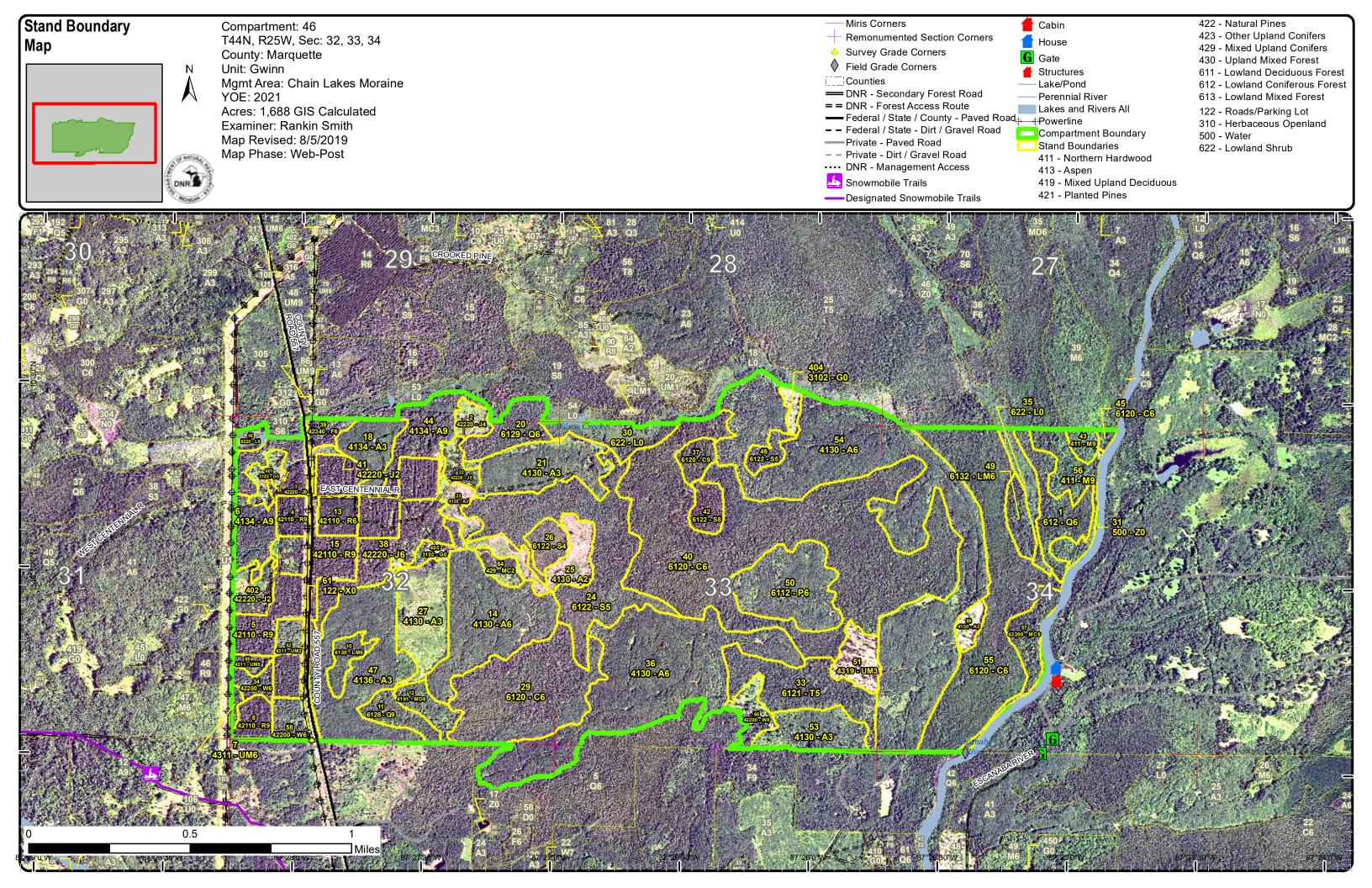
The following information is displayed, where pertinent, on the attached compartment maps:

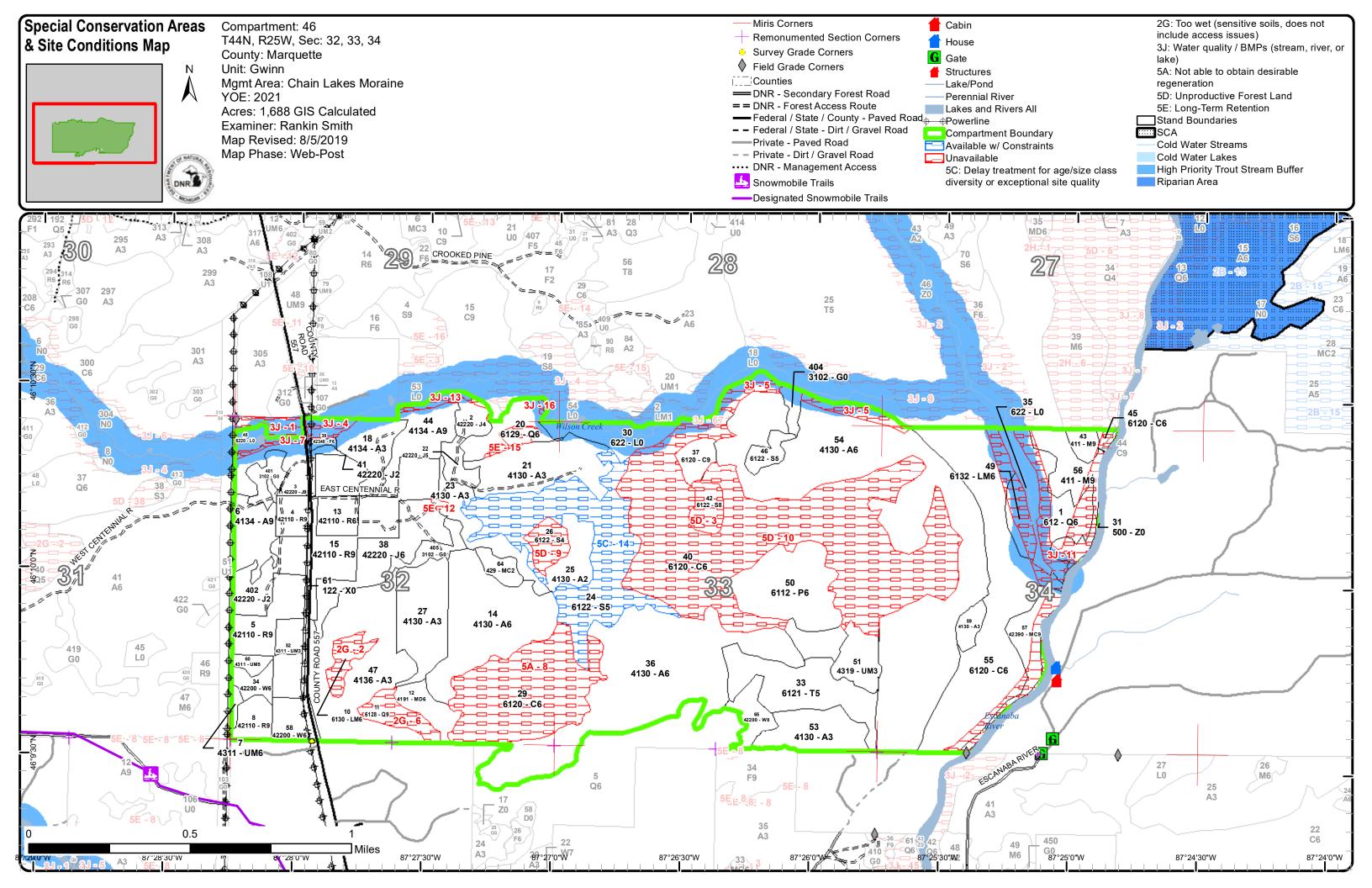
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

Site condition boundaries

Details on the road access system







Gwinn Mgt. Unit

Rankin Smith : Examiner

Compartment 46 Year of Entry 2021



Age Class

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	No.	y de la company	3 / 5	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		8 / 4	\$ 10°	, 3 / 8				\$ \ \&\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	00,00	,		S. J. L. L. S. S. L.		No.	No. No.
Aspen	0	69	79	127	321	0	25	17	0	0	0	0	0	0	0	0	0	0	636
Cedar	0	0	0	0	0	0	0	0	0	8	75	0	229	103	0	0	0	0	415
Herbaceous Openland	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Jack Pine	0	2	19	14	0	0	48	0	0	0	0	0	0	0	0	0	0	0	81
Lowland Aspen/Balsam Poplar	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0	0	54
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	8	0	0	10	0	0	0	0	18
Lowland Shrub	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Lowland Spruce/Fir	0	0	0	0	0	0	0	7	10	90	0	0	0	0	0	0	0	0	106
Mixed Upland Deciduous	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	11
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	5	28
Red Pine	0	0	0	0	10	0	0	0	0	93	0	0	0	0	0	0	0	0	103
Tamarack	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	40
Upland Conifers	0	0	0	6	0	0	0	0	0	18	0	0	0	0	0	0	0	0	24
Upland Mixed Forest	0	20	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	26
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	6
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	0	0	0	0	0	15	0	0	11	0	0	0	0	0	26
Total	71	91	98	151	374	2	84	24	10	264	144	23	240	113	0	0	0	5	1688



Report 2 – Treatment Summary

Gwinn Mgt. Unit Year of Entry: 2021

Acres of Harvest

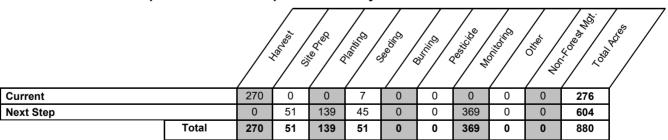
Compartment 46
Total Compartment Acres: 1,688

Commercial Harvest - 270 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

		/'			100 C		DOM COM COM	Sind Sol	Key Or Col	85 / 85 / 85 / 85 / 85 / 85 / 85 / 85 /	
Aspen		37	0	0	0	0	0	0	0	0	37
Herbaceous Openland		16	0	0	0	0	0	0	0	0	16
Jack Pine		45	0	0	0	0	0	0	0	0	45
Lowland Conifers		13	0	0	0	0	0	0	0	0	13
Red Pine		0	93	0	0	0	10	0	0	0	103
Tamarack		39	0	0	0	0	0	0	0	0	39
Upland Mixed Forest		0	0	0	0	2	0	0	0	0	2
White Pine		0	15	0	0	0	0	0	0	0	15
	Total	150	108	0	0	2	10	0	0	0	270

Proposed and Next Step Treatments by Method



ort 3 -- Treatments Compartment: 46
Year of Entry: 2021



	a n d	Approval Status
2 32046002- 6.5 42220 - Natural Poletimber 24 1-50 Seeding Machine Seed 4222 - Natural Even-Aged Prop Seed Jack Pine Poor Jack Pine	2	Proposal

Habitat Cut: No Site Condition:

<u>Prescription</u> Trench and seed per TMS Spec, Time with treatment in stand 38, to maintain stand diversty do not use herbicide.

Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Planting, Underplant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial

Treatments: Regen(3yr); Monitoring, Direct Seeding

Acceptable Jack Pine, Red pine, spruce, fir, aspen, oak

Regen:

Other Most of this stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

6 32046003-Cut 17.0 4134 - Aspen, Sawtimber 60 141- Harvest Clearcut with 413 - Aspen Even-Aged Proposal Spruce/Fir Well 170 Retention

Habitat Cut: No Site Condition:

Prescription Clearcut stand using a 2 inch spec, leave all white pine, red pine, and birch. Leave retention on the southern pinnulas in Stand 402 Leave all

<u>Specs:</u> leagacy trees using a 25 inch stump spec.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Aspen, Red Maple, Birch.

Regen:

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

4212 - Planted 32046003-cutx 14.3 42220 - Natural Sawtimber 50 Clearcut with Even-Aged Proposal 141-Harvest Jack Pine Well 170 Retention Jack Pine

Habitat Cut: No Site Condition:

Prescription Clearcut all species using a 2 inch spec except white pine, paper birch, and red pine. Leave a retention pocket that includes mature bigtooth

Specs: aspen and white spruce on the river buffer to the north.

Trench and seed per TMS spec to regenerate. per no herbicide in this area to increase stand diversity.

Well

Next Step Planting, Initial Plant; SitePrep, Trenching; Seeding, Machine Seed; Planting, Replant; Monitoring, Artificial Regen(1yr); Monitoring,

Treatments: Artificial Regen(3yr); Monitoring, Direct Seeding

Acceptable Jack pine, aspen, maple, red pine, red maple, spruce and fir.

Regen:

Other The retention within this compartment will benefit pileated woodpecker and northern goshawk. This stand was purchased with state game funds.

Comment:

Proposed Start Date: 10/1 /2020

4 32046004-cutx 8.0 42110 - Planted Sawtimber 80 81-110 Harvest Single Tree 4211 - Planted Even-Aged Proposal

Red Pine

Selection

Habitat Cut: No Site Condition:

<u>Prescription</u> Mark trees for removal with a target residual BA of 70-90 SF. Remove trees of poor form, suppressed trees, make gaps in areas of regeneration, <u>Specs:</u> improve spacing, improve diversity though tree selection. Favor red maple, spruce and fir when marking. White pine will be retained to provide

black bear habitat.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable White pine, jack pine, aspen, maple, spruce, fir, red maple, red pine.

Red Pine

Regen:

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

improve spacing, improve diversity though tree selection. Favor red maple, spruce and fir when marking. White pine will be retained to provide Specs: black bear habitat

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable White pine, jack pine, aspen, maple, spruce, fir, red maple, red pine.

Regen:

5

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

32046007-Cut 2.0 4311 - Pine, Aspen Poletimber 49 Proposal 141-4319 - Mixed Harvest Shelterwood Even-Aged Mix

Well 170 **Upland Forest**

Habitat Cut: No Site Condition:

Prescription Cut all aspen, maple, jack pine, and fir over 2 inches DBH. Mark about 20-30 SF of red pine to leave. Also mark a few large forked aspen to

leave, these trees will provide Goshawk habatat. All White spruce, birch, and white pine present should be left. Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable White pine, jack pine, aspen, maple, spruce, fir, red maple, red pine.

Regen:

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

42110 - Planted 32046008-cut 93 Sawtimber 80 111-Harvest Single Tree 4319 - Mixed Proposal Uneven-Red Pine Well 140 Selection **Upland Forest** Aged

Habitat Cut: No Site Condition:

Prescription Mark trees for removal with a target residual BA of 70-90 SF. Remove trees of poor form, suppressed trees, make gaps in areas of regeneration. improve spacing, improve diversity though tree selection. Favor red maple, spruce and fir when marking. White pine will be retained to provide Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable White pine, jack pine, aspen, maple, spruce, fir, red maple, red pine.

Regen:

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

32046013-Cut 10.0 42110 - Planted Poletimber 32 111-Harvest Crown Thinning 4211 - Planted Even-Aged Proposal Red Pine Red Pine

Well 140

Habitat Cut: No Site Condition:

Prescription Third row thin red pine. Remove all merchantable jack pine. The planted tamarack in middle should be thinned to facilitate normal thinning

Specs: operations hereafter. Thin down to 100 BA.

Next Step

Treatments:

Acceptable Regen:

Other Light thinning of the Tamarack will provide habitat the gray jay. This stand was purchased by state game funds.

Comment:

Proposed Start Date: 10/1 /2020 Next Step

Treatments:

Acceptable Jack pine, spruce, fir, aspen, red maple, white pine, red pine.

Regen:

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

81-110 32046020-Cut 13.0 6129 - Mixed Poletimber 94 6122 - Black Harvest Clearcut with Even-Aged Proposal

Coniferous Lowland Well

Forest

Retention Spruce

Habitat Cut: No Site Condition:

Prescription Clearcut all species except cedar and black cherry. Retention will be an upland patch of aspen and spruce on the west side of the stand the patch will include a few mature tamarack. this area will provide habitat for northern goshawk and gray jay. Cut in frozen or dry summer conditions. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Black Spruce, Tamarack, Aspen, Balsam Fir.

Regen: **Other**

This stand was purchased with State Game Funds

Comment:

Proposed Start Date: 10/1 /2020

32046033-Cut 39.4 6121 - Tamarack Poletimber 83 81-110 612 - Lowland Harvest Clearcut with Even-Aged Proposal Medium Retention Coniferous

Forest

Habitat Cut: No Site Condition:

Prescription Cut all species 2" and above except for cedar, paper birch and white pine. Retention will be on the north end of the treatment where it starts to grade into cedar. The cedar will provide white tail deer habitat, the tamarack will provide gray jay habitat. Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Tamarack, Black Spruce, Cedar

Regen:

Other This stand was purchased with State Game Funds.

Comment

Proposed Start Date: 10/1 /2020

32046034-Cut 42200 - Natural 85 6.4 Poletimber 81-110 Harvest Single Tree 4319 - Mixed Uneven-Proposal White Pine Selection **Upland Forest** Well Aged

Habitat Cut: No Site Condition:

Prescription Mark trees for removal with a target residual BA of 70-90 SF. Remove trees of poor form, suppressed trees, make gaps in areas of regeneration, improve spacing, improve diversity though tree selection. Favor red maple, red pine, spruce and fir when marking. Do not mark black cherry as it Specs:

provides soft mast for black bear.

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable White pine, jack pine, aspen, maple, spruce, fir, red maple, red pine.

Regen:

<u>Other</u> This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

Compartment: 46
Year of Entry: 2021

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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
38	32046038-Cut	30.4	42220 - Natural Jack Pine	Poletimber Well	59	81-110	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Proposal

Habitat Cut: No Site Condition:

<u>Prescription</u> Clearcut all species using a 2 inch spec except white pine and red pine. Leave a retention pocket against the opening on the northeast. <u>Specs:</u>

Next Step Seeding, Machine Seed; Planting, Replant; Planting, Initial Plant; Planting, Underplant; SitePrep, Trenching; Monitoring, Artificial Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr); Monitoring, Direct Seeding

Acceptable Jack pine, red pine, aspen, spruce, fir, maple.

Regen:

Other During reforestation do not use herbicide. This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

44 32046044-Cut 19.9 4134 - Aspen, Sawtimber 52 111- Harvest Clearcut with 413 - Aspen Even-Aged Proposal Spruce/Fir Well 140 Retention

Habitat Cut: No Site Condition:

<u>Prescription</u> Clearcut stand using a 2 inch spec mark some red pine to leave, leave all white pine and black cherry if present. leave retention at the north end <u>Specs:</u> of stand as buffer to creek. Leave all leagacy trees using a 25 inch stump spec.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, mixed hardwood, mixed conifer.

Regen:

Other Most of this stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

32046058-Cut 42200 - Natural Poletimber 85 Single Tree 4319 - Mixed Proposal 9.0 141-Harvest Uneven-White Pine Well 170 Selection **Upland Forest** Aged

Habitat Cut: No Site Condition:

<u>Prescription</u> Mark trees for removal with a target residual BA of 70-90 SF. Remove trees of poor form, suppressed trees, make gaps in areas of regeneration, <u>Specs:</u> improve spacing, improve diversity though tree selection. Favor red maple, red pine, spruce and fir when marking.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable White pine, jack pine, aspen, maple, spruce, fir, red maple, red pine.

Regen:

Other This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

401 32046401-Cut 7.9 3102 - Grass Nonstocked Unspec Harvest Clearcut 3103 - Rubus- Proposal ified Fern

Habitat Cut: No Site Condition:

Prescription Cut all trees in opening leaving only red and white pine. Cut all trees 2 inches and above. Management objective for site is upland brush, no

Specs: reforestation is needed.

Next Step Monitoring, Natural Regen (Re-Inventory)

<u>Treatments:</u>

Acceptable Grass

Regen:

Other This stand was purchased by state game funds.

Comment:

Proposed Start Date: 10/1 /2020

Gwinn Mgt. Unit Report 3 -- Treatments Compartment: 46 Year of Entry: 2021

t а **Cover Type Treatment** Acres Stand Size Stand BA **Treatment Treatment** Age **Approval** n Method Objective d Name CoverType Density Age Range Type Structure **Status** 3102 - Grass 405 32046405-Cut Clearcut 3103 - Rubus-7.7 Nonstocked Unspec Harvest Proposal ified Fern

Habitat Cut: No Site Condition:

Prescription Cut all trees in opening leaving only red and white pine. Cut all trees 2 inches and above. Management objective for site is upland brush, no Specs:

reforestation is needed.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

s

Acceptable Grass

Regen: <u>Other</u>

This stand was purchased with State Game Funds.

Comment:

Proposed Start Date: 10/1 /2020

Total Treatment Acreage Proposed:

276.2

Compartment: 46

Gwinn Mgt. Unit

Rankin Smith : Examiner Year of Entry: 2021

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	dition	s		
Acres	Available	With Condition	Not Available		5C	2G	2H	3J	5A	5D	5E
636	618	0	19	Aspen				19			
415	109	0	307	Cedar			0	15	74	218	
20	20	0	0	Herbaceous Openland							
83	80	0	3	Jack Pine				2			1
43	43	0	0	Lowland Aspen/Balsam Poplar							
54	21	0	33	Lowland Conifers		11		18			4
18	3	0	16	Lowland Mixed Forest		8		7			
31	31	0	0	Lowland Shrub				0			
106	6	81	19	Lowland Spruce/Fir	81					19	
11	11	0	0	Mixed Upland Deciduous							
28	19	0	9	Northern Hardwood			0	9			
103	103	0	0	Red Pine							
40	40	0	0	Tamarack							
24	14	0	10	Upland Conifers				10			
25	25	0	0	Upland Mixed Forest							
7	1	0	5	Upland Spruce/Fir				5			
11	11	0	0	Urban							
8	0	0	8	Water				8			
26	26	0	0	White Pine							
1,688	1,180	81	427	Total Forested Acres	81	20	0	92	74	237	5
	70%	5%	25%	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 Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Gwinn Mgt. Unit

Rankin Smith : Examiner

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
3	Unavailable	5D: Unproductive Forest Land	9	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rankin Smith: Examiner

8	Unavailable	5A: Not able to obtain desirable regeneration	74	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	5D: Unproductive Forest Land	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	5D: Unproductive Forest Land	218	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	64	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Gwinn Mgt. Unit Rankin Smith: Examiner

14	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	81	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
15	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

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: 46
Year of Entry 2021



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 condition 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 y are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condi- stocked 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	unique conditions adjacent to lakes, iversity of plants and wildlife. Riparian cts on water quality and quantity, as well

Compartment: 46
Year of Entry: 2021



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
1	612 - Lowland	Coniferous	Forest	Poletimber Well		24.6	98	51-80	N/A		Mostly cedar with some lowland conifers. Areas of thick balsam fir understory. Higher BA along upland edges but most areas lower sparse BA with small trees. Hard access due to Escanaba River to east Bob's Creek to west and south and bog to north.
2	42220 - Nat Canopy Species Jack Pine Balsam Fir	% Cover Size Class 85 Pole 10 Sapling/F		DBH			24	1-50	N/A		Mostly open area but well stocked in a few patches. Some A3 in narrow spot. Average one merchantable stick at this age.
3	42220 - Nat	ural Jack P	Pine	Sawtimb	er Well	17.0	50	141-170	N/A		Stand grades from aspen to jack pine. Large opening in the middle of
	Canopy Species Bigtooth Aspen Jack Pine	% Cover 10 65	Size Class Log/Pole Log/Pole	12 10	Age 60 50	Ba Wit	py Species Isam Fir ch Hazel ck Cherry	Low Low Low	Avg. Height 10 - 20 feet 5 - 10 feet >20 feet	Pole Tall Shrub	the stand. The stand has good site quality as a result it is fairly diverse.
4	42110 - Pla	nted Red P	ine	Sawtimb	er Well	8.0	80	81-110	N/A		Plantation planted 30's mixed with mostly red pine and to a lesser extent
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	jack pine. Most red pine stems are sized 10"-12"dbh. Stand was harvested under timber sale #008-11-01 "W. 557 Pine Blocks" - thinned
	Red Pine	95	Log	13	80		lsam Fir	Medium	10 - 20 feet	Sapling	spring 2013.
						Re	d Maple	Low	>20 feet	Sapling	Approximate habitat type is PArVAa, The understory of this stand is well
						Blad	k Cherry	Low	10 - 20 feet	Pole	developed with a mix of aspen, red maple, white pine, jack pine, and witch hazel. This site is on State Game Funds lands, as a result wildlife
											values are the priority in this area. The best way to increase wildlife value in this stand is to increase diversity and move the stand toward a natural stand made up of aspen, maple, white pine, jack pine, red pine, spruce and fir. We will accomplish this goal by conducting selection harvests every 10 years until the red pine reaches near non merchantable size.
5	42110 - Pla			Sawtimb		27.6	80	111-140	N/A		Plantation planted 30's mixed with mostly red pine and to a lesser extent jack pine. Most red pine stems are sized 12"-14"dbh. Stand was
	Canopy Species		Size Class		Age		py Species	Density	Avg. Height	Size	harvested under timber sale #008-11-01 "W. 557 Pine Blocks" - thinned
	Red Pine	95	Log/Pole	14	80	Blad	ck Cherry	Trace	< 5 feet	Seeding	spring 2013.
					ļ		te Spruce	Low	10 - 20 feet	Sapling	Approximate habitat type is PArVAa, The understory of this stand is well developed with a mix of aspen, red maple, white pine, jack pine, and
					Į	Wh	nite Pine	Low	5 - 10 feet	Sapling	witch hazel. This site is on State Game Funds lands, as a result wildlife
											values are the priority in this area. The best way to increase wildlife value in this stand is to increase diversity and move the stand toward a natural stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the red pine reaches near non merchantable size.
6	4134 - Asp	en, Spruce/	/Fir	Sawtimb	er Well	16.9	60	141-170	N/A		Red pine pocket with 7 sticks inside of stand. High basal areas. 6 to 7
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	stick aspen as well. Red maple beginning to succeed aspen in many
	Bigtooth Aspen	50	parts. Trace basswood. Aspert is beginning to de	parts. Trace basswood. Aspert is beginning to deteriorate.							
	Red Pine	15	Log	14		Musclewe	ood/Hornbean	n High	5 - 10 feet	Sapling	
	White Spruce	20	Pole	8		Ame	rican Elm	Low	5 - 10 feet	Sapling	

>20 feet

Pole

Low

Black Cherry



Stand	Level 4 Cover Type		Size Density		Acres	Stand Age	BA Range	Managed S	ite	General Comments	
	4311 - Pine Canopy Species Red Pine uaking Aspen	· '	Size Class Log Pole	Poletimbe DBH 15 7	Age 49	2.0	49	141-170	N/A		Mixed Red Pine and Aspen stand. Aspen of poor quality. 5-6 stick Red pine and 2-3 stick Aspen. Cut in next YOE.
8	42110 - Plar	nted Red P	ine	Sawtimb	er Well	9.3	80	111-140	N/A		Plantation planted 30's mixed with mostly red pine and to a lesser extent
C	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	jack pine. Most red pine stems are sized 12"-14"dbh. Stand was harvested under timber sale #008-11-01 "W. 557 Pine Blocks" - thi
	Red Pine	90	Pole/Log	11	80	Qua	king Aspen	Low	>20 feet	Pole	spring 2013.
						Bá	alsam Fir	Low	5 - 10 feet	Sapling	Approximate habitat type is PArVAa. The understory of this stand is we developed with a mix of aspen, red maple, white pine, jack pine, and witch hazel. This site is on State Game Funds lands, as a result wildlif values are the priority in this area. The best way to increase wildlife values are the priority in this area. The best way to increase wildlife values in this stand is to increase diversity and move the stand toward a natu stand made up of aspen, maple, white pine, jack pine, red pine, spruce and fir. We will accomplish this goal by conducting selection harvests every 10 years until the red pine reaches near non merchantable size.
10	6130 - Fir, A	Aspen, Ma _l	ole	Poletimb	er Well	8.4	95	51-80	N/A		Very wet area with aspen in dry spots and mix of Cedar patches in wetter
C	Canopy Species	% Cover	Size Class	DBH	Age						areas. Not merchantible.
	Black Ash	15	Pole	8							
Q	uaking Aspen	20	Pole	6							
V	White Spruce	10	Pole	8							
	Red Maple	20	Pole	7	95						
	Balsam Fir	20	Pole/Sapling	g 6							
North	nern White Cedar	15	Pole/Log	8							
11	6128 - Lowland (Deci	Coniferous duous	Mixed	Sawtimb	er Well	11.4	90	171-200	N/A		Cedar with variable stocking and species arrangements. MIddle is very dense and less so on the outside.
C	Canopy Species	% Cover	Size Class	DBH	Age						
North	nern White Cedar	45	Log/Pole	10	90						
Е	Black Spruce	20	Pole/Log	8							
	Paper Birch	10	Pole/Log	8							
	Red Maple	10	Log/Pole	12							
	Balsam Fir	10	Pole	7							
12	Co	Jpland Deciduous with Conifer		Poletimber Well		11.0	55	1-50	N/A		Stand was cut in 1992. Aspen in the understory is undeveloped for agreement birch is in poor condition. Possibly due to soils or cutting
	Canopy Species		Size Class		Age	Cano	opy Species		Avg. Height	Size	conditions or delayed regeneration. Poor quality red maple.
	Paper Birch	30	Pole/Log	9		Qua	king Aspen	Full	10 - 20 feet	Sapling	
,	Yellow Birch	10	Log/Pole	11							
	Red Maple	40	Pole/Log	9	55						



Stand	Level 4 Co	over Type	:	Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
13	42110 - Plan Canopy Species Red Pine Jack Pine		Size Class Pole/Sapling Pole	DBH 5 6		10.0	32	111-140	N/A		Sesquicentennial plantation. Well-stocked with larger tamarack "150" design in center of stand.
14	4130	- Aspen	F	oletimbe	er Well	59.6	25	1-50	N/A		Cut under permits 19-91-01 DeShambo. Some j. pine, r. pine, w. pine.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	Roads have grown in.
	Quaking Aspen	80	Pole/Sapling	5	25	Ва	Isam Fir	Low	< 5 feet	Sapling	
	Balsam Fir	10	Sapling	4							
15	42110 - Plar	nted Red P	ine S	awtimbe	er Well	47.8	85	81-110	N/A		Plantation planted 30's mixed with mostly red pine and to a lesser extent
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	jack pine. Most red pine stems are sized 12"-14"dbh. Stand was harvested under timber sale #008-11-01 "W. 557 Pine Blocks" - thinned
	Red Pine	95	Log/Pole	14	85	Ва	lsam Fir	Low	>20 feet	Pole	spring 2013. Approximate habitat type is PArVAa. The understory of this stand is weldeveloped with a mix of aspen, red maple, white pine, jack pine, and witch hazel. This site is on State Game Funds lands, as a result wildlife values are the priority in this area. The best way to increase wildlife value in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the red pine reaches near non merchantable size.
18	4134 - Aspe	-		Sapling		18.2	18	Immature	N/A		Cut in 2001. Permit #12-01-01. Trace black cherry and overmature white pine.
	Canopy Species		Size Class	DBH							
	Quaking Aspen	80	Sapling/Pole	4	18						
	Balsam Fir	15	Sapling	3							
20	6129 - Mixed Co Fo	oniferous Lo orest	owland F	oletimbe	er Well	18.4	94	81-110	N/A		A good patch of spruce and aspen upland of a couple acres on west side. 4-5 stick Spruce and tamarack. Cedar located in middle.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	
	Black Spruce	40	Pole/Log	9	94	Ва	Isam Fir	Medium	5 - 10 feet	Sapling	
	Tamarack	35	Pole/Log	9		Ta	ag Alder	Medium	10 - 20 feet	Tall Shrub	
No	rthern White Cedar	25	Log/Pole	10							
21	4130	- Aspen		Sapling	Well	36.3	18	Immature	N/A		Cut Permit 1 #13-01-01. Pockets of log sized red pine scattered
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	throughout. Access road in good condition but starting to grow in.
	Quaking Aspen	80	Sapling/Pole	3	18	Ва	lsam Fir	Medium	5 - 10 feet	Sapling	
	White Spruce	10	Pole	7							
22	42220 - Nati				Medium	7.1	24	1-50	N/A		Mostly open area but well stocked in a few patches. Some A3 in narrow spot. Average one merchantable stick at this age.
	Canopy Species		Size Class	DBH							opot. Avorago one merenantable such at this age.
	Jack Pine	85	Pole	6	24						
	Balsam Fir	10	Sapling/Pole	4							



Stand	d Level 4 C	Level 4 Cover Type		ize De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
23	4130	- Aspen		Sapling	y Well	16.9	5	Immature	N/A		Upland aspen regeneration and moderately well-stocked. Fades to
	Canopy Species	% Cover	Size Class	DBH	l Age						lowland and more sparse there. Harvested as "Blacked Out Spruce" #003-11-01 in Nov-Dec, 2014.
	Quaking Aspen	90	Sapling	1	5						
	Red Maple	10	Sapling	1							
24	6122 - BI	ack Spruce	e Pol	etimbe	Medium	80.9	89	51-80	N/A		Stocked with 3-4 stick scattered spruce over thick alder. Patches of cedar and mixed swamp conifers, especially northwest. Doesn't appear
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	merchantible under current conditions. Soils are more productive than
	Tamarack	40	Pole/Sap/Log	7		Ta	ag Alder	Full	10 - 20 feet	Tall Shrub	the adjacent lowland types.
	Black Spruce	50	Pole/Sap/Log	7	89	Blad	ck Spruce	Medium	5 - 10 feet	Sapling	
No	orthern White Cedar	10	Log/Pole	10							
25	4130	- Aspen	S	apling I	Medium	13.9	5	Immature	N/A		Harvested as "Blacked Out Spruce" sale # 003-11-01 - cut in December 2014. Decent aspen regeneration in dry hump in the middle. The lower
	Canopy Species	% Cover	Size Class	DBH	l Age						edges by the S types has little to no regeneration.
	Quaking Aspen	65	Sapling	1	5						
	Red Maple	20	Sapling	1							
	Balsam Fir	15	Sapling	1							
26	6122 - Bl	ack Spruce	e Po	oletimb	er Poor	9.7	70	1-50	N/A		Borderline treed bog. Unproductive soils. 2 stick trees.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Black Spruce	95	Pole/Sapling	5	70						
27	4130	- Aspen		Sapling	y Well	32.3	5	Immature	N/A		Stand harvested as "Sesquicentennial Aspen" #32-006-11-01 - cut
	Canopy Species	% Cover	Size Class	DBH	l Age						October, 2013. Pockets of edge Red Pine. Trace White Pine.
	Quaking Aspen	95	Sapling	1	5						
29	6120 - Lov	wland Ceda	ar P	oletimb	er Well	73.5	96	81-110	N/A		Low productivity soils. A mix of thin and thick areas. Some Lowland brush
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	in gaps. Heavier to cedar especially west and spruce/tamarack east but mixed in areas throughout. In Spruce areas BA is lower.
	Black Spruce	20	Pole/Log	9		Ba	ılsam Fir	Low	5 - 10 feet	Sapling	3 1
No	orthern White Cedar	60	Pole/Log	9	96						
	Tamarack	15	Pole/Sap/Log	7							
30	622 - Lov	vland Shrub)	Nonst	ocked	16.4		Unspecified	No		6-8" tall alder west and small/sparse alder east. Scattered spruce and tamarack 3-5' tall.
						Cano	py Species	Density	Avg. Height	Size	tallialack 3-3 tall.
						Ta	ag Alder	Full	5 - 10 feet	Tall Shrub	
						Ta	amarack	Medium	>20 feet	Pole	
						Bla	ck Spruce	Medium	>20 feet	Pole	
31	500 -	- Water		Nonsto	ocked	7.7	0	Unspecified	No		Escanaba river.



Canopy Species	Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed Site		General Comments	
Canopy Species No. Cover Size Class Bell Age Canopy Species Density Avg. Height Size Bell Service Size Siz	33											Tamarack well-stocked in a few areas. Scattered cedar. Variable stocking with areas of high BA and decent quality. 4-5 stick tamarack and 4 stick	
Stack Sprace 25								• • •			1	black spruce. Thick tag alder in gaps. Trace Red maple, Sugar Maple,	
Acquor White Cedar 10					-	83	Ва	Isam Fir	High	10 - 20 feet	Pole	and XL White Pine.	
34 42200 - Natural White Pline Poletimber Well 64 85 81-110 NI/A		Black Spruce	25	Pole									
Canopy Species % Cover Size Class DBH Age White Pine 80 Pole 8 85 Red Pine 10 Log/Pole 14 September Very Log/Pole Very Log/Pole	No	orthern White Cedar	10	Log	12								
White Pine 80 Pole 8 85 Pole 14	34	42200 - Nati	ural White F	Pine F	Poletimb	er Well	6.4	85	81-110	N/A			
Mithe Pine 80		Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size		
developed with a mix of aspen, red maple, white pine, jack pine, and witch haze. This site is on State Game Funds lands, as a result wildlife value are the priority in this area. The best way to increase wildlife value and the priority in this area. The best way to increase wildlife value and the priority in this area. The best way to increase wildlife value and made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size. 35		White Pine	80	Pole		85	Quak	ing Aspen	High	10 - 20 feet	Sapling	most areas looking good.	
values are the priority in this area. The best way to increase wildlife value stand toward a natural stand made up of aspen, maple, white pine, jack pine, spring, spring, reprine, spring, spring, spring, spring, reprine, spring, spring, reprine, spring, spring, reprine, spring, spring, reprine, spring, reprine, spring, spring, reprine, sprine, reprine, sprine, reprine, sprine, reprine, sprine, reprine, spring, reprine, sprine,		Red Pine	10	Log/Pole	14							developed with a mix of aspen, red maple, white pine, jack pine, and	
Section Sect													
Second Part													
Second Process Seco												stand made up of aspen, maple, white pine, jack pine, red pine, spruce,	
35													
Canopy Species Northern White Cedar Density Northern White Cedar Northern White C												every 10 years until the white pine reaches near non merchantable size.	
Northern White Cedar Medium >20 feet Log	35	622 - Lov	vland Shrub	•	Nonsto	cked	11.0		Unspecified	No		Bob's Creek corridor.	
36 4130 - Aspen Poletimber Well 121.3 33 51-80 N/A Canopy Species % Cover Size Class DBH Age Quaking Aspen 80 Pole/Log/Sap 6 33 Balsam Fir Hilp > 20 feet Pole Needium 5 - 10 feet Sapling Poletimber Well 7.9 85 141-170 N/A Size Density Avg. Height Size Pole Northern White Cedar 95 Log/Pole 10 85 Balsam Fir Medium 5 - 10 feet Sapling Poletimber Well 31.1 59 81-110 N/A Size Density Avg. Height Size Balsam Fir Medium 10 - 20 feet Pole Sapling Poletimber Well 5 - 10 feet Sapling Poletimber Well 5							Cano	py Species	Density	Avg. Height	Size		
Canopy Species % Cover Size Class DBH Age Quaking Aspen 80 Pole/Log/Sap 6 33 Balsam Fir High >20 feet Pole Red Maple Medium 5 - 10 feet Sapling 7 6120 - Lowland Cedar Sawtimber Well Red Maple Size Pole Red Maple Species Pole Red Maple Species Pole Red Maple Species Species Red Maple Species Red Maple Species Red Maple Species Red Maple Species Species Red Maple Species Red Maple Species Species Red Maple Species Red Maple Species Red Maple Species Species Red Maple Species Species Red Maple Species Red Maple Species Species Red Maple Species Species Red Maple Species Species Species Red Maple Species							Northern	White Cedar	Medium	>20 feet	Log		
Canopy Species	36	4130	- Aspen	F	Poletimber Well		121.3 33		51-80	N/A			
A grading Aspen 80 Pole/Log/Sap 6 33 Balsam Fir High >20 feet Pole Red Maple Medium 5 - 10 feet Sapling Fir High S		Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size		
37 6120 - Lowland Cedar Sawtimber Well 7.9 85 141-170 N/A Canopy Species Northern White Cedar 95 Log/Pole 10 85 Balsam Fir Medium 5-10 feet Sapling Tag Alder Medium 5-20 feet Tall Shrub 3/4 of stand is 3-4 stick mostly well-stocked cedar. Patches of log size black spruce located within. Areas of heavy tag alder understory. Balsam Fir Medium 5-10 feet Sapling Tag Alder Medium 5-20 feet Tall Shrub 3/4 of stand is 3-4 stick mostly well-stocked cedar. Patches of log size black spruce located within. Areas of heavy tag alder understory. Balsam Fir Medium 5-10 feet Sapling Tag Alder Medium 5-10 feet Sapling Tag Alder Medium 5-10 feet Sapling Tag Alder Medium 10-20 feet Pole Tag Alder Medium 10-20 feet Sapling		Quaking Aspen	80	Pole/Log/Sap	6	33	Ва	lsam Fir	High	>20 feet	Pole		
37 6120 - Lowland Cedar Sawtimber Well 7.9 85 141-170 N/A Canopy Species % Cover Size Class DBH Age Northern White Cedar 95 Log/Pole 10 85 Canopy Species 7 Size Class DBH Age Deletimber Well 31.1 59 81-110 N/A Canopy Species 95 Log/Pole 10 59 Density Avg. Height 5- 10 feet Sapling Tag Alder Medium 5- 10 feet Tall Shrub 38 42220 - Natural Jack Pine Poletimber Well 31.1 59 81-110 N/A Canopy Species 95 Log/Pole 10 59 Density Avg. Height 5:2e Jack Pine 95 Log/Pole 10 59 Balsam Fir Medium 10 - 20 feet Pole 39 42340 - Upland Spruce/Fir Poletimber Well 6.5 92 81-110 N/A Canopy Species % Cover Size Class DBH Age Black Spruce 40 Pole/Log 8 92 Balsam Fir Medium 10 - 20 feet Sapling Canopy Species Density Avg. Height 10 - 20 feet Pole Strip of mature fir and spruce along wilson creek on high ground. Some mortality. Some cedar next to creek. Stream buffer stand left from adjacent sale.							Re	d Maple	Medium	5 - 10 feet	Sapling		
Canopy Species % Cover Size Class DBH Age Northern White Cedar 95 Log/Pole 10 85 Balsam Fir Medium 5 - 10 feet Sapling Tag Alder Medium 5 - 10 feet Tall Shrub 38 42220 - Natural Jack Pine Poletimber Well 31.1 59 81-110 N/A Canopy Species % Cover Size Class DBH Age Jack Pine 95 Log/Pole 10 59 Balsam Fir Medium 5 - 10 feet Tall Shrub Canopy Species Medium 5 - 10 feet Tall Shrub Jack pine seeding in formerly open area. Mostly well-stocked with 4-5 sticks. Some open areas. Areas of J3 since seeded in over the years an is continuing to fill in. Canopy Species % Cover Size Class DBH Age Balsam Fir Poletimber Well 6.5 92 81-110 N/A Canopy Species % Cover Size Class DBH Age Black Spruce 40 Pole/Log 8 92 Balsam Fir Medium 10 - 20 feet Sapling Medium 10 - 20 feet Sapling Medium 10 - 20 feet Sapling												years but should hold to harvest with stand 50 in 20 years.	
Northern White Cedar 95 Log/Pole 10 85 Balsam Fir Medium 5 - 10 feet Sapling Tag Alder Medium 5 - 10 feet Tall Shrub 38 42220 - Natural Jack Pine Poletimber Well 31.1 59 81-110 N/A Canopy Species % Cover Size Class DBH Age Jack Pine 95 Log/Pole 10 59 Balsam Fir Medium 10 - 20 feet Pole 39 42340 - Upland Spruce/Fir Poletimber Well 6.5 92 81-110 N/A Canopy Species % Cover Size Class DBH Age Black Spruce 40 Pole/Log 8 92 Balsam Fir Medium 10 - 20 feet Sapling Canopy Species Density Avg. Height Size Balsam Fir Medium 10 - 20 feet Pole Strip of mature fir and spruce along wilson creek on high ground. Some mortality. Some cedar next to creek. Stream buffer stand left from adjacent sale.	37	6120 - Lo	wland Ceda	r S	Sawtimb	er Well	7.9	85	141-170	N/A			
Tag Alder Medium 5 - 10 feet Tall Shrub Size Canopy Species W Cover Size Class DBH Age Deletimber Well Size Density Deletimber Well Size Density Density Size Density Density Size Density Density Size Density Size Density Size Density Size Density Densit		Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	plack spruce located within. Areas of heavy tag alder understory.	
38 42220 - Natural Jack Pine Poletimber Well 31.1 59 81-110 N/A Canopy Species	No	orthern White Cedar	95	Log/Pole	10	85	Ва	lsam Fir	Medium	5 - 10 feet	Sapling		
Canopy Species % Cover Size Class DBH Age Jack Pine 95 Log/Pole 10 59 Balsam Fir Medium 10 - 20 feet Pole Tanopy Species Black Spruce 40 Pole Balsam Fir Medium 10 - 20 feet Sapling Balsam Fir 40 Pole 6					'		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub		
Canopy Species % Cover Size Class DBH Age Jack Pine 95 Log/Pole 10 59 Balsam Fir Medium 10 - 20 feet Pole Tanopy Species Black Spruce 40 Pole Balsam Fir Medium 10 - 20 feet Sapling Balsam Fir 40 Pole 6	20	42220 - Nat	ural Jack P	ine G	Poletimh	er Well	31.1	50	81-110	N/A		lack nine seeding in formerly open area. Mostly well-stocked with 4.5	
Jack Pine 95 Log/Pole 10 59 Balsam Fir Medium 10 - 20 feet Pole 42340 - Upland Spruce/Fir Poletimber Well 6.5 92 81-110 N/A Canopy Species % Cover Size Class DBH Age Black Spruce 40 Pole/Log 8 92 Balsam Fir Medium 10 - 20 feet Sapling Balsam Fir 40 Pole 6	38										6:	sticks. Some open areas. Areas of J3 since seeded in over the years and	
39 42340 - Upland Spruce/Fir Poletimber Well 6.5 92 81-110 N/A Strip of mature fir and spruce along wilson creek on high ground. Some mortality. Some cedar next to creek. Stream buffer stand left from adjacent sale. Black Spruce												is continuing to fill in.	
Canopy Species % Cover Size Class DBH Age Black Spruce 40 Pole/Log 8 92 Balsam Fir 40 Pole 6		Jack Pine	95	Log/Pole	10	59	Ва	isam Fir	Medium	10 - 20 feet	Pole		
Canopy Species % Cover Size Class DBH Age Black Spruce 40 Pole/Log 8 92 Balsam Fir 40 Pole 6	39	42340 - Upla	and Spruce	/Fir F	Poletimb	er Well	6.5	92	81-110	N/A			
Black Spruce 40 Pole/Log 8 92 Balsam Fir Medium 10 - 20 feet Sapling Balsam Fir 40 Pole 6		Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size		
		Black Spruce	40	Pole/Log	8	92	Ва	lsam Fir	Medium	10 - 20 feet	Sapling		
Jack Pine 15 Pole/Log 9		Balsam Fir	40	Pole	6				'			•	
		Jack Pine	15	Pole/Log	9								

Gwinn Mgt. Unit



Stand	Level 4 Co	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		ite	General Comments							
40	6120 - Lov	wland Ceda	ar F	Poletimb	er Well	229.4	118	81-110	N/A		Patches of spruce with alder under sparse, low BA. All trees are small. Numerous gaps. Some patches of thicker cedar, mostly small, low	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	quality. Unproductive soils.	
No	rthern White Cedar	65	Pole/Log	8	118	Ta	g Alder	Full	5 - 10 feet	Tall Shrub		
	Tamarack	15	Pole	7		Bal	sam Fir	Medium	5 - 10 feet	Sapling		
	Black Spruce	20	Pole/Sapling	6		Blac	k Spruce	High	5 - 10 feet	Sapling		
41	42220 - Nati	ural Jack P	Pine S	Sapling N	/ledium	2.4	6	Immature	N/A		Jack pine seeded in naturally from adjacent plantations. Well-stocked 4-stick average. Looks good, could cut with adjacent red pine thinnings.	
	Canopy Species	% Cover	Size Class		Age						Could scarify after and probably get adequate regeneration. A few w.	
	Jack Pine	100	Sapling	1	6						birch, aspen ,fir. Leave any w. pine or red pine. ***Stand harvested as "E 557 Pine Blocks" #007-11-01 (part of Unit 1) - cut June, 2013. FTP 32-795 prepared for scarification. FTP Dropped due to small size, logging scarification will be sufficient here to regenerate stand check regen during inventory.	
42	6122 - Bl	ack Spruce	e Sa	awtimber	Medium	9.0	85	51-80	N/A		5-6 stick spruce in spots with numerous large gaps and sparse areas. Heavy balsam fir understory. Lots of small bogs located within. Located	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	on very low productivity Delford soils.	
	Black Spruce	90	Log/Pole	11	85	Bal	sam Fir	Full	5 - 10 feet	Sapling		
	Tamarack	10	Pole/Log	9								
43	411 - Northe	ern Hardwo	ood S	Sawtimb	er Well	5.1 100		81-110	N/A		High basal area maple due to lack of management. Access to this stand and adjacent prevents harvest. Upland cedar in most areas. Hard access due to Escanaba River to east Bob's Creek to west and south and bog to north.	
44	4134 - Aspe	en, Spruce/	/Fir S	Sawtimb	er Well	24.5	52	111-140	N/A		Numerous 14" + Balsam Fir. Stand is over mature and succeeding to	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	spruce/fir. 4-5 stick Fir and 6-7 stick Aspen.	
	Quaking Aspen	50	Log	13	52		sam Fir	Full	10 - 20 feet	Sapling		
	White Spruce	12	Log	11								
	Balsam Fir	18	Pole/Log	8								
	Black Cherry	10	Pole	8								
	Red Pine	10	XLog	18								
45	6120 - Lov	wland Ceda	ar F	Poletimb	er Well	1.8	98	51-80	N/A		Mostly cedar with some lowland conifers. Hard access due to Escanaba River to east Bob's Creek to west and south and bog to north	
46	6122 - Bl	ack Spruce	e Po	oletimber	Medium	6.5	65	51-80	N/A		Mostly 2-3 stick spruce and 2 stick tamarack. Almost well- stocked but	
	Canopy Species	% Cover	Size Class	DBH	Age	Canoi	py Species	Density	Avg. Height	Size	many trees are unmerchantable. Very few log sized spruce with 4-5	
	Black Spruce	80			65		k Spruce				sticks. Stands seems to be low productivity as it is located on Greenwood soil. Bog looks non-productive. Advance regeneration of	
	Tamarack	15	Pole/Sapling								spruce is present.	
47	4136 - Aspen	ı, Mixed Co	nifer	Sapling	Well	67.2	25	Immature	N/A		OPIC - FMD: Cut under permit 18-91-01. Numerous low seeps. Trace 2"	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	cherry and Log size White Pine. Pine located along co. rd. 557.	
			0 " " "		0.5	D - I		N. 4. 11	E 40 f	0 1!	1	
	Quaking Aspen	80	Sapling/Pole	4	25	Bai	sam Fir	Medium	5 - 10 feet	Sapling		



Stand	Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments		
48	6220 - A	lder/willow		Nonstocked	4.1	0	Unspecified	No		Red pine pocket with 7 sticks inside of stand. High basal areas. 6 to 7 stick aspen as well. Red maple beginning to succeed aspen in many parts. Trace Basswood. Aspen is beginning to deteriorate.		
49	6132 - Mixed Lo C	wland Fore edar	st with	Poletimber Well	9.9	120	111-140	N/A		Birch is overmature and has significant mortality. Thick Fir in understory. Vicinity to Bob's Creek and blockage by adjacent Q type make this stand		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	unmanageable. A few yellow birch and red maple.		
	Paper Birch	40	Log/Pole	10	Ва	lsam Fir	Full	10 - 20 feet	Sapling			
No	rthern White Cedar	40	Log	11 120						-		
50	6112 - Lo	6112 - Lowland Aspen		Poletimber Well	42.6	33	1-50	N/A		CUT 1986 # 020-82-1. On the low-stocked side of P6. Some sparse		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	areas in center with scattered cherry. Trace red maple. Some lowland brush on edge of stand or S1S2. Some areas still submerchantable.		
	Quaking Aspen	70	Pole	6 33	Ва	lsam Fir	Medium	10 - 20 feet	Sapling	Wetter soils have resulted in lower productivity. Should be cut along with		
	Tamarack	15	Pole	6						stand 36 in 20 years.		
	White Spruce	10	Sapling/Pole	9 4								
51	4319 - Mixed	l Upland Fo	rest	Sapling Well	13.8	3	Immature	N/A		Stand was a mix of aspen, birch, and fir along with some big pine, in patches and cedar on upland and in lowland swales. Overstory now sparse with leave trees. Patchy M3 and F3 under. Treatment complete 02/2016, Way's Access Aspen/Fir, 32-011-11-01. Continue to monitor.		
52	4311 - Pin	e, Aspen M	ix	Sapling Well	5.9	5	51-80	N/A		OPIC - FMD: A6 small 3-stick with some larger mixed in. also w. and red		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	pine scattered throughout. Aspen short, poor quality due to sandy soil. Some J. Pine. Leave w. and r. pine in harvest. ***Stand harvested as t.		
	Red Pine	25	Log/Pole	10 65	Ja	ack Pine	High	10 - 20 feet	Sapling	sale #008-11-01 "W. 557 Pine Blocks" (E 1/2 unit 3) - cut spring, 2013.		
	Quaking Aspen	40	Sapling	1 5	Ва	ılsam Fir	Medium	5 - 10 feet	Sapling	All RP, WP, cherry and white spruce were left.		
	White Spruce	6	Sapling	7								
	Red Maple	11	Sapling	1								
53	4130	- Aspen		Sapling Well	24.0	16	Immature	N/A		Stand cut in 2003 by giguere logging. West part has thicker white pine and a lower tamarack/ spruce bog.		
	Canopy Species	% Cover	Size Class	DBH Age						and a long, talliardoly opinion bog.		
	Quaking Aspen	80	Sapling/Pole									
	Black Cherry	10	Sapling	2								
	White Pine	10	Log	14								
54	4130	- Aspen		Poletimber Well	199.4	32	81-110	N/A		Cut 1987. Well-stocked 4-5 stick Aspen located on highly productive		
	Canopy Species	% Cover		DBH Age	Cano	py Species	Density	Avg. Height	Size	Emmet soils. Stand will be ready to harvest in next YOE at age 42. Some areas are 2-stick and Some sparse areas along the northwest		
	Quaking Aspen	85	Pole/Log	8 32	Ва	ılsam Fir	Medium	10 - 20 feet	Sapling	edge. Some swamp edges are F3 or F2. W.p and j.p. in spots along with		
										some cherry.		
55		wland Ceda		Poletimber Well	102.7	120	141-170	N/A		Mostly cedar with some spruce and ash in pocket of wetter lower terrain Areas of thick balsam fir understory. Higher BA along upland edges but		
	Canopy Species		Size Class	DBH Age		py Species	Density	Avg. Height	Size	most areas lower BA. Absent of any Cedar regeneration.		
No	rthern White Cedar	85	Log/Pole	10 120	Ва	lsam Fir	Medium	10 - 20 feet	Sapling			
	Black Spruce	10	Log	12								



Stand	Level 4 C	over Type		Size Density Sawtimber Well		Acres	Stand Age	BA Range	1-170 N/A		High basal area maple due to lack of management. Access to this stand and adjacent prevents harvest. Upland cedar in most areas. Hard access due to Escanaba River to east Bob's Creek to west and south and bog to north.	
56	411 - Northern Hardwood		ood S			22.9	100	141-170				
57		d Non-Pine Upland conifers		Sawtimb	er Well	17.5	88	81-110	N/A		Upland, big hemlock,cedar and pine mixed with other species. Plentiful oversize trees. Some High BA areas of big hemlock.	
	Canopy Species	% Cover	Size Class	DBH	Age							
	Hemlock	40	XLog/Log	20	88							
Noi	rthern White Cedar	30	Log/Pole	16								
	White Pine	10	Log/XLog	15								
	Red Maple	15	Log	15								
58	42200 - Natu	ural White F	Pine F	Poletimb	er Well	9.0	85	141-170	N/A		Cut 1992 permit 49-91-01 deshambo. Left all w.pine. Well-stocked .	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	Better quality in thick areas. White pine 2-stick now with some larger. A few A3 gaps 2". Some areas still W3. Some multiple topped pine but	
	White Pine	95	Pole/Log	8	85	Re	ed Maple	Low	10 - 20 feet	Sapling	most areas looking good.	
				'		Blad	ck Cherry	Low	5 - 10 feet	Sapling	Approximate habitat type is PArVAa. The understory of this stand is v	
						developed with a mix of aspen, red maple, white pine, jack pine, and witch hazel. This site is on State Game Funds lands, as a result wildlife						
											values are the priority in this area. The best way to increase wildlife value	
											in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce and fir. We will accomplish this goal by conducting selection harvests	
 59	4130	- Aspen		Sapling	ı Well	5.9	4	51-80	N/A		in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size. Big white pine scattered throughout. Harvest completed 02/2016, Way	
59	4130 Canopy Species	- Aspen	Size Class		Well	5.9	4	51-80	N/A		in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size. Big white pine scattered throughout. Harvest completed 02/2016, Way	
			Size Class Sapling			5.9	4	51-80	N/A		in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size. Big white pine scattered throughout. Harvest completed 02/2016, Way'	
	Canopy Species	% Cover		DBH	Age	5.9	4	51-80	N/A		values are the priority in this area. The best way to increase wildlife valuin this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size Big white pine scattered throughout. Harvest completed 02/2016, Way' Access Aspen/Fir, TS #32-011-11-01. Large amount of fir in understory	
	Canopy Species Quaking Aspen	% Cover 75	Sapling	DBH	Age	5.9	4	51-80	N/A		in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size. Big white pine scattered throughout. Harvest completed 02/2016, Way	
59 60	Canopy Species Quaking Aspen White Pine Red Maple	% Cover 75 10	Sapling Log/Pole Sapling	DBH 1 14	Age 4		4 29	51-80 51-80	N/A		in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size Big white pine scattered throughout. Harvest completed 02/2016, Way' Access Aspen/Fir, TS #32-011-11-01. Large amount of fir in understory	
	Canopy Species Quaking Aspen White Pine Red Maple	% Cover 75 10 15 e, Aspen M	Sapling Log/Pole Sapling	DBH 1 14 1	Age 4	n 3.6				Size	in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size Big white pine scattered throughout. Harvest completed 02/2016, Way' Access Aspen/Fir, TS #32-011-11-01. Large amount of fir in understory	
60	Canopy Species Quaking Aspen White Pine Red Maple 4311 - Pin	% Cover 75 10 15 e, Aspen M	Sapling Log/Pole Sapling	DBH 1 14 1	Age 4 Medium	a 3.6	29	51-80	N/A	Size Sapling	in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size Big white pine scattered throughout. Harvest completed 02/2016, Way' Access Aspen/Fir, TS #32-011-11-01. Large amount of fir in understory	
60	Canopy Species Quaking Aspen White Pine Red Maple 4311 - Pin Canopy Species	% Cover 75 10 15 e, Aspen M % Cover	Sapling Log/Pole Sapling ix Po	DBH 1 14 1 Dletimber DBH 8	Age 4 Medium	n 3.6 Cano	29 ppy Species	51-80 Density	N/A Avg. Height		in this stand is to increase diversity and move the stand toward a natura stand made up of aspen, maple, white pine, jack pine, red pine, spruce, and fir. We will accomplish this goal by conducting selection harvests every 10 years until the white pine reaches near non merchantable size Big white pine scattered throughout. Harvest completed 02/2016, Way' Access Aspen/Fir, TS #32-011-11-01. Large amount of fir in understory	



Stand	nd Level 4 Cover Type	Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments		
64	429 - Mixed l	Jpland Con	ifers S	Sapling N	/ledium	6.3	25	1-50	N/A		Cut under permits 19-91-01 DeShambo. Poorly stocked jack pine with
	Canopy Species	% Cover	Size Class	DBH	Age						some aspen, fir, red pine, cherry, trace white pine. Numerous open patches.
	Quaking Aspen	30	Sapling/Pole	9 3	25						parones.
	Jack Pine	40	Pole/Sapling	g 5	25						
	Black Cherry	10	Sapling	3							
	Red Pine	10	Pole/Sapling	g 6							
	Balsam Fir	10	Sapling/Pole	e 3							
65	42200 - Nati	ural White F	Pine Sa	awtimber Medium		10.8	110	51-80	N/A		Was a W9 stand cut in 2002 by Giguere. A burn was planned to
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	suppress heavy fir and aspen regen. No sign of White/Red Pine regeneration as of 2019. Most residual white pine is legacy tree status.
	White Pine	90	XLog	24	110	Whi	te Spruce	Medium	>20 feet	Pole	regerioration as or 2010 most rockast mino pino is regas, and status.
	Red Pine	10	Log	15							•
401	3102	- Grass		Nonsto	cked	ed 7.9		7.9 Unspecified		pening	Old opening filling in with trees.
						Cano	py Species	Density	Avg. Height	Size	
						Ja	ck Pine	Medium	>20 feet	Sapling	
						Wh	nite Pine	Low	5 - 10 feet	Sapling	
						Blad	ck Cherry	Low	>20 feet	Pole	
402	42220 - Nat	ural Jack P	ine S	Sapling N		18.5	16	Immature	N/A		Natural regeneration with openings. Slight traces of paper birch (3 dbh).
	Canopy Species		Size Class		Age						
	Jack Pine	80	Sapling	3	16						
	Red Pine	10	Sapling	2							
404	3102	- Grass		Nonsto	cked	4.2		Unspecified	No		
						Cano	py Species	Density	Avg. Height	Size	
						Ja	ck Pine	Low	10 - 20 feet	Pole	
						Blad	ck Cherry	Low	5 - 10 feet	Pole	
						Wh	nite Pine	Low	5 - 10 feet	Sapling	
405	3102	- Grass		Nonsto	cked	7.7		Unspecified	No		
						Cano	py Species	Density	Avg. Height	Size	
						Ja	ck Pine	Low	10 - 20 feet	Sapling	
						Quak	ing Aspen	Low	10 - 20 feet	Sapling	
							<u> </u>			1 0	