

## **Compartment Review Presentation**

**Gladwin Forest Management Unit** 

Compartment 73024
Entry Year 2019
Acreage: 4,749
County Gladwin

Management Area: Upper Muskegon

Revision Date: 2017-05-26

Stand Examiner: Tim Gallagher

**Legal Description:** 

T20N - R02W Sections 3 thru 10.

#### **Identified Planning Goals:**

Vegetation management in the Upper Muskegon management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year period will focus on harvesting mature aspen and oak stands and balancing age class distributions of, aspen and oak. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests with an emphasis on Ruffed Grouse for conducting Dog Field Trials using natural birds, and other wildlife-related recreation. Expected trends within this 10-year planning period are the need to manage oak wilt, the need to continue to manage aspen cover types for a balanced age-class distribution and an expected increase in recreation pressure.

### Soil and topography:

The area varies from well drained soils to poorly drained soils as you enter the scattered forested drains and/or one of several creek flood plains. The terrain varies from rolling hills to steep. The steepest terrain is located within section 3 and there is an abandoned fire tower site also located within section 3. The major soil types are Chelsea associations and Rubicon associations.

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

The state land occurs in one large contiguous block. This compartment is made up of eight contiguous sections that are solid state ownership, except for one small (one acre) lot located at the very southeast corner of the compartment. There are numerous permanent residences all around the compartment. The town of Meredith is located directly adjacent to the southwest corner of the compartment. The location of this town concentrates use within the compartment. The Mid-Forest Lodge, a large hunt club is directly adjacent to the northern boundary of the compartment. The Mid-Forest Lodge actively manages there forest land for wildlife and timber production.

### **Unique Natural Features:**

Records indicate Spotted Turtle within the compartment.

#### Archeological, Historical, and Cultural Features:

No sites listed in Archaeological database.

#### **Special Management Designations or Considerations:**

The entire compartment is a dedicated "High Conservation Value Area" (HCVA) as the Gladwin Field Trial Area. Under Act 82 the Gladwin Field Trial Area has special resource management direction; with a primary objective to perpetuate early-successional communities for species adapted to young forests with an emphasis on Ruffed Grouse for conducting Dog Field Trials using natural birds, and other wildlife-related recreation.

### **Watershed and Fisheries Considerations:**

House Lake, Trout Lake, Hoister Lake and Russ Eaton Lake are all located within the Compartment. There are populations of pan fish and bass within all four lakes and they receive moderate fishing pressure. Gas motors are prohibited on all the lakes within the Gladwin Field Trial Area. Stoney Creek and the North Branch Cedar River are both located within the Compartment and should be treated as cold water fisheries, both are designated trout streams. Both Stoney Creek and the North Branch Cedar River have a natural buffer of lowland brush, lowland timber types and marsh directly adjacent to there banks, these river corridors should be considered sensitive wetland.

### Wildlife Habitat Considerations:

Wildlife Habitat Considerations: Compartment #24 "The Gladwin Field Trail Area (GFTA) is located in T20N, R2W, Sections 3-10 (within Gladwin County) and is a small component of the Gladwin Forest Management Unit. In 1916, much

of the above area now referred to as the GFTA was purchased as a public grouse field trial area. Since that time, field trialing has remained the priority use of this area. On September 12, 1957, the Conservation Commission, under authority of Act 81, as amended, established / dedicated the GFTA. At this same time, it was designated as a special use zone within the state forest, referred to as the Tittabawassee River State Forest. An approved management plan developed in 1977, has been closely followed and implemented by two administering divisions, Wildlife and Forestry. Wildlife Management, particularly grouse production, has remained the key value of the plan. Only hunting seasons or other activities that do not conflict with the primary intent of the area have been promoted and allowed in the GFTA. Off-road vehicles are not legal in the GFTA, only licensed street vehicles. One of the truly unique characteristics of the area is that field trial events are conducted with native wild grouse, birds produced on-site that represent end products of the management plan. The GFTA remains highly regarded as one of the nation's premiere field trail event locations.

### Mineral Resource and Development Concerns and/or Restrictions

There is no known metallic mineral potential in this part of the state. An active sand/gravel pit is located in Section 12, two miles to the southeast, and there appears to be good potential in some parts of the compartment. No oil and gas exploration or development has occurred within the compartment to date. The Headquarters and Skeels Devonian oil fields are less than three miles west and southwest, respectively. There is currently no active leasing within the compartment. However, there have been some recent new discoveries of Dundee oil reservoirs in the county and there has been a rise in leasing and permit activity in the region.

#### **Vehicle Access:**

Access to the compartment is good via the county road system and state two tracks that are in place. Many of the state forest two track roads have been improved with gravel, culverts and routine grading. There is a clear span wood laminate tension bridge over Stoney Creek on the main east/west travel corridor. The bridge is approximately 20 years old and is along a main haul route for forest products. It is recommended that the bridge be inspected, due to its age and heavy usage.

#### **Survey Needs:**

None needed at this time.

### **Recreational Facilities and Opportunities:**

Concentrated Recreation Area exist within the compartment minimize impacts and use. There are two desingated state rustic campgrounds, three designated boating access sites, a designated hiking pathway around Trout and Hoister Lakes, designated Snowmobile Trail 655 and Field Trial Areas.

Assure warning signs are placed on the trail regarding logging activity. Focus any retention pockets or clusters along or near trail. All sign posts shall be protected. Limit stacking of timber along the trail. Ensure logging activity does not obliterate the trail. All stumps within 20 feet of the snowmobile trail shall be Flush-Cut to ensure stumps do not result in unsafe conditions.

### **Fire Protection:**

A potential fire control problem exists due to the heavy rural /urban interface within this compartment.

#### **Additional Compartment Information:**

For all timber sale contracts apply Gladwin Field Trial Area timber sale specifications.

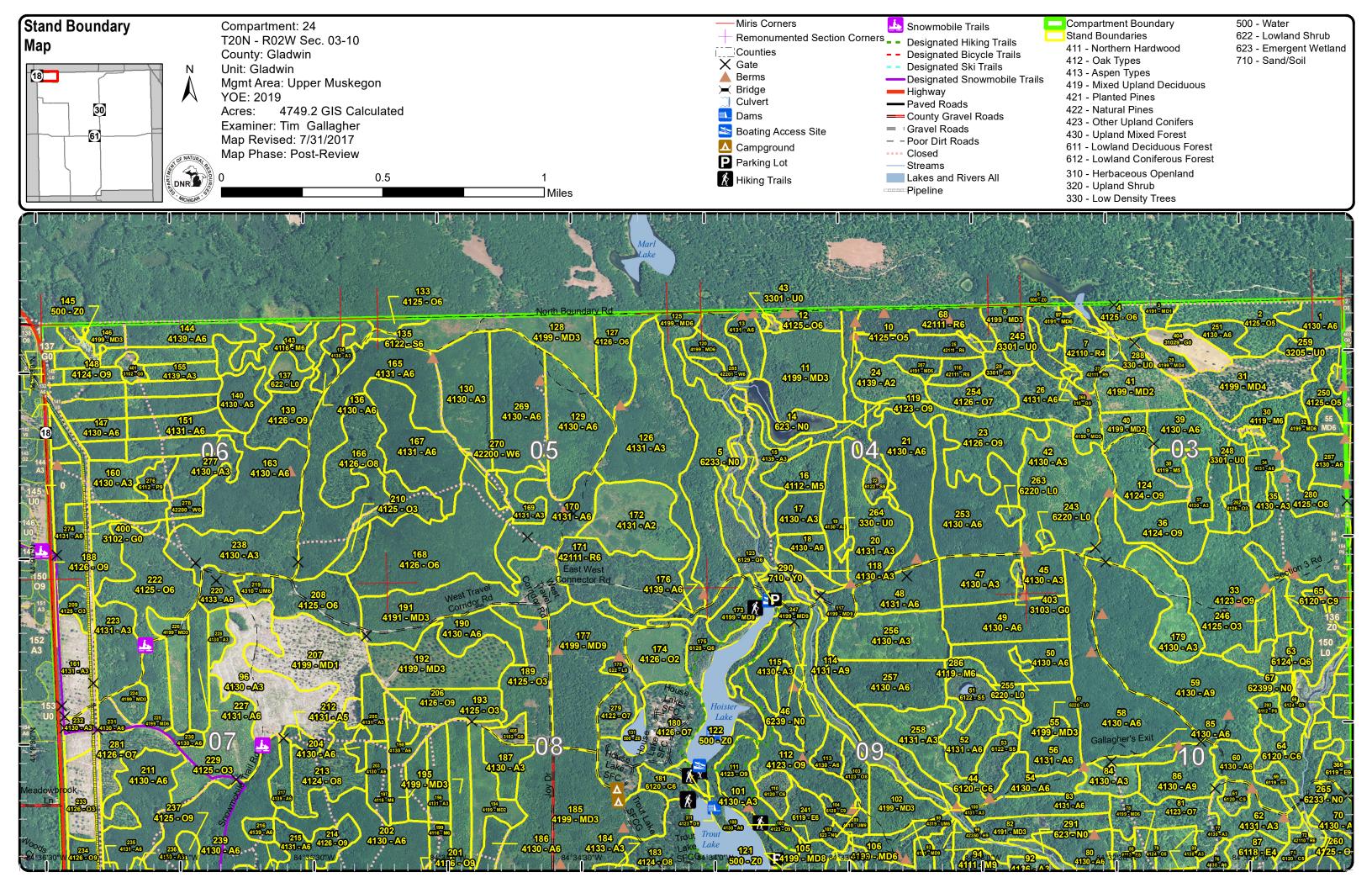
#### The following reports from the Inventory are attached:

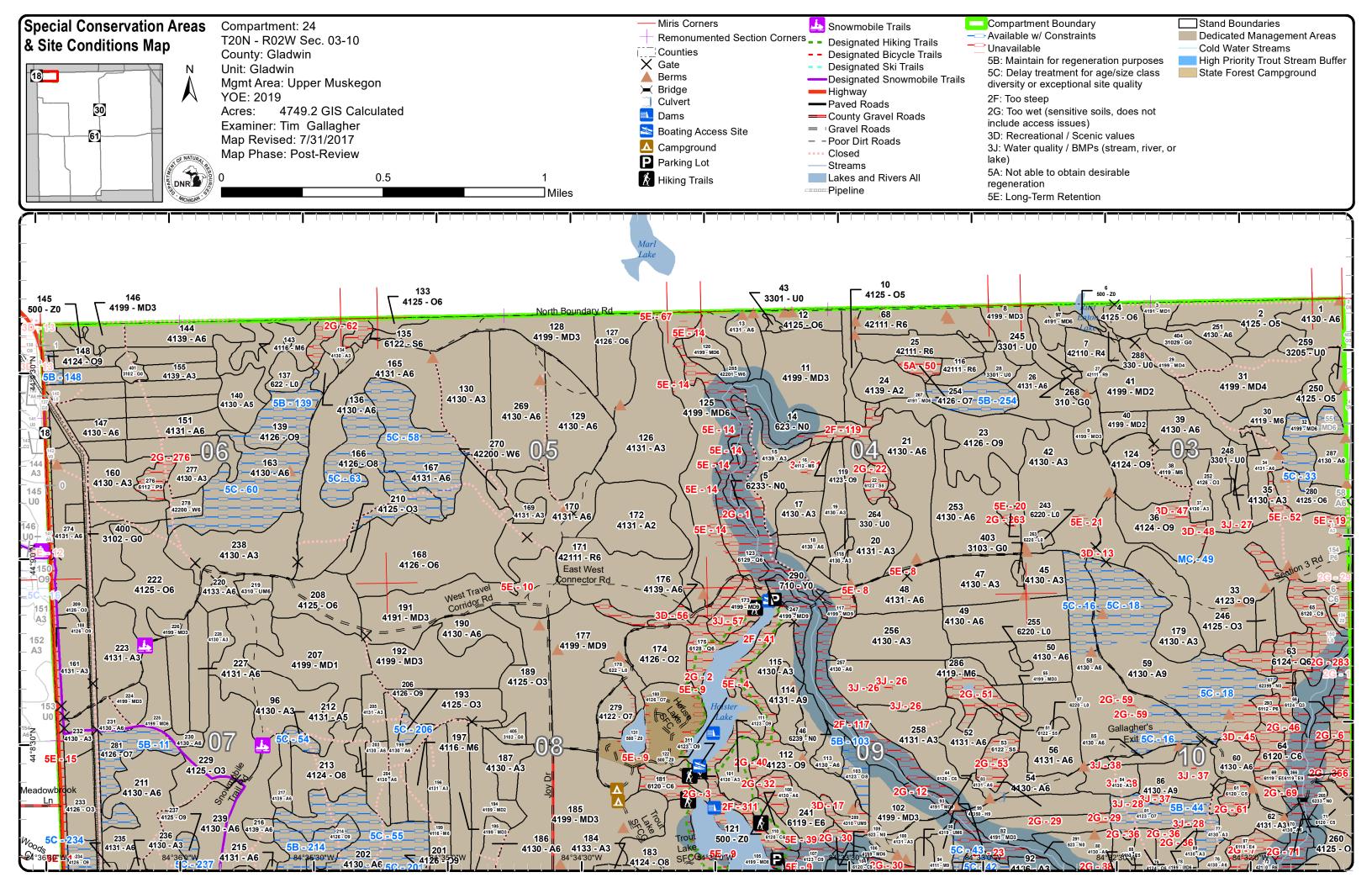
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

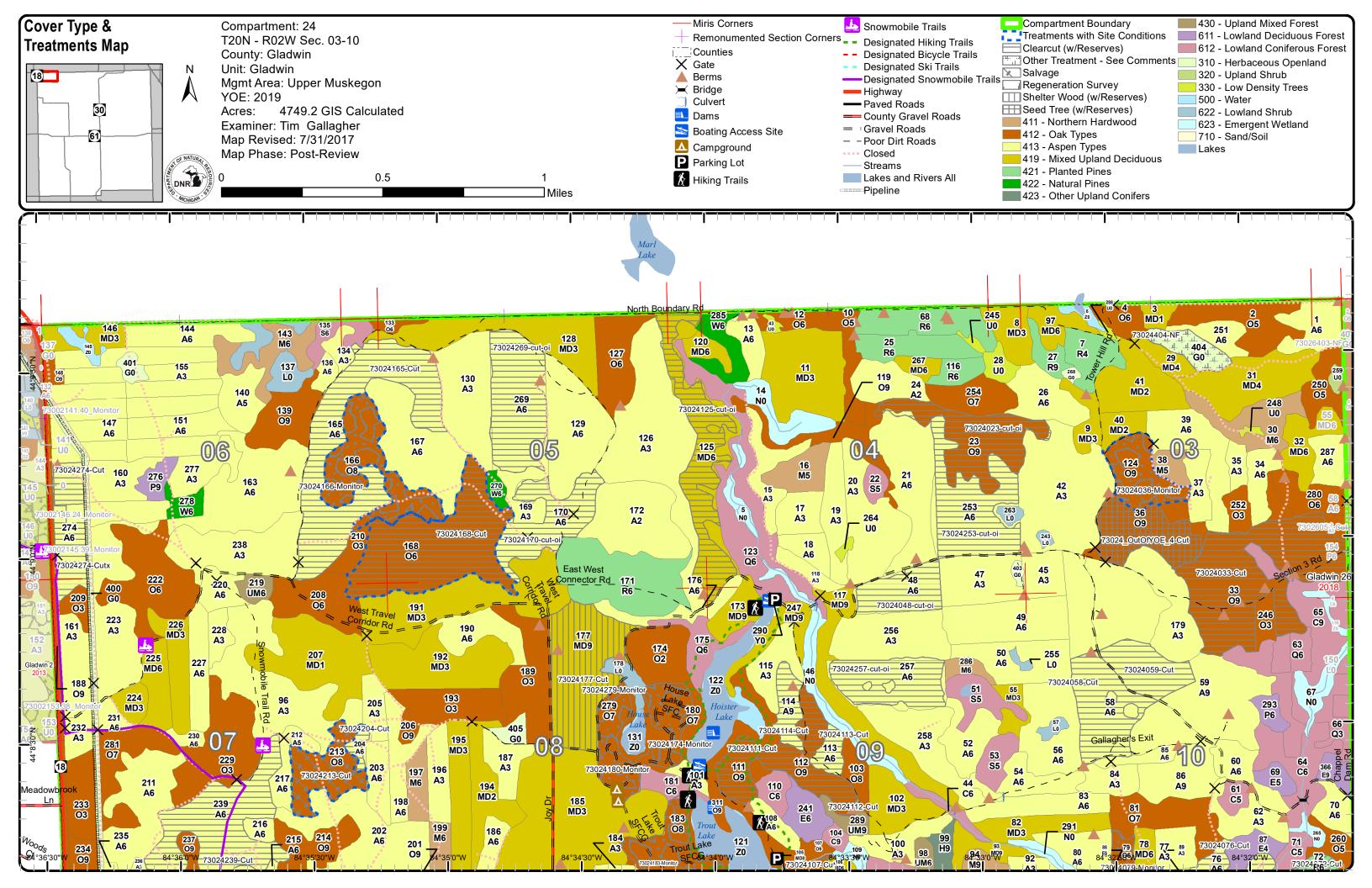
The following information is displayed, where pertinent, on the attached compartment maps:

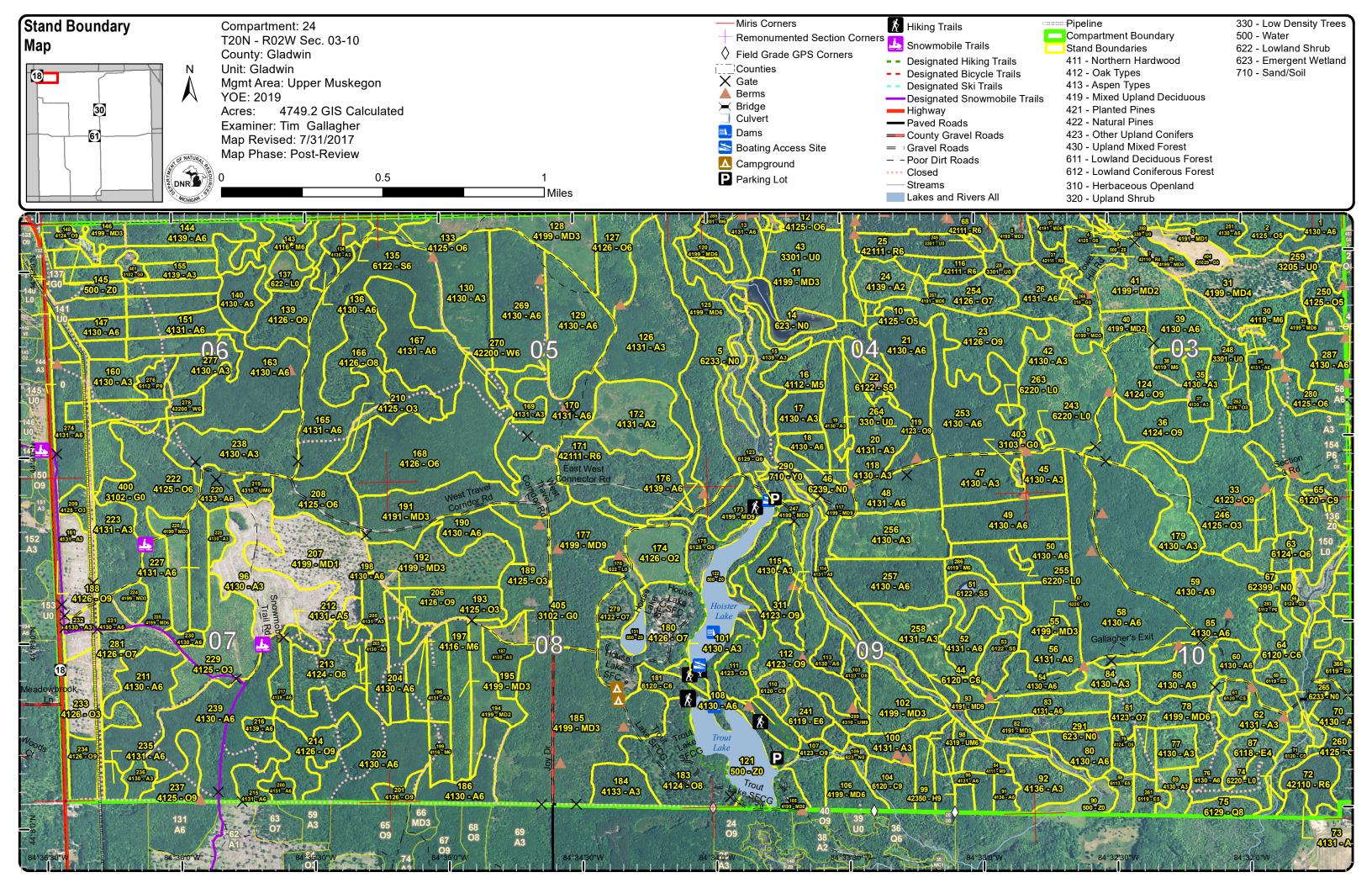
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries

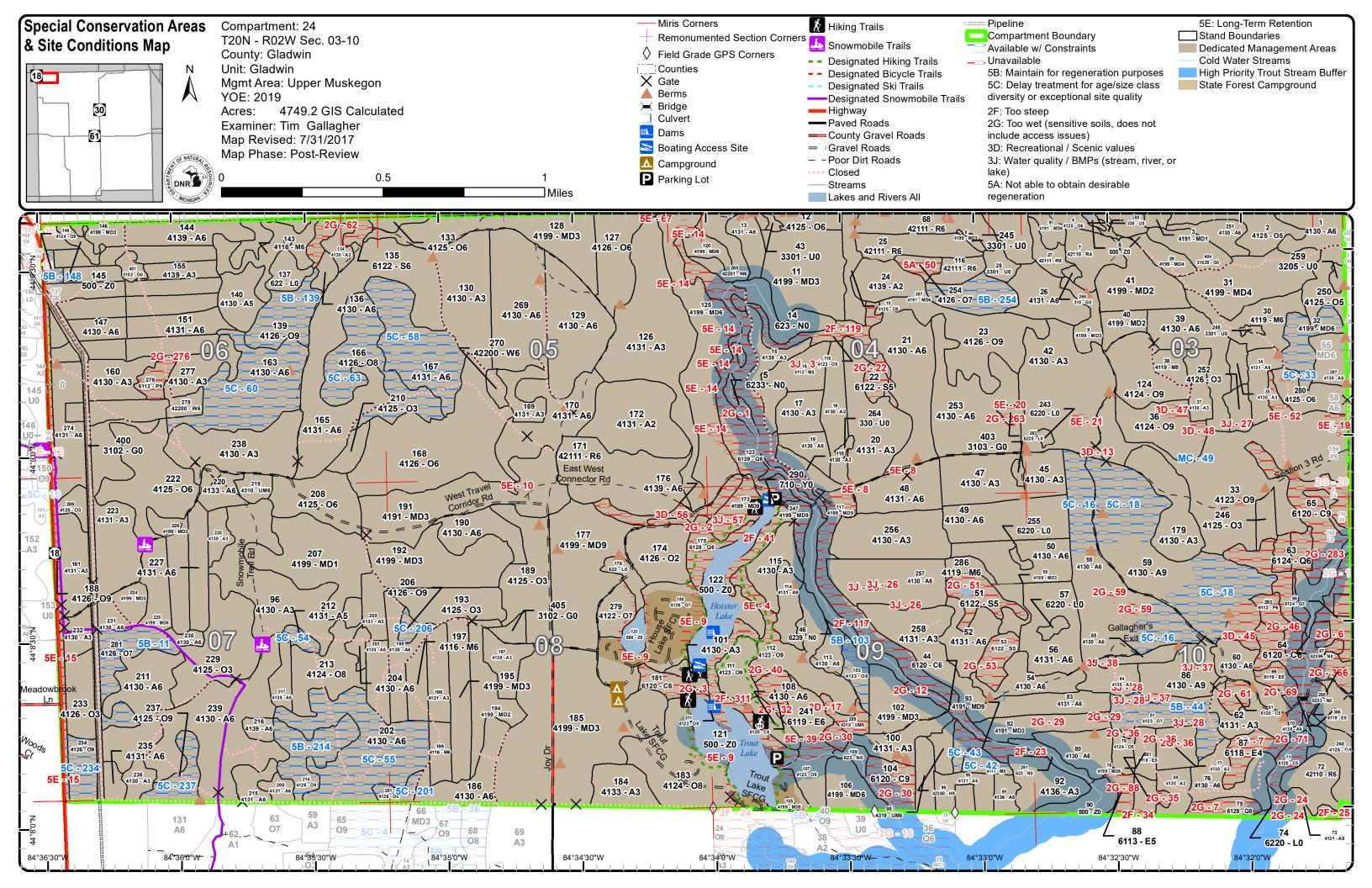
Details on the road access system

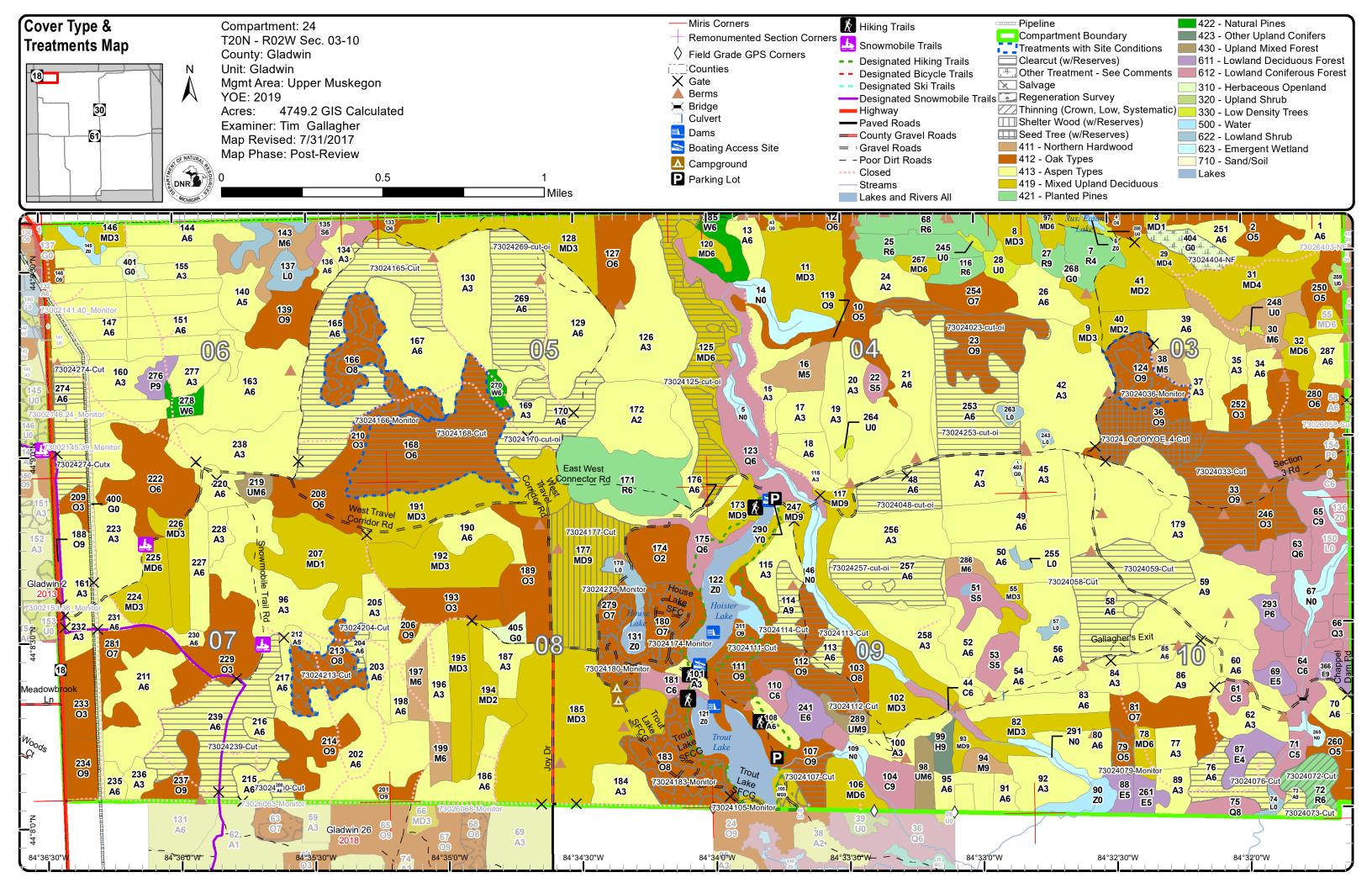


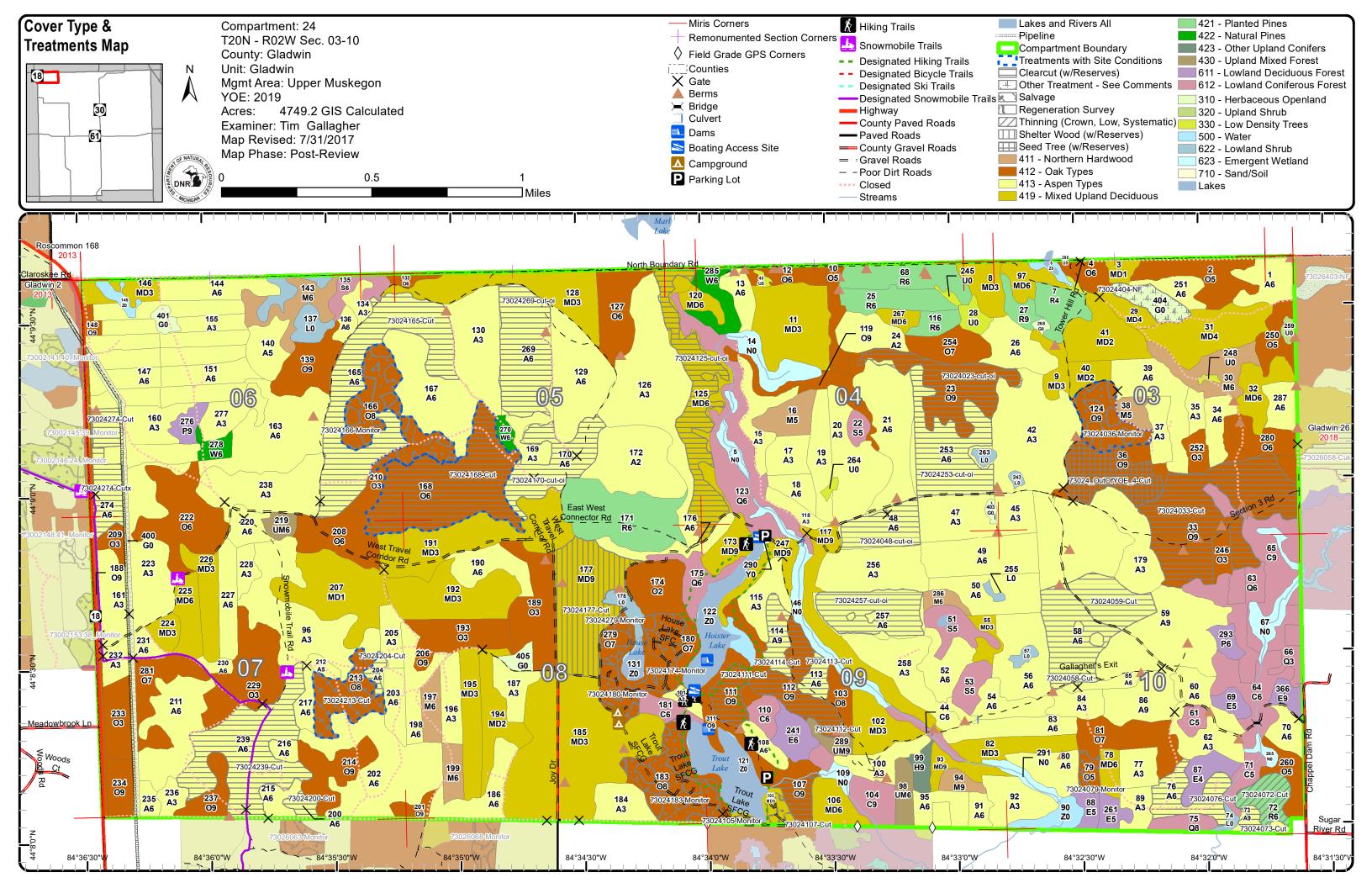












Compartment 24 Year of Entry 2019

Tim Gallagher: Examiner

Gladwin Mgt. Unit



### Age Class

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	/	LA S	/ /	/	_ /	_ /	_ /	_ /	//	/	/_/	_ /	\ <u> </u>	, , /	/ , /	/ /	/ /	/ /	No. No.
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Aspen	0	324	283	355	256	431	541	0	0	0	0	0	0	0	0	0	0	0	2190
Cedar	0	0	0	0	0	0	0	0	0	16	88	0	5	0	0	0	0	0	109
Hemlock	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
Herbaceous Openland	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Low-Density Trees	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Lowland Aspen/Balsam Poplar	0	0	0	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0	11
Lowland Conifers	0	0	0	0	30	0	0	45	0	0	13	8	0	0	0	0	0	0	96
Lowland Deciduous	0	0	0	0	7	0	23	0	0	6	11	0	0	0	0	0	0	0	46
Lowland Shrub	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	31	4	0	0	0	0	0	0	0	34
Marsh	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Mixed Upland Deciduous	0	156	264	76	77	20	10	0	0	0	184	0	0	0	0	0	0	0	787
Northern Hardwood	0	0	0	0	74	6	0	0	0	0	6	0	0	0	0	0	0	0	85
Oak	0	72	75	66	93	21	0	0	0	305	366	0	0	0	0	0	0	0	998
Red Pine	0	0	0	0	0	45	68	13	0	0	0	0	0	0	0	0	0	0	126
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Upland Mixed Forest	0	0	0	0	5	9	0	0	0	0	6	0	0	0	0	0	0	0	20
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
White Pine	0	0	0	0	0	18	3	0	0	0	0	0	0	0	0	0	0	0	21
Total	223	552	622	497	542	555	651	58	0	358	678	14	5	0	0	0	0	0	4750



### **Report 2 – Treatment Summary**

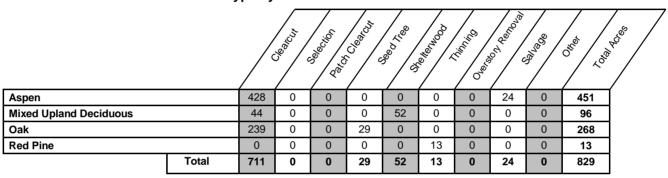
## Gladwin Mgt. Unit Year of Entry: 2019

#### **Acres of Harvest**

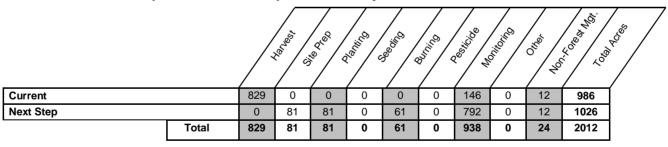
Compartment 24
Total Compartment Acres: 4,749

Commercial Harvest - 732 Harvests with Site Condition - 73 Next Step Harvest - 0 Habitat Cut - 24

### **Cover Type by Harvest Method**



## **Proposed and Next Step Treatments by Method**



White Oak

Compartment: 24

Year of Entry: 2019

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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
36	73024_OutOfY	29.2	4124 - Red with	Sawtimber	85	81-110	Harvest	Seed Tree	412 - Oak Types	Two-Aged	Field Boundary

**Habitat Cut: No Site Condition:** 

Specs:

OE\_4-Cut

Prescription As per chapter 7. Mark 20 BA/AC to leave. Half of the residual would be marked with the standard slash with the focus being windfirm oak. The other half of the residual would be marked with a green X focusing on red maple and other low quality stems trees larger than 8" dbh. Wildlife Division plans to hire a contractor to push these trees over to create drumming habitat after the harvest is complete. Other retention would include any other conifer species which is widely scattered. Expand harvest area to the south west toward road intersection to pick up some mature aspen and make the sale unit more operable.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A medium to fully stock stand of mixed oak and upland deciduous will be acceptable.

Well

Regen:

Other Old next step comments: Monitor regeneration until fully stocked.

Comment:

Proposed Start Date: 10/01/2014

73024023-cut-37.7 4126 - White, Black, Sawtimber 91 81-110 Harvest Clearcut with 4121 - Oak, Even-Aged Field Boundary N. Pin Oak oi Well Retention Aspen

**Habitat Cut: No Site Condition:** 

Prescription OPIC - FMD: 07/09/2014 As per approved chapter 7. Change from shelterwood treatment to a seed treatment. Mark 20 BA to leave. Half of the

residual will be marked with the standard slash with the focus being windfirm oak. The other half of the residual wil Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A medium to fully stocked stand of mixed oak and aspen will be acceptable.

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2008

73024033-Cut 4123 - Red Oak 88 111-Clearcut with Draft Field 82.4 Sawtimber Harvest 4131 - Aspen, Even-Aged Well 140 Retention Oak Boundary

**Habitat Cut: No Site Condition:** 

Prescription Clear cut 2" and up marking approximately one large diameter oak for every two acres to leave for mast. Apply Field Trial timber sale specifications

Specs: including drumming log specification.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of aspen, oak, and maple meeting medium stocking levels.

Regen:

Other Some areas of the stand may be too steep to harvest. Retention for this stand has already been delineated. Additional areas may need to be

Comment: removed from the sale area to meet operational requirements.

**Proposed Start Date:** 10/01/2023

124 73024036-22.2 4124 - Red with Sawtimber Natural Regen 412 - Oak Types Even-Aged Draft Field 81-110 Monitoring Monitor White Oak Well (Intermediate) Boundary

**Habitat Cut: No** Site Condition: Recreational/Scenic

Prescription Low intensity understory burn was conducted on 04/24/2017.

Specs:

Next Step ; Burn, Understory

Treatments:

Acceptable Medium stocked stand of mixed oak.

Regen:

Other Percent to Treat = 100%

Comment:

Compartment: 24 Year of Entry: 2019

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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
48	73024048-cut- oi	19.7	4131 - Aspen, Oak	Poletimber Well	54	111- 140	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	Field Boundary

**Habitat Cut: No Site Condition:** 

Prescription OPIC - FMD: This stand is to be held until 2014 then cut with stand 257 after stands 256 and 258 have met green up standards. The stand is expected to regenerate to a well-stocked aspen stand. The stand should be exempt from retention guidelines. This a Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A fully to medium stock of aspen with mixed deciduous will be acceptable.

Regen: Other

Comment:

Proposed Start Date: 10/01/2008

58 73024058-Cut 4130 - Aspen Poletimber 141-Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Well 170 Retention Boundary

**Habitat Cut: No Site Condition:** 

Prescription Clear cut 2" and up applying standard island retention. Apply Field Trial timber sale specifications including drumming log specification. Specs:

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

Acceptable A full to medium stocking of aspen with mixed maple and oak.

Regen:

Remove vernal ponds from sale area. Buffer in accordance with BMP guidelines. Preliminary areas have been removed from the treatment area Other Comment:

based on a 50 ft buffer. These areas are subject to change pending field review.

**Proposed Start Date:** 10/01/2023

73024059-Cut 20.8 4130 - Aspen Sawtimber 141-Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Well 170 Retention Boundary

**Habitat Cut: No** Site Condition:

Prescription Clear cut 2" and up applying standard island retention. Apply Field Trial timber sale specifications including drumming log specification.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

<u>Acceptable</u> Full to medium stocking of aspen mixed with northern hardwood. .

Regen:

Other Mark to leave one scattered large diameter red and/or white pine for every two acres.

Comment:

**Proposed Start Date:** 10/01/2023

72 73024072-Cut 13.3 42110 - Planted Poletimber 61 171-Harvest Crown Thinning 4211 - Planted Even-Aged Draft Field Red Pine Red Pine Well 200 Boundary

Site Condition: **Habitat Cut: No** 

Prescription Thin to 120 BA removing 1/3rd of volume. Target BA may vary somewhat with stem density. Apply Field Trial timber sale specifications.

Specs:

Next Step **Treatments:** 

<u>Acceptable</u> Regen:

Other Best quality is to the NE along the ridge. BA averaged 200+. The rest of the stand averaged closer to 170 - 180. Old landing is located in stand 260.

Comment:

Compartment: 24 Year of Entry: 2019

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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
73	73024073-Cut	3.0	4131 - Aspen, Oak	Sawtimber Well	53	111- 140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

**Habitat Cut: No Site Condition:** 

Prescription Clear cut 2" and up leaving all conifers. Mark a few scattered oak for residual. Apply Field Trial timber sale specifications including drumming log Specs:

specification.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Medium stocked aspen but will accept any mix of aspen, maple, or oak meeting minimum stocking levels. <u>Acceptable</u>

Regen:

Other Remove wet areas from sale boundary.

Comment:

Proposed Start Date: 10/01/2023

76 73024076-Cut 18.8 4130 - Aspen Poletimber 54 81-110 Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Well Retention Boundary

**Habitat Cut: No Site Condition:** 

Prescription Clear cut 2" and up marking approximately one large crown oak for every two acres. Utilize standard island retention. Apply Field Trial timber sale

Specs: specifications including drumming log specification.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Fully stocked aspen.

Regen:

Other A small forested drain flows from stand 87 to stand 75. If the road which crosses this drain is utilized for hauling a culvert will be necessary.

Comment:

**Proposed Start Date:** 10/01/2023

73024079-5.2 4124 - Red with Poletimber 1-50 Monitoring Natural Regen 412 - Oak Types Two-Aged Draft Field **Monitor** White Oak Medium (Intermediate) Boundary

Site Condition: **Habitat Cut: No** 

Prescription Stand was shelterwood harvested in 2013 leaving 40 BA (30 BA oak, 8 BA mixed hardwood, & 2 BA conifer)

Specs:

Next Step Treatments:

<u>Acceptable</u> Medium stocking of oak, maple, and aspen.

Regen:

Other At time of inventory stand had not yet regenerated successfully but believe it will with more time.

Comment:

**Proposed Start Date:** 10/01/2022

105 73024105-6.0 4199 - Other Mixed Sawtimber 51-80 Monitoring Natural Regen 411 - Northern Uneven-Field Boundary **Upland Deciduous** Hardwood Monitor Medium (Re-Inventory) Aged

**Habitat Cut: No Site Condition:** 

Prescription A mix of red maple, white pine, white oak, northern pin oak and aspen regeneration is acceptable.

Specs:

Next Step **Treatments:** 

Acceptable A mix of red maple, white pine, white oak, northern pin oak and aspen regeneration is acceptable.

Regen:

Other Percent to Treat = 100%

Comment:

**Proposed Start Date:** 

111 73024111-Cut

**Habitat Cut:** No

**Proposed Start Date:** 

112 73024112-Cut

**Habitat Cut: No** 

Prescription

Specs:

Regen:

Other

Specs:
Next Step

Regen: Other

Comment:

**Proposed Start Date:** 

Treatments:
Acceptable

Comment:

**Proposed Start Date:** 

113 73024113-Cut

**Habitat Cut: No** 

Next Step

**Treatments:** 

<u>Prescription</u>

Next Step

**Treatments:** 

Specs:

Regen:

Other Comment: 10/01/2023

10/01/2023

Monitoring, Natural Regen (Re-Inventory)

10/01/2023

Monitoring, Natural Regen (Re-Inventory)

10/01/2023

6.6

Fully stocked aspen stand.

25.8

protection specifications.

4123 - Red Oak

**Site Condition:** 

4123 - Red Oak

**Site Condition:** 

runs through the stand and is signed with blue triangles.

4130 - Aspen

**Site Condition:** 

on steep slopes and to help with runoff control.

Sawtimber

Well

Monitoring, Natural Regen (Intermediate); NonForestMgt, Fruit Tree/Shrub Planting

Acceptable Minimum stocking of oak. If this stand fails to regenerate plant beneficial wildlife shrubs throughout.

Sawtimber

Well

Poletimber

Well

The Trout Lake Pathway is a hiking trail which runs through the stand and is signed with blue triangles.

94

Acceptable Any mix of oak, red maple, aspen, or northern hardwood meeting medium stocking. A medium stocking of aspen is expected.

54

141-

170

Prescription Clear cut 2" and up apply standard area retention. Apply Field Trial timber sale specifications including drumming log specification.

Parts of this stand are seasonally wet with more organic soil. Work with contractor to remove timber from these areas.

111-

140

94

81-110

Harvest

Harvest

Final harvest 2" and up. Mark approximately one oak and/or beech per two acres to maintain hard mast for wildlife. Leave all red and white pine

Avoid leaving mast trees in areas where aspen is present. Utilize Hoister Lake buffer as retention. The Trout Lake Pathway is a hiking trail which

Harvest

over 18" and the trace of white spruce. Apply Field Trial timber sale specifications including drumming log specification. Apply recreation trial

Clear cut 2" and up. Leave all white oak and mark to leave one red oak for every two acres to meet retention guidelines. Add recreation trial protection specifications. Apply Field Trial timber sale specifications EXCEPT do not chip this stand. The reason for this is too reduce overall traffic

Clearcut with

Retention

Clearcut with

Retention

Clearcut with

Retention

412 - Oak Types Even-Aged

4139 - Aspen.

Mixed Deciduous

413 - Aspen

Even-Aged

Even-Aged

Draft Field

Boundary

Draft Field

Boundary

Draft Field

Boundary

12.1

Apply Field Trial timber sale specifications including drumming log specification. All vernal ponds need to be excluded from sale area.

Comment:

Other

Proposed Start Date: 10/01/2023

166 73024166- 38.8 4126 - White, Black, Sawtimber 89 51-80 Monitoring Natural Regen 412 - Oak Types Even-Aged Draft Field Boundary

Habitat Cut: No Site Condition: Age-Class or Site Quality

Prescription Low intensity Rx Burn completed 4/24/2017 to set back red maple regeneration and promote oak regeneration.

Specs:

Next Step Burn, Understory

Treatments:

Acceptable Monitor natural regeneration until desired stocking levels are achieved.

Regen:

Other Percent to Treat = 100%

Comment

Gladwin Mgt. Unit Report 3 -- Treatments Compartment: 24 s Year of Entry: 2019 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** n Age Approval Method Name Objective Structure d CoverType Density Age Range Type Status 73.0 4126 - White, Black, Poletimber 168 73024168-Cut 81-110 Harvest Clearcut 412 - Oak Types Even-Aged Field Boundary N. Pin Oak Well **Habitat Cut: No** Site Condition: Long-Term Retention Prescription Clear-cut 2" and up. Do not apply retention. Apply ruffed grouse specifications. Specs: Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Trenching; Planting, Interplant **Treatments:** Acceptable Medium to fully stocked oak stand. If regeneration fails interplant red pine. Regen: Other The primary objective of this harvest is to maintain high quality ruffed grouse habitat. Comment: **Proposed Start Date:** 10/01/2014 170 73024170-cut-30.7 4131 - Aspen, Oak Poletimber 111-Harvest Completed -Clearcut 4139 - Aspen. Even-Aged Well 140 Mixed Deciduous Pending Edits oi **Habitat Cut: No** Site Condition: Prescription Final harvest with reserves to regenerate aspen. Part of timber sale contract 73-018-15-01. Bird Dawg Mix. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable A fully to medium stocked stand of aspen with mixed deciduous will be acceptable. Regen: Other Part of timber sale contract 73-018-15-01. Bird Dawg Mix. Comment: **Proposed Start Date:** 10/01/2008 180 73024174-17.6 4126 - White, Black, Sawtimber 94 1-50 Monitoring Natural Regen 411 - Northern Two-Aged Field Boundary Monitor N. Pin Oak Poor (Re-Inventory) Hardwood **Habitat Cut: No Site Condition:** Prescription A mix of red maple, white pine, white oak, northern pin oak and aspen regeneration is acceptable. Specs: Next Step

Treatments:

A mix of red maple, white pine, white oak, northern pin oak and aspen regeneration is acceptable.

Regen:

Other Percent to Treat = 100%

Comment:

**Proposed Start Date:** 05/08/2015

73024177-Cut 52.2 4199 - Other Mixed Sawtimber 81-110 Harvest Shelterwood 4191 - Mixed Two-Aged Draft Field **Upland Deciduous** Well Upland Boundary Deciduous with

Conifer

**Habitat Cut: No Site Condition:** 

Prescription Shelterwood harvest, Individual tree mark reducing residual BA/AC down to 60 sq. ft. not eliminating any one species. Manage for the best tree in Specs: place. Leave all white and red pine. The pine residual will be approximately 10 sq. ft. Extremely highly visible stand, require tops to be chipped.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of oak, maple, white pine and aspen regeneration is acceptable.

Regen:

Other Extremely highly visible stand, require tops to be chipped.

Comment:

**Habitat Cut: No** 

Treatments:

<u>Acceptable</u> Natural aspen regeneration with a mix of oak and red maple as well.

Regen:

Other Apply Field Trial timber sale specifications including drumming log specification.

Comment:

**Proposed Start Date:** 10/01/2023

204 73024204-Cut 3.1 4130 - Aspen Poletimber 49 81-110 Harvest Clearcut 413 - Aspen Even-Aged Field Boundary

Well

**Site Condition: Habitat Cut: No** 

Prescription Clearcut 2" and up. Do not apply retention because of small stand size and to maximize stem density. Approved through variance dated July 22nd

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Management objective is aspen but will accept any mix of maple, oak, & aspen which maximizes stem density. <u>Acceptable</u>

Regen:

Other Comment:

Regen:

access when harvesting this stand. The Field Trial specifications only allow winter logging. Possible to re-route Snowmobile Trail. Comment:

**Proposed Start Date:** 10/01/2023

253 73024253-cut-42.2 4130 - Aspen Poletimber 49 111-Harvest Clearcut 4130 - Aspen Even-Aged Field Boundary Well 140 oi

**Habitat Cut: No Site Condition:** 

Prescription OPIC - FMD: The stand is a nice aspen stand and is scheduled to be cut in 2014 after stand 43 has met green up requirements. The stand is expected to regenerate as a well stocked aspen stand and because of the field, trail area should be exempt from the Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable A fully to medium stocked stand of aspen with some mixed deciduous will be acceptable.

Regen:

Other Comment:

Proposed Start Date: 10/01/2008

73024257-cut-28.8 4130 - Aspen Poletimber 54 111-Harvest Clearcut 4139 - Aspen. Even-Aged Field Boundary 257 oi Well 140 Mixed Deciduous

**Habitat Cut: No Site Condition:** 

Prescription OPIC - FMD: This stand is part of stand 48 that is to be cut in 2014 if after stands 256 and 258 meet greenup requirements. The stand is expected to regenerate as a well stock aspen stand. Because of the field trail area, this stand should be exempt fro Specs:

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

Acceptable A fully to medium stocked stand of aspen with some mixed deciduous will be acceptable.

Regen:

Other Comment:

Specs: final harvest without reserves. Before this stand is harvested, make sure that stand 130 has met the greenup Next Step Monitoring, Natural Regen (Re-Inventory)

Acceptable A fully to medium stocked stand of aspen with some mixed deciduous will be acceptable.

Regen: Other Comment:

Treatments:

Proposed Start Date: 10/01/2008

274 73024274-Cut 7.5 4131 - Aspen, Oak Poletimber 81-110 Harvest Clearcut 4131 - Aspen. Even-Aged Field Boundary Well Oak

**Habitat Cut: No Site Condition:** 

Prescription Clear-cut 2" and up. Do not apply retention. Leave the narrow strip between M-18 and the distribution power line.

Specs:

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Trenching; Planting, Interplant

Treatments:

Acceptable Medium to fully stocked aspen/oak. If regeneration fails interplant red pine.

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2014

73024274-14.9 4131 - Aspen, Oak Poletimber 81-110 Harvest Clearcut 413 - Aspen Even-Aged Field Boundary Well

Cutx

Prescription Clear-cut 2" and up. Do not apply retention. Leave the narrow strip between M-18 and the distribution power line.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

**Habitat Cut: No** 

<u>Acceptable</u> Medium to fully stocked aspen/oak. If regeneration fails interplant red pine.

**Site Condition:** 

Regen:

Other Stand is on timber sale contract for final harvest to naturally regenerate a mix of aspen and mixed hardwood. Bird Dawg Mix 73-018-15-01.

Comment:

**Proposed Start Date:** 10/01/2014

279 73024279-79 4122 - Oak, Pine Sawtimber 94 1-50 Monitoring Natural Regen 411 - Northern Two-Aged Field Boundary Hardwood Poor (Re-Inventory)

Monitor

**Habitat Cut: No Site Condition:** 

Prescription A mix of red maple, white pine, white oak, northern pin oak and aspen regeneration is acceptable.

Specs:

Next Step **Treatments:** 

Acceptable A mix of red maple, white pine, white oak, northern pin oak and aspen.

Regen:

Other Percent to Treat = 100%

Comment:

**Proposed Start Date:** 04/27/2015

Report 3 -- Treatments Compartment: 24 s Year of Entry: 2019 а **Treatment** Stand Size BA **Treatment Treatment Cover Type Acres** Stand Age **Approval** n Name CoverType Density Range Method Objective Structure Status Age Type d 404 73024404-NF 11.5 31029 - Grass (OI) Nonstocked NonForestMgt Other - Specify 310 -Draft Field Herbaceous Boundary

Openland

**Habitat Cut: No Site Condition:** 

Prescription Perform WLD maintenance. Treatments may include: cultivating, planting of annual cover types, planting of perennial cover types, applications of

Specs: lime, applications of herbicide and mowing.

Gladwin Mgt. Unit

Next Step **Treatments:** 

<u>Acceptable</u> Regen:

<u>Other</u> Comment:

Proposed Start Date: 10/01/2018

**Total Treatment** 985.9 Acreage Proposed:

Compartment: 24

Gladwin Mgt. Unit

Tim Gallagher: Examiner Year of Entry: 2019

Availa	ability for	Managemer	nt										
Total	Acres	Acres Avail	Acres	De	omina	nt Site	Con	ditions	S				
Acres	Available	With Condition	Not Available		5B	5C	MC	2F	2G	3D	3J	5A	5E
2189	1840	293	56	Aspen	54	240		2	4	18	30		3
109	0	0	109	Cedar					106				3
6	6	0	0	Hemlock									
42	42	0	0	Herbaceous Openland									
11	11	0	0	Low-Density Trees									
12	0	0	12	Lowland Aspen/Balsam Poplar					12				
95	0	0	95	Lowland Conifers					95				
46	16	0	31	Lowland Deciduous				1	30				
30	28	0	2	Lowland Shrub					2				0
35	0	0	35	Lowland Spruce/Fir					35				
61	52	0	8	Marsh					8				
786	626	17	143	Mixed Upland Deciduous		17		46	3	10	11	5	67
85	79	5	1	Northern Hardwood		5					1		
997	699	183	115	Oak	111	72	0	35	3	28	1		49
126	126	0	0	Red Pine									
1	1	0	0	Sand, Soil									
20	14	0	6	Upland Mixed Forest						6			
2	2	0	0	Upland Shrub									
75	75	0	0	Water				0					0
21	21	0	0	White Pine									
4,749	3,637	499	612	Total Forested Acres	165	334	0	84	298	62	43	5	122
	77%	11%	13%	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.

1 Unavailable 2G: Too wet (sensitive soils, does not include access issues)  Comments:		Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Comments:	1	Unavailable	soils, does not include	55	Unspecified	Unspecified	Unspecified	Unspecified
	С	comments:						

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2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	5E: Long-Term Retention	7	2F: Too steep	3D: Recreational / Scenic values	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	88	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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9	Unavailable	5E: Long-Term Retention	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
•	Comments:						
11	Available	5B: Maintain for regeneration purposes	20	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
13	Unavailable	3D: Recreational / Scenic values	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Land mark for busy	y intersection.					
14	Unavailable	5E: Long-Term Retention	11	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Vernal pond surrou	unded by deciduous.					
15	Unavailable	5E: Long-Term Retention	14	Unspecified	Unspecified	Unspecified	Unspecified
•	Comments:						

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16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
17	Unavailable	3D: Recreational / Scenic values	6	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
18	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	61	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
19	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	omments: eft to resolve pos	sible green up issues with stand	d 58 in co	ompartment 26.			
20	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
21	Unavailable	5E: Long-Term Retention	2	2F: Too steep	Unspecified	Unspecified	Unspecified
С	omments:	n for old stand 43 which occupie	ed the hil	to the NW of this pocket	t.		

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22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	2F: Too steep	4A: No Markets Available for these Forest Products	Unspecified	Unspecified
(	Comments:						
23	Unavailable	2F: Too steep	7	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
24	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
25	Unavailable	2F: Too steep	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: nclusion of older ti	mber on a steep slope.					
26	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: /ernal ponds.						
27	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: /ernal pond						

Gladwin Mgt. Unit Compartment: 24 Year of Entry: 2019 Tim Gallagher: Examiner Unspecified Unspecified Unspecified Unspecified 28 Unavailable 3J: Water quality / BMPs 1 (stream, river, or lake) Comments: Vernal ponds. 29 Unavailable 2G: Too wet (sensitive 2 Unspecified Unspecified Unspecified Unspecified soils, does not include access issues) Comments: Low depression, non-vernal pond because of open canopy. Unspecified Unspecified Unspecified 2G: Too wet (sensitive Unspecified 30 Unavailable 16 soils, does not include access issues) Comments: 31 Unavailable 3J: Water quality / BMPs 1 Unspecified Unspecified Unspecified Unspecified (stream, river, or lake) Comments: Vernal pond. 32 Unavailable 7 Unspecified Unspecified Unspecified Unspecified 2G: Too wet (sensitive soils, does not include access issues) Comments: Unspecified Unspecified Unspecified Unspecified 33 **Available** 5C: Delay treatment for 15 age/size class diversity or exceptional site quality

Comments:

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34	Unavailable	2F: Too steep	1	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments:								
35	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments:								
36	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Low depressions, non-vernal pond because of open canopy.								
37	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Vernal pond.								
38	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	0	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Vernal pond.								
39	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments:								

Compartment: 24
Year of Entry: 2019

Unspecified Unspecified Unspecified Unspecified 40 Unavailable 2G: Too wet (sensitive 2 soils, does not include access issues) Comments: Unspecified 2F: Too steep 3D: Recreational / Unspecified Unspecified 41 Unavailable 11 Scenic values Comments: 42 Unspecified Unspecified Unspecified 5C: Delay treatment for 6 Unspecified **Available** age/size class diversity or exceptional site quality Comments: Unspecified Unspecified Unspecified Unspecified 5C: Delay treatment for 2 43 **Available** age/size class diversity or exceptional site quality Comments: 44 **Available** 5B: Maintain for 23 Unspecified Unspecified Unspecified Unspecified regeneration purposes Comments: 45 Unavailable 3D: Recreational / Scenic 8 Unspecified Unspecified Unspecified Unspecified values Comments:

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46	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
47	Unavailable	3D: Recreational / Scenic values	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Tower Hill Site						
48	Unavailable	3D: Recreational / Scenic values	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Tower Hill Site						
49	Available	Minor Change in Acreage	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
50	Unavailable	5A: Not able to obtain desirable regeneration	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
51	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
(	Comments:						

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52	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
53	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
54	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
5		d that has been left when surro this stand will protect the gate	_	•	•		
55	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	57	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Aspen stand with o	oak and red maple mixed in. Ho	ld due to	the amount of clearcuts	proposed in the area. Cou	ld be harvest this YOE	
56	Unavailable	3D: Recreational / Scenic values	10	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
57	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

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58	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
59	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
60	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	47	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
61	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
62	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

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63	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
67	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	comments: ong Term retention	on, where treatments don't exist					
69	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
71	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
С	omments:						
88	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
103	Available	5B: Maintain for regeneration purposes	8	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

Gladwin Mgt. Unit

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117	Unavailable	2F: Too steep	29	Unspecified	Unspecified	Unspecified	Unspecified				
C	Comments:										
119	Unavailable	2F: Too steep	16	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified				
Co	omments:										
139	Available	5B: Maintain for regeneration purposes	20	Unspecified	Unspecified	Unspecified	Unspecified				
Co	omments:										
148	Available	5B: Maintain for regeneration purposes	3	Unspecified	Unspecified	Unspecified	Unspecified				
Co	omments:										
201	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified				
Co	omments:										
206	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified				
Co	Comments:										

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Tim Gallagher: Examiner

214	Available	5B: Maintain for regeneration purposes	21	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
234	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
237	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
254	Available	5B: Maintain for regeneration purposes	16	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
263	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
276	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

Compartment: 24

Gladwin Mgt. Unit

	Tim Gall	agher : Examiner		Year of Entry: 2019			19
283	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
311	Unavailable	2F: Too steep	18	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							
366	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type! Year of Entry:



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Gladwin Mgt. Unit Compartment: 24
Year of Entry 2019



## 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	туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area		
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spectyear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial		
SCA	SCA Riparian Area  A transitional area between aquatic and terrestrial ecosystems in which the teinfluences the aquatic ecosystem and vice-versa. Because of the unique constreams and open water wetlands, riparian areas harbor a high diversity of placements of the unique constreams and open water wetlands, riparian areas harbor a high diversity of placements are ecologically and socially significant in their effects on water of as aesthetics, habitat, bank stability, timber production, and their contribution				
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific manarules, as governed by Part 5, Department of Natural Resources, 324.504). Section 38 of the Administrative Procedures Act (MCL the promulgation of rules. This is an active program, with one pr DNR.	of the NREPA (MCL 324.502(2) and _ 24.238) provides for public requests for		

S t	Gladwin	Mgt. Unit		Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Poletimber Well	16.4	40	1-50	This is a stand of poorly formed trembling aspen. Part of timber sale # 49-77A which was 8 cutting blocks in Sec. 3 & 4 totaling 96 acres.
2	4125 - Black, N. Pin Oak	Poletimber Medium	24.6	37	1-50	The stand grades from a good O5/03 along the north edge of the stand but goes to and O4/O2 going south. Also the south 1/2 of the stand has a large percentage of choke cherry mixed with the oak. Overall it is an O5/O2 with some clones of aspen and a lot of choke cherry. The stand was burned in 1980 after it was harvested under contract # 56-80A, clear cut 4" and up.
3	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	4.7	13	Immature	Partial harvest 2005 under contract number 73-037-00-01, Northeast Refuge removing most of the overstory except pine, oak < 6" DBH and green marked oak (36). The aspen is regenerating fairly well and currently the overstory has about a 25% crown closure. Most of the residual pine in the stand is located in the NE corner of the stand.
4	4125 - Black, N. Pin Oak	Poletimber Well	8.8	40	1-50	BURNED MAY 5, 1980. Stand appears to be droughty. The oak regeneration in the stand is mostly of stump sprout origin but there are some seed source oak also present. There is a lot of choke cherry in it. Harvested under contract # 49-77A which was 96 acres in 8 cutting blocks.
7	42110 - Planted Red Pine	Poletimber Poor	14.4	56	1-50	DEAD OAK REMOVED IN 1992 (unsure of '92 harvest) Harvested under contract number 73-046-95-01, Old fire Tower in June of '98., The red pine that was left after the harvest is starting to respond to being released but it is slow getting going. The regeneration in the stand is mainly black cherry with a little oak and maple. The red pine was planted in 1963 as 2-0 seedlings.
8	4199 - Other Mixed Upland Deciduous	Sapling Well	13.2	12	Immature	Harvested in 2005 under contract number 73-037-00-01, Northeast Refuge. The stand has a medium stocking of aspen, oak, maple, and black cherry. The ground cover goes from sweet fern to grasses and blueberry.
9	4199 - Other Mixed Upland Deciduous	Sapling Well	8.7	12	Immature	Harvested in 2005 under contract number 73-037-00-01, Northeast Refuge. Clearcut 2" and up except left all pine which was mostly pole size white pine. Stand is mainly a north to north east aspect. The area is coming back heavy to oak with some clones of aspen scattered around the stand. Also in the stand there is a lot of choke cherry.
10	4125 - Black, N. Pin Oak	Poletimber Medium	10.1	39	1-50	Stand is mainly an oak regeneration stand that is just starting to go to poles. The regeneration in the stand is a mix of stump sprout with some seed source oak. Heavy mortality of oak stump sprouts in the northern1/3rd. South 1/4 is red maple regeneration on a morain. Harvested under contract # 49-77A, clear cut 4" and up.
11	4199 - Other Mixed Upland Deciduous	Sapling Well	40.9	24	Immature	CUT 1993 under contract number 73-069-92-01, N. Beaver Salvage. Completed December '93. Removed 900+ cords of mixed oak (unsure if 4" and up or 2" and up). The stand is fully stocked and is a mix of mainly red oak and black oak some white pine is present. It also has a lot of cherry (mainly choke cherry). There are some scattered clones of aspen mainly in the south half of the stand. The ground cover goes from blueberry, sweet fern, and bracken fern in the south to mainly sweet fern in the north.

S t	Gladwin	Mgt. Unit		Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4125 - Black, N. Pin Oak	Poletimber Well	9.3	31	1-50	The area is mainly an O6 stand with some residual white pine. Harvested under contract number 73-025-85-01, Tower Hill Sale. Clear cut 4" and up. Management objective at the time was oak.
13	4131 - Aspen, Oak	Poletimber Well	9.3	40	81-110	The south end of the stand has been heavily damaged by beaver activity. The stand goes from oak, maple, and white pine to aspen and white pine, to oak and white pine. The stand could be typed as a W or O or A depending on where the plots fell. Harvested under contract # 49-77A, clear cut 4" and up.
15	4139 - Aspen, Mixed Deciduous	Sapling Well	14.4	12	Immature	HARVEST IN 2000 50% OAK MORTALITY. Final harvest 2005 under contract number 73-037-00-01, Northeast Refuge. Clearcut 2" and up. The stand has regenerated and is fully stocked with the majority being aspen but there are pockets of red maple, cherry, and oak. The red maple stump sprout in the area are being heavily browsed by deer. Much of the stand is on a side slope with a west aspect.
16	4112 - Maple, Beech, Cherry Association	Poletimber Medium	13.0	35	1-50	Harvested under contract number 73-040-80A completed June '81. Cut all species 4" and up. The stand is mainly made up of stump sprout red maple clumps which average 5 stems, 2-3 of those stems are dominant to co-dominant. Clump density is low, around500/acre, and the understory is almost devoid of tree species. The aspen in the stand is mainly along stand 17 and there is an area of oak and white pine in the NE 1/4 of the stand. The center of the stand has a small (<1ac) leather leaf bog that is in a bowl.
17	4130 - Aspen	Sapling Well	11.1	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. The stand is a very nice A3 that should have a few poles in it in 10 years. Also in the stand there are some oaks and red maples.
18	4130 - Aspen	Poletimber Well	8.3	36	81-110	Harvested under contract number 73-040-80A completed June '81. Cut all species 4" and up. The stand is just coming into poles. There are scattered areas that are heavier to red maple and areas heavier to oak but overall the stand is an aspen stand.
19	4130 - Aspen	Sapling Well	16.6	20	Immature	CUT WINTER 96-97 under contract number 73-048-95-01, Trestle Grade Aspen. Cut all species 2" and up. Stand is an A3 that is a mix of bigtooth and trembling aspen with some areas of oak.
20	4131 - Aspen, Oak	Sapling Well	32.8	14	Immature	Some red oak cut in 2000 then Final harvest in 2005 under contract number 73-037-00-01, Northeast Refuge. The stand appears to be mainly an aspen stand with pockets of M3 and O3.
21	4130 - Aspen	Poletimber Well	38.6	44	81-110	The stand has a couple of depression in the north 1/2 of the stand that are sparsly treed. Along the edges of these opening there is some wind throw happening but it is not extensive. The south half

some wind throw happening but it is not extensive. The south half of the stand occupies a shallow valley and west facing slope, all of which is operable. Centrally located within the stand is a 1-2 acre historic wildfire 10-15 years old. 50% of the stems in this area have blown over with the rest showing severe decay at the burn scare. The overstory in the stand is mainly bigtooth aspen with some area of trembling aspen.

S t	Gladwin	Gladwin Mgt. Unit			<ul><li>Forested</li></ul>	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	6122 - Black Spruce	Poletimber Medium	4.3	92	1-50	OPIC - FMD: This stand is in a depression of leather leaf with spruce, tamerack, and white pine starting to fill in. The bog does have poles of black spruce, tamerack, and white pine along the edges but much of the stand is open.
23	4126 - White, Black, N. Pin Oak	Sawtimber Well	37.2	91	81-110	OPIC - FMD: 07/09/2014 As per approved chapter 7. Change from shelterwood treatment to a seed treatment. Mark 20 BA to leave. Half of the residual will be marked with the standard slash with the focus being windfirm oak. The other half of the residual will be marked with a green X focusing on red maple and other low quality stem trees larger than 8 inch dbh. Wildlife Division plans to hire a contractor to push these trees over to create drumming habitat after the harvest is complete. Other retention would include any other conifer species which is widely scattered within the stand. Expand treatment boundary into adjacent aspen cover types in an effort to spread aspen into this stand.
						The stand is mature and should be shelterwood harvested leaving 30-40 BA scattered on the hills and in groups in the draws. The BA could be 10-20 on the ridges and kept between 40-50 in the draws to break up the cold air drianages and minimize frost pockets. When harvesting leave all the conifers especially in the draws. Harvest the red maple heavily but leave some for diversity. The stand overall appears to be declining some what and there is diffiently a lack of aspen in the stand. The stand is expected to regenerate naturally to oak mixed with red maple.
24	4139 - Aspen, Mixed Deciduous	Sapling Medium	15.1	12	Immature	Harvested in 2005 under contract number 73-037-00-01, Northeast Refuge. clearcut 2" and up except left all pine (mostly young red pine, some of which had been underplanted). The stand is fully stocked and the regeneration is a patchy mix of oak, aspen, red maple with choke cherry scattered through out the stand. The topography is undualating and the aspect and moisture because of slope position affect the density and species composition in the regeneration. Oak being on the droughtiest spots, aspen in the mid range, and maple in the moistest areas.
25	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	17.0	56	81-110	Stand was planted in rows but they are very hard to follow. It appears that there was a substantial amount of mortality in the red pine after it was planted. Also it appears that moisture is a major limiting factor in the red pine survival and growth. The red pine in depression was 3-4 stick tall and on the droughty ridges it was only 1-3 sticks tall. Harvested in '87 under contract # 73-025-85-01, Tower Hill Sale. Oak, aspen, and maple were cut 4" and up. 60% of the volume removed was oak.
26	4131 - Aspen, Oak	Poletimber Well	18.9	44	51-80	The stand is a patchy mosaic of cherry, poorly formed trembling aspen, and oak that is declining. In the stand there are areas of U-Type being mainly choke cherry and sweet fern as well as areas of A3 and A4.the oak in the stand is declining very fast and much of it is dead and down. What is left is not really worth salvaging.
27	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	6.7	56	51-80	The stand has a lot of dead oak that is coming down. Currently there is not enough sound dead wood in the stand to warrant a salvage.
29	4199 - Other Mixed Upland Deciduous	Poletimber Poor	7.5	37	1-50	The stand is mainly choke cherry and black cherry with some oak and a clone of aspen in the south east corner of the stand. The cherry is heavily black knotted. Harvested in 1980 under contract # 56-80A, clear cut 4" and up. Stand has been trenched and planted to autumn olive but the planting failed.

S t	Gladwir	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4119 - Mixed Northern Hardwoods	Poletimber Well	20.6	37	1-50	The stand is part of a burn which occurred in 1980 after the stand was harvested. It is denser then stand 31. sThe north aspect are M4/M3 the rest of the stand is an O4/O2. Most of the regeneration are stump sprouts that have one or 2 poles. Also in the stand there are some small aspen clones of about 15 trees. Harvest in 1980 under contract # 56-80A, clear cut 4" and up. This stand and stand 250 had a higher stem density and smaller size class than stand 31 prior to harvest. This along with a presumably higher SI most likely attributed to the better regeneration, not the burn.
31	4199 - Other Mixed Upland Deciduous	Poletimber Poor	33.3	37	1-50	BURNED in 1980 after it was harvested under contract # 56-80A, clear cut 4" and up. The stand is sparse and open with a canopy closure closer to 25%. There may be 10 BA of mixed oak in the stand and some red pine that is really squat. The red pine was planted in May of '63 as 2-0 seedlings. There are some patches that look to have been planted to jack pine but the mortality in this patch planting is 25 to 30%. Prior to harvest this stand was typed out as an O7 with an O4 understory.
32	4199 - Other Mixed Upland Deciduous	Poletimber Well	15.2	36	111-140	The stand is rolling and the species are variable. The narrow center of the stand sits in a valley. The east 1/3rd of the stand is heavier to red oak the rest of it is a mix of red maple, red oak and aspen. Harvested October of '81 under contract # 56-80A. Clear cut 4" and up.
33	4123 - Red Oak	Sawtimber Well	101.0	88	111-140	The stand has a good oak over-story above aspen. The terrain is undulating and overall is heavy to oak but there are pockets of aspen and maple. The soil under the stand is Chelsea-Rubicon. The stand is almost split by a ribbon of cedar swamp. This area had the aspen, maple, and birch removed 4" and up in 1971. Some of the aspen pockets were missed and are now large diameter high quality stems. These areas are concentrated to the north end of the stand which is also more rugged.
34	4131 - Aspen, Oak	Poletimber Well	10.6	40	81-110	This stand occupies a ridge top and the associated north and south aspects. The north aspect makes up 23rds of the stand

4130 - Aspen

35

Well

Sapling Well

5.1

19

**Immature** 

south aspects. The north aspect makes up 23rds of the stand and is dominated by aspen. This area is going through a natural thinning so there is a lot of woody debry on the ground. The smaller south aspect is extremely steep and consists of oak and maple. Part of timber sale # 49-77A which was 8 blocks totaling 96 acres in Sec. 3 & 4.

Harvested under contract number 73-046-95-01, Old fire Tower in

June of '98. This stand is mainly a north aspect and heavy to aspen and red maple with some oak. Overall the stand is an A3.

S t	Gladwii	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	4124 - Red with White Oak	Sawtimber Well	23.6	85	81-110	OPIC - FMD: 07/09/2014 As per approved chapter 7. Split stand into two treatments for the south half of stand; change from shelterwood treatment to a seed treatment. Mark 20 BA to leave. Half of the residual will be marked with the standard slash with the focus being windfirm oak. The other half of the residual will be marked with a green X focusing on red maple and other low quality stem trees larger than 8 inch dbh. Wildlife Division plans to hire a contractor to push these trees over to create drumming habitat after the harvest is complete. Other retention would include any other conifer species which is widely scattered within the stand. Expand treatment boundary into adjacent aspen cover types in an effort to spread aspen into this stand. For the north half of stand; manage as an SCA Rx burn for understory maintenance. (no harvest treatment)  The oak in the stand is showing some sign of decline. The terrain is rolling hills having some areas of fairly steep slopes. Harvest the stand as a shelterwood-seed tree leaving around 40-50 BA of oak. The oak is to be left in clumps and some scattered trees. The clumps should be in the cold air drainages to minimize frost affect on young oak. The stand looks like it will regenerate well because where there are natural opening with an O3 understory. When harvesting try and keep some healthy trees from all species but favoring the retention of Red Oak. The stand should regenerate naturally.
37	4130 - Aspen	Sapling Well	9.5	19	Immature	Harvested under contract number 73-046-95-01, Old fire Tower in June of '98. The stand is mainly on a side slope with an east aspect. The area is mainly A3 with the aspen being mixed with maple and oak.
38	4119 - Mixed Northern Hardwoods	Poletimber Medium	6.3	40	1-50	The stand has a level 3 stocking in regeneration. The species composition is also some what variable with the northern exposures being heavy to maple and the others being heavier to oak and aspen. Part of timber sale # 49-77A which was 8 cutting blocks in Sec. 3 & 4 totaling 96 acres.
39	4130 - Aspen	Poletimber Well	26.3	28	Immature	The north block of the stand is high quality aspen. The south finger of the stand is mainly in a saddle between two ridges. This area is somewhat patchy and is a mix of aspen, oak. Harvested under contract number 73-025-85-01, Tower Hill Climb. Clearcut 4" and up.
40	4199 - Other Mixed Upland Deciduous	Sapling Medium	7.5	19	Immature	Harvested under contract number 73-046-95-01, Old fire Tower in June of '98. The stand has a orange carsonite marker in it next to what appears to be a GPS control point. The north side of the stand is sparse and heavy to oak being a light O2 but it goes to a M3 of mainly red maple going south. Overall the stand is heavier to red maple then oak.
41	4199 - Other Mixed	Sapling	25.9	12	Immature	Harvested in 2005 under contract number 73-037-00-01,

Upland Deciduous

Medium

Northeast Refuge. Clearcut 2" and up except left all pine. It has regenerated fairly well being mainly an O3. The aspen in the area is mainly in the south east corner of the stand and has been heavily browsed by deer. The cover type is an O3 with areas of red maple, aspen, and grassy opening.

S	Gladwii	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	4130 - Aspen	Sapling Well	57.7	8	Immature	The stand is mainly in a valley or draw with a high spot in the center of the stand which was old stand 43. There is a high concentration of maple along the east side. The stand has regenerated naturally to a mix of aspen and maple with a higher concentration of oak where old stand 43 used to be. Both stand 42 and old stand 43 were final harvested in February of 2009 under contract # 73-003-07-01, GFTA 2007 Aspen without retention to maximize regeneration for field trail use. There is an inclusion of mature timber along the east edge which was to steep to cut. The trembling aspen in this stand is concentrated around stand 243.
44	6120 - Lowland Cedar	Poletimber Well	5.4	114	111-140	The stand is along the river bottom and the banks along side the flood plain of the Cedar River. In this area the Cedar river is a trout stream and the river bottom has a gravel substrate.
45	4130 - Aspen	Sapling Well	11.5	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. Stand is a good A3 that will be a pole stand in 10 years. The aspen in the stand is mixed with cherry and red maple. In the center of the stand there is a large aspen clone and to the west of that and area heavy to red maple.
47	4130 - Aspen	Sapling Well	23.2	20	Immature	CUT WINTER 96-97 under contract number 73-048-95-01, Trestle Grade Aspen. Cut all species 2" and up. The stand has two large pocket of L-Type in it that are less than 1 acre in size. These low area are in noticeable depressions. Overall the stand is an A3 with a mix of poles. The aspen in the stand is a mix of bigtooth and trembling with some cherry, paper birch, maple, and oak. The oak component is more pronounce in the west in of the stand.
48	4131 - Aspen, Oak	Poletimber Well	21.2	54	111-140	This stand is to be held until 2014 then cut with stand 257 after stands 256 and 258 have met green up standards. The stand is expected to regenerate to a well-stocked aspen stand. The stand should be exempt from retention guidelines. The west end of the stand is an O9 and may not regenerate as dense as the rest of the stand.
49	4130 - Aspen	Poletimber Well	30.7	31		Harvested March '86 under contract number 73-026-85-01, Aspen Dream Sale. Cut all species 4" and up. The stand is 5 years younger than stand 50 but was kept separate in order to maintain the management history as well as add flexibility to future management of the area. The aspen in the stand is a mix of trembling and bigtooth but there is also some red maple and oak.
50	4130 - Aspen	Poletimber Well	23.8	36	81-110	Harvested January '81 under contract number 57-80A. Cut all species 4" and up. The aspen in the stand is a mix of bigthooth and trembling aspen but there is also red maple and some oak and paper birch. This stand has a high site index. The area is currently going through a natural thinning process. The east line of this stand is hard to define.
51	6122 - Black Spruce	Poletimber Medium	12.7	89	1-50	The stand has an inclusion of water and around this the stand is more of a S3 made up of mainly black spruce with some tamerack. The rest of the stand is more of a S5 of black spruce and tamerack with an S2 understory. There are areas that are S6 as well as S3 scattered in the stand as well as some small pockets of L-Type.

S t	Gladwi	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	4131 - Aspen, Oak	Poletimber Well	15.9	36	81-110	The stand is mainly on a ridge between drains, swales and the S-Types. The aspen is a mix of trembling and bigtooth with pockets of birch main in the north end of the stand. Also in the stand there is a fair amount of red maple and oak. The stand should be an A6 in ten years. Beaver activity most likely played into the variable density of aspen. Harvested January '81 under contract number 57-80A. Cut all species 4" and up.
53	6122 - Black Spruce	Poletimber Medium	9.2	89	51-80	The stand is patchy with pockets that are open from windthrow and area that have a level 6 stocking. The stand is naturally seeding in to the opening that are created by withthrow and some of the opening are S3. The stand also has some scattered white pine and black ash. The ground cover in the stand has a lot of labador tea, leather leaf, and spangnum moss. Also in the stand are picture plants.
54	4130 - Aspen	Poletimber Well	14.9	40	81-110	Harvested under contract # 45-77A which consisted of 63 acres split over 6 cutting blocks. White pine is concentrated in a few pockets. Stand should bump to lag a ice in ten years.
55	4199 - Other Mixed Upland Deciduous	Sapling Well	6.1	16	Immature	Harvested February 2001 under contract number 73-001-00-01, South East Corner. Clearcut 2" and up. This stand was typed out as an O 9 prior to cutting. The southern end of the stand is more of and O2 and the north end A3, but there is aspen though out the stand. The aspen in the north end is mixed with red maple and right along stand 50 it is an E3. Much of the aspen in the north end has been lost to beaver activity.
56	4131 - Aspen, Oak	Poletimber Well	27.9	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clear cut 2" and up. The stand is regenerating well and is a mix of aspen, birch, cherry, and some oak. The ridges in the stand are heavy to big tooth aspen and the swales are heavy to trembling aspen. The trail that was use to log the stand is still present but is not being used and has some trees growing in the roadway. The ground cover is a mix of grasses, sweet fern, juneberry, and choke cherry.
58	4130 - Aspen	Poletimber Well	64.7	46	141-170	The stand has rolling topography and the low areas are heavy to trembling aspen and the upland is heavy to bigtooth aspen. This stand is on the verge of being an A9 stand. The stand is currently going through a natural thinning so there is a lot of down woody debri. Also in the stand are 4 fairly large vernal ponds that are less than 1 acre in size. The form of the trees goes from good in the south to medium in the north.
59	4130 - Aspen	Sawtimber Well	89.7	52	141-170	The stand is mainly an aspen stand but it is mixed with beech, red pine, white pine, red oak, and red maple. The lower flat area are aspen mixed with red maple and white pine while much of the rest of the stand is heavy to aspen mixed with oak. Sugar maple is present throughout the stand although it is of poor quality. Upwards of 10% of the canopy has been lost due to ash morality.
60	4130 - Aspen	Poletimber Well	13.0	31	Immature	The stand is heavy to trembling aspen in the south east going to bigtooth and oak in the north west. The oak in the stand is a mix of red and white with scattered older stems which were left during '87 harvest. Harvested under contract number 73-028-85-01, East Gate Sale in 1987. Harvested all trees 4" and up.

S t	Gladwir	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	6120 - Lowland Cedar	Poletimber Medium	5.0	97	1-50	This stand was part of a deer exclosure. The fence around the stand is completely on the ground. The mortality of ash and resulting conifer wind throw have reduced the canopy closure to below 75%.
62	4131 - Aspen, Oak	Sapling Well	14.8	16	Immature	Harvested February 2001 under contract number 73-001-00-01, South East Corner. Clearcut 2" and up. Stand was inventoried as an E 6 prior to harvest. Center portion is more wet. The stand is fully regenerated and is a fairly even mix of aspen and oak. The oak is more common in the east and west end and aspen in the center.
63	6124 - Lowland Spruce- Fir	Poletimber Well	19.8	37	51-80	OLD CEDAR CUTTINGS. The north east section of the stand is a heavy S3 of black spruce mixed with balsam popular, tamerack and balsam fir. The rest of the stand is a patch mix of swamp hardwood, tamerack, and swamp popular. Overall the stand is mainly an S-type with a overall stockin of a level 3.
64	6120 - Lowland Cedar	Poletimber Well	27.6	94	171-200	The stand is low and wet with several drainage running through it. Where this stand is open there is a Q3 regeneration of mainly black spruce and balsam fir. Though out the stand there is a large amount of blow down, especially along the cuts.
65	6120 - Lowland Cedar	Sawtimber Well	32.4	94	141-170	Where this stand is open there is a Q3 regeration of mainly black spruce and balsam fir. Though out the stand there is a large amount of blow down, especially along the cuts.
66	6124 - Lowland Spruce- Fir	Sapling Well	9.7	37	1-50	The stand is variable going from E3/P3 on the east side to S3/Q3 along the west side. Overall the stand is and Q3/E3. The species in the stand are balsam fir, tamarack, black spruce, black ash, red maple and balsam popular.
68	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	22.9	56	111-140	Stand was planted in rows but they are very hard to follow. It appears that there was a substantial amount of mortality in the red pine after it was planted. Also it appears that moisture is a major limiting factor in the red pine survival and growth. The red pine in depression was 3-4 stick tall and on the droughty ridges it was only 1-3 sticks tall. The red pine has a greatest density along the north two-track and decreases going south. Harvested in '96 under Rust Eaton Salvage. All trees were cut 2" and up except red pine, white pine, and oak marked with orange paint.
69	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	5.4	90	51-80	Stand is very wet and cannot be harvested. It is regenerating under the overstory with ash and red maple but ash becomes more domiate further south you go in the stand. The oldest deciduous stems are 90 years old and are still the majority however this stand is quickly approaching an uneven aged structure due to ash mortality, deciduous wind throw, and long-lived conifers persisting in the canopy.
70	4130 - Aspen	Poletimber Well	9.1	31	141-170	The stand is just coming into poles, an it should be an A6 in 10 years. Harvested under contract number 73-028-85-01, East Gate Sale in 1987. Harvested all trees 4" and up.

S t	Gladwin	Mgt. Unit		Report 7	<ul><li>Forested</li></ul>	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
71	6120 - Lowland Cedar	Poletimber Medium	7.9	89	1-50	This stand is along the bank of the N. Cedar River. It has heavy blow down primarily located on the west side of the river and primarily cedar. The east side of the river contains the majority of the log sized pine and deciduous trees.
<del></del>	42110 - Planted Red Pine	Poletimber Well	13.3	61	171-200	Harvested February 2001 under contract number 73-001-00-01, South East Corner. Pine stand had one third (38% according to sale notes) of the volume removed.
73	4131 - Aspen, Oak	Sawtimber Well	6.0	53	111-140	The stand has low, wet areas to the south and through the center. The larger diameter aspen in the stand is older and mostly rotten with hollow pockets, rotten out cavities and conk on the boles. This area has a good number of den trees and trees ready to come down for wood debris.
<b>75</b>	6129 - Mixed Coniferous Lowland Forest	Sawtimber Medium	7.6	104	51-80	South of this stand is private land that was harvested and is now a L-Type. Also because of wind action from the cut on private there is a lot of blow down in this stand. The west end of the stand has some cedar pole that were harvested. In the stand there are also open area that have regenereated to S3. Mix conifer 98/2 are a mix of balsam fir, tamarack and black spruce.
76	4130 - Aspen	Poletimber Well	18.8	54	81-110	The stand is fairly sparse between the east and west lobes. The aspen percent gets higher going to the east and west and the sawlog oak and maple is higher in the center.
<b>77</b>	4130 - Aspen	Sapling Well	10.3	16	Immature	Harvested February 2001 under contract number 73-001-00-01, South East Corner. Clear cut 2" and up. The stand has regenerated fairly well to a level 3 stocking. It is a mix mosaic of upland and lowland with the center being heavier to aspen and the edges heavier to oak and maple. There were some cedar left (4) and a hemlock near a vernal pond in the stand. There are multiple vernal ponds in and around this stand.
78	4199 - Other Mixed Upland Deciduous	Poletimber Well	6.6	31	Immature	The stand is well stocked with south of the road being primarily aspen and north of the road primarily maple with some oak.  Harvested under contract number 73-027-85-01, South Side Sale closed February '87. Cut all trees 4" and up.
<b>7</b> 9	4124 - Red with White Oak	Poletimber Medium	5.2	89	1-50	The stand goes up in elevation from south to north. The stand is expected to regenerate naturally to a mix of oak, aspen, and maple. Shelterwood harvested under contract # 73-014-09-01, C24 Southeast. The stand was treated as prescribed, sale closed 7/2013. Residual Ba was 40 sqft on average (30 oak, 8 mixed hardwood, and 2 conifer) and ranged from 30 - 50 sqft. Full natural regeneration is expected. A hemlock inclusion exists in the

4130 - Aspen

80

Poletimber

Well

14.9

40

111-140

natural regeneration is expected. A hemlock inclusion exists in the SW corner of the stand. Stand has yet to regenerate.

The stand is a mix of bigtooth and trembling aspen. The terrain in

the stand is undulating with dry upland and wet drainages The wettest areas are to the southeast and along the river. Historic beaver activity is visible in the form of woody debris and g solid balsam fir well along the river. Harvested under contract # 45-77A which consisted of 63 acres split over 6 cutting blocks.

S	Gladwir	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
81	4123 - Red Oak	Sawtimber Poor	24.2	91	1-50	Harvested as a single selection and group selection to promote a mixed stand of oak, aspen, and maple. Left all conifers to promote species diversity. Harvested under contract number 73-014-09-01, C24 Southeast in July of 2013. Shelter wood harvest reducing the BA to 46 (33 oak, 12 mixed hardwood, and 1 conifer) on average and ranging from 20 to 70. In addition cut all aspen and birch regardless of merchantability. Regeneration is primarily aspen and maple. Minimal oak regeneration. Several pockets of good white pine regeneration around canopy white
82	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	16.0	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. The stand overall is an M3 that has areas of aspen, as well as a scattering of white and red pines. The pines are more common in the west end of the stand. There is a small L-Type present in the east end of the stand. The red pine was planted in 1963 as 2-0 seedlings in small areas that now have been released and are starting to respond.
83	4131 - Aspen, Oak	Poletimber Well	17.4	31	Immature	Regen of the aspen is intermixed with pockets of oak regen and maple/birch regen. The east 1/3 is dominated by oak and maple. Harvested under contract number 73-027-85-01, South Side Sale closed February '87. Cut all trees 4" and up.
84	4130 - Aspen	Sapling Well	10.0	5	Immature	The stand has regenerated to a mix of aspen, oak and maple. Harvested under contract number 73-014-09-01, C24 Southeast July 2013, no retention. Harvested all trees 2" and up. A vernal pond is located in the southeast portion of the stand.
85	4130 - Aspen	Poletimber Well	5.6	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clear cut 2" and up. Stand is a well stocked A6 with areas of oak. There is a vernal pond located at the west end.
86	4130 - Aspen	Sawtimber Well	21.1	57	141-170	The stand is a mix of aspen and northern hardwood. Most of the hardwood was left during the previous harvest and may produce decent quality sawlogs this cycle. Also in the stand there is an inclusion of a C-Type .
87	6118 - Lowland Deciduous with Cedar	Poletimber Poor	10.6	54	51-80	Stand is in a low wet area south of the cut stand 62. In the center of the stand there is an area of major blow down and there are many tip over trees throughout the stand. This stand appears to have been cut with stand 76 to the south leaving the cedar and scattered log size red maple. All of the ash which regenerated from the cut has died leaving room for a third age class to occupy the canopy.
88	6113 - Lowland Maple	Poletimber Medium	5.8	89	51-80	This stand is the lower portion of stand 79 at the foot of the slope.  The transition from the E6 to O6 of stand 79 is gradual so the boundary is some what subjective. Stand was reduced in density because of ash die off.
89	4130 - Aspen	Sapling Well	8.4	4	Immature	The stand has a narrow swale through the center that is an E-Type and there is an old narrow gage RR along the west side.  Timber Sale C24 Southeast 73-014-09-01 was treated as prescribed, sale closed 7/2013. Clearcut2" and up except for the swale witch was cut 4" and up. Stand regenerated to a fully stocked aspen stand.

s t	Gladwir	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
91	4136 - Aspen, Mixed Conifer	Poletimber Well	8.7	40	111-140	This stand is made up of two separate polygons which were cut at the same time and display similar ratios of aspen and conifer.  The lower slopes of the stand are primarily black spruce, tamarack, white pine, and balsam fir and changes over to aspen on the upper slopes and ridge tops. Harvested under contract # 45-77A which consisted of 63 acres split over 6 cutting blocks.
92	4136 - Aspen, Mixed Conifer	Sapling Well	18.2	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clear cut 2" and up. The stand has regenerated as an A6 in the west end and an O5 in the east. The NE most 4 1/2 acres were cut in 1986, 7 years prior to the west end. The edges of the stand along the cedar river had most of the aspen remove 10 years ago by beaver leaving behind a balsam fir, white pine, and oak mix. The south edge of the stand along the large beaver flooding is primarily tag alder with mixed balsam fir/tamarack and yellow birch.
93	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	8.9	94	141-170	Stand is a northern hardwood & hemlock associate. The hardwood associate is primarily red oak, basswood, red maple, and formerly white ash. The east end of this stand between the cedar river and stand 92 is primarily young pole sized hemlock which regenerated under sparse log sized red maple and birch. The majority of this stand is situated on a north facing slope which boarders the cedar river.
94	4111 - S.Maple, Hard Mast Association	Sawtimber Well	5.5	94	111-140	Sugar maple is slowly taking over the stand. As the ash, birch, and basswood decline canopy gaps will be occupied by sugar maple poles which make up the majority of the stands stems.
95	4131 - Aspen, Oak	Poletimber Well	11.0	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. The historic strait line management of this stand created a variable stand which crosses between upland ridges and lowland drainages and swales. The majority of this stand is upland aspen on productive soil. The NW corner is more draughty and contains the bulk of the oak and pine. The SE corner of the stand is a well defined low depression which is dominated by tag alder which scattered yellow birch, tamarack, and balsam fir. Overall the stand is a mix of aspen, maple, oak and Balsam fir.
96	4130 - Aspen	Sapling Well	52.5	1	Immature	Final harvest 2016. Bird Dawg Mixx, 73-018-15-01. Excellent

4191 - Mixed Upland

Deciduous with Conifer

Poletimber

Well

9.7

56

51-80

97

aspen regeneration. Snowmobile trail bisects stand. Inclusion of a small (1.5 Acre) pocket of 40 year old red maple that was left when stand was cut, located at very NW corner of stand.

The stand is adjacent to Rust Eaton Lake on it's east side. The

mature red oak in the stand has died out for the most part. The red pine in the stand was planted in 1963 as 2-0 seedlings and varies from log size dominant in the canopy to sapling size suppressed in the understory. The maple is two-aged, 56 and 91 with the majority being 56.

s t	Gladwin	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
98	4319 - Mixed Upland Forest	Poletimber Well	8.6	40	111-140	The stand is a mix of hardwood and conifers. It could be called either a hardwood stand or a white pine stand from the OI plot data. The aspen is all located in the southern 1/3rd. After looking through the stand is appears to be more of a white pine/balsam fir stand. The white pine and fir in the stand is has multiple ages. The primary age is 40 which seeded in when the stand was cut. The second age is variable as scattered pine of varying age and pockets of balsam were left. Harvested under contract # 45-77A which consisted of 63 acres split over 6 cutting blocks.
99	42350 - Upland Hemlock	Sawtimber Well	5.7	109	111-140	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Did not cut hemlock or beech, cut marked white pine, red pine, and red oak, and cut all other species 2" and up. The hemlock in the stand is overall doing well but there are areas where there is mortality and den trees and coarse wood debris. Currently there is very little regeneration present. What is present is beech.
100	4131 - Aspen, Oak	Sapling Well	13.4	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. This stand is an aspen type that has a portion of it as a wet depression. The depression is a P-Type of trembling aspen and balsam popular mixed with some red maple. Much of the stand is upland being a mix of trembling aspen, bigtooth aspen, red maple and oak.
101	4130 - Aspen	Sapling Well	4.2	5	Immature	Clearcut 2011. Chelsea Oak 73-003-10-01.
102	4199 - Other Mixed Upland Deciduous	Sapling Well	19.0	24	Immature	Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. The stand is mainly red maple mixed with aspen and some oak and paper birch. The terrain is rolling to undualating. The aspen that is present is mainly on the knob along the Cedar River much of the rest of the stand is maple.
103	4123 - Red Oak	Sawtimber Medium	7.6	97	51-80	The stand is mainly a mix of red oak, white oak and maple. Timber Sale C24 Southeast 73-014-09-01 was treated as prescribed, sale closed 7/2013. Average residual BA was 58 sq ft/acre of that 33 was oak, 20 other hardwoods, and 5 sq ft of conifer. BA ranges from 30 - 80 sq ft/acre. Some of the oak removed was of large diameter (20" +) which resulted in some of the BA variation. The best regeneration is located in the center of the stand where a canopy gap was opened up for an aspen clone. The rest of the stand is sparse hardwood below 5 ft. however in these areas a fair number of understory and subordinate sugar maple were released.
104	6120 - Lowland Cedar	Sawtimber Well	16.1	99	111-140	The stand is low and wet in areas with a lot of blow down but also has higher knobs scattered throughout which have less blow down. Pockets of scattered regeneration exist throughout the stand and are primarily balsam fir. This area is used heavily by deer in the winter.
105	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	9.1	94	51-80	Selection harvest 2/2015 Three Lakes Harvest. 73-016-14-01. (residual BA/AC 63) The overall goal was to remove hazard trees and reduce the proportion of pin/red oak in an effort to prevent oak wilt issues in the future. The stand has the center and middle loop of trout lake campground.

S t	Gladwir	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
106	4199 - Other Mixed Upland Deciduous	Poletimber Well	13.8	40	51-80	The stand primarily sits on a ridge which extends out into a cedar swamp with two areas along the north and south boundaries which cut into the swamp. The area to the south is an A4 with a DBH of 5". The north area is a grove of sapling balsam fir. The ridge is a mix of oak, maple, and balsam fir with scattered aspen. The oak varies from red oak to black oak with the highest quality oak to the west. Harvested under contract # 45-77A which consisted of 63 acres split over 6 cutting blocks.
107	4123 - Red Oak	Sawtimber Well	12.3	94	81-110	Stand was partially thinned in 2003 under contract number 73-025-00-01, Two Lake Selection and currently the regeneration is coming in but it is a little slow. The residual BA was approximately 70 sqft/acre (35sqft oak and maple removed). A creek/drainage bisects the stand. This was buffered during the 2003 harvest.
108	4130 - Aspen	Poletimber Well	7.0	31	Immature	The stand is a well stocked A6 of mainly bigtooth aspen mixed with some oak and maple. Most of this area is on a side slope. Harvested under contract number 73-027-85-01, South Side Sale closed February '87. Cut all trees 4" and up.
110	6120 - Lowland Cedar	Poletimber Well	6.7	99	81-110	Stand is low and wet and is a mix of swamp conifers. The regen in the stand is heavy to black spruce, tamarack and balsam fir. Currently there is a lot of blown down in the stand. Where this has made opening in the crown the stand has regenerated as an
111	4123 - Red Oak	Sawtimber Well	12.1	94	81-110	CUT All ASPEN, BIRCH, & RED MAPLE in 2003 under contract number 73-025-00-01, Two Lake Selection. Residual BA was approximately 70 sqft/acre. Thinning released on average two sides of each crop tree. The understory that was created is dominated by shrub species. Minimal red maple present.
112	4123 - Red Oak	Sawtimber Well	34.7	94	111-140	Red oak stand of medium quality. Topography consists of multiple ridges and knobs with valleys in between. Portion's of this stand had the aspen and maple removed 54 yrs ago resulting in a second age with in the canopy.
113	4130 - Aspen	Poletimber Well	6.6	54	141-170	The stand has swales in it that appear to hold water in the spring.  The species in the stand are a mix of trembling aspen, bigtooth aspen, red maple, and oak. In the next 10 years there should be some sawlogs present in this stand.

4131 - Aspen, Oak

4130 - Aspen

114

115

Sawtimber

Well

Sapling Well

10.8

14.3

54

24

111-140

**Immature** 

The stand consists of two aspects; southern in the north half and

northern in the south half with a small shallow bowl in the center. 54 years prior to inventory the aspen, maple, birch, and cherry were removed leaving all of the oak, pine, and mixed hardwood. The southern aspect regenerated aspen under 40+ BA of oak resulting in smaller pole sized aspen today. The northern aspect had less oak and was cut cleaner resulting in log sized aspen today.

Harvested March of '93 under contract number 73-048-90-01, Field Trial B. Clearcut 2" and up. The stand is mainly bigtooth aspen mixed with oak and red maple.

s t	Gladwir	Gladwin Mgt. Unit				Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
116	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	7.0	56	111-140	Harvested under contract number 73-060-93-01, Bee Hive Salvage in '95. This stand is unit two of the sale which was cut orange painted trees only. No indication as to what or how much was marked. In addition scatted den and snag trees were marked with yellow paint. The aspen in the stand is disappearing and the ground cover is sweet fern.
117	4199 - Other Mixed Upland Deciduous	Sawtimber Well	29.2	91	81-110	The stand is a ribbon of oak along the Cedar River that is wide at the north end but narrows down going south. North of the cedar stand along the river the stand has tirers and some of them have low wet ground that may have been oxbows in the past. This stand is equal to or greater than 150'. Part of the reason this stand was created was to act as a buffer between the Cedar River and aspen final harvest. This was done to keep aspen regeneration away from the river so it is less attractive to beavers.
118	4130 - Aspen	Sapling Well	6.5	12	Immature	Harvested in 2005 under contract number 73-037-00-01, Northeast Refuge. Clearcut 2" and up. The stand is an A3 with areas of red maple and oak. It is mainly on a slope with a west aspect.
119	4123 - Red Oak	Sawtimber Well	16.4	95	111-140	The stand is mainly a deep ravine with a creek at the bottom that flows into stand 14 a beaver flooding. The west finger of the stand is the steep of stand 14.
120	4199 - Other Mixed Upland Deciduous	Poletimber Well	6.1	40	1-50	Harvested under contract # 49-77A, clear cut 4" and up.
123	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	45.0	64	111-140	N. Branch of the cedar river flows through the stand. It is mainly on the flood plain of the river and a mixed martix of cedar, tamarack, black spruce, lowland brush, and swamp conifers. Along the river the stand is mainly a T3 to L-type. Many springs flow from the steep banks along the edges into the Cedar River because of this the soil remains thawed and soft most, if not all, of the year.
124	4124 - Red with White Oak	Sawtimber Well	22.2	85	81-110	OPIC - FMD: 07/09/2014 As per approved chapter 7. Split stand into two treatments for the south half of stand; change from shelterwood treatment to a seed treatment. Mark 20 BA to leave. Half of the residual will be marked with the standard slash with the focus being windfirm oak. The other half of the residual will be marked with a green X focusing on red maple and other low quality stem trees larger than 8 inch dbh. Wildlife Division plans to hire a contractor to push these trees over to create drumming habitat after the harvest is complete. Other retention would include any other conifer species which is widely scattered within the stand. Expand treatment boundary into adjacent aspen cover types in an effort to spread aspen into this stand. For the north half of stand; manage as an SCA Rx burn for understory

The oak in the

maintenance. (no harvest

stand is showing some sign of decline. The terrain is rolling hills having some areas of fairly steep slopes. Harvest the stand as a shelterwood-seed tree leaving around 40-50 BA of oak. The oak is to be left in clumps and some scattered trees. The clumps should be in the cold air drainages to minimize frost affect on young oak. The stand looks like it will regenerate well because where there are natural opening with an O3 understory. When harvesting try and keep some healthy trees from all species but favoring the retention of Red Oak. The stand should regenerate naturally. Understory burn conducted on 04/24/2017.

treatment)

Gladwin Mgt. Unit S t				Report 7 -	- Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
125	4199 - Other Mixed Upland Deciduous	Poletimber Well	55.3	99	81-110	Part of timber sale contract 73-018-15-01. Bird Dawg Mix. 07/09/2014 As per approved chapter 7. Changed from shelterwood treatment to a seed treatment. Mark 20 BA to leave. Half of the residual was marked with the standard slash with the focus being windfirm oak. The other half of the residual was marked with a green X focusing on red maple and other low quality stem trees larger than 8 inch dbh. Wildlife Division plans to hire a contractor to push these trees over to create drumming habitat after the harvest is complete. Other retention would include any other conifer species which is widely scattered within the stand. Expand treatment boundary into adjacent aspen cover types in an effort to spread aspen into this stand.
126	4131 - Aspen, Oak	Sapling Well	67.0	16	Immature	Final harvest 2001. 2" spec. Nice mix of natural regeneration Scattered small pockets dominated by oak regeneration and small pockets dominated by red maple regeneration.
127	4126 - White, Black, N. Pin Oak	Poletimber Well	22.7	36	51-80	Mixed stand, pockets of oak with maple and aspen mixed in. And pockets of maple with aspen and oak mixed in.
128	4199 - Other Mixed Upland Deciduous	Sapling Well	39.2	5	1-50	Clearcut December 2011, Chelsea Oak 73-003-10-01. A mix of natural regeneration.
129	4130 - Aspen	Poletimber Well	39.0	24	Immature	Final harvest 1993. 2" spec. Nice mix of natural regeneration.
130	4130 - Aspen	Sapling Well	35.7	8	Immature	Final harvest 2009. Excellent aspen regeneration.
133	4125 - Black, N. Pin Oak	Poletimber Well	3.5	24	Immature	Final harvest 1993. 2"spec. The stand is on a side slope and regenerated well.
134	4130 - Aspen	Sapling Well	5.1	32	Immature	
135	6122 - Black Spruce	Poletimber Well	8.5	87	81-110	
136	4130 - Aspen	Poletimber Well	3.9	36	51-80	
139	4126 - White, Black, N. Pin Oak	Sawtimber Well	20.2	87	51-80	Shelter wood harvest in 2005. All maple, aspen, birch, ash removed and oak residual marked down to 60 BA/AC. A mix of aspen, red maple and oak in the understory. Possible to hold stand 10 years to better establish oak regeneration and take off the rest of the over story.

4130 - Aspen

4116 - Mixed N. Hardwood - Aspen

140

143

Poletimber

Medium

Poletimber

Well

13.6

18.0

36

32

51-80

Immature

Beaver activity along L types.

S	Gladwin Mgt. Unit			Report 7	<ul><li>Forested</li></ul>	Stands Compartment: 24 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
144	4139 - Aspen, Mixed Deciduous	Poletimber Well	44.0	36	51-80	Final harvest 1981. Part of a checker board cut that was done in the 80's and 90's
146	4199 - Other Mixed Upland Deciduous	Sapling Well	10.1	19	Immature	Final harvest 1998. Part of a checker board cut that was done in the 80's and 90's
147	4130 - Aspen	Poletimber Well	53.9	26	Immature	Final harvest 1991. 2" spec. Part of a checker board cut that was done in the 80's and 90's
148	4124 - Red with White Oak	Sawtimber Well	3.2	94	51-80	Shelter wood harvest in 2005. All maple, aspen, birch, ash removed and oak residual marked down to 70 BA/AC. Maple, aspen and oak in understory. Highly visible small stand adjacent to M-18 on top of a hill.
151	4131 - Aspen, Oak	Poletimber Well	29.3	31	Immature	Final harvest 1986. Part of a checker board cut that was done in the 80's and 90's
155	4139 - Aspen, Mixed Deciduous	Sapling Well	7.4	21	Immature	Final harvest 1996. 2" spec.
160	4130 - Aspen	Sapling Well	14.4	17	Immature	Final harvest 2000. Good aspen regeneration with mixed oak and maple regeneration mixed in as well.
161	4131 - Aspen, Oak	Sapling Well	17.3	1	Immature	Final harvest 2016. Bird Dawg Mixx 73-018-15-01. Desired stocking achieved.
163	4130 - Aspen	Poletimber Well	47.1	54	81-110	Excellent aspen. Hold 10 years due to the amount of aspen clear- cuts proposed this year of entry.
165	4131 - Aspen, Oak	Poletimber Well	77.4	52	111-140	Excellent quality aspen. The stand has a series of vernal ponds and pockets of mature oak but.
166	4126 - White, Black, N. Pin Oak	Sawtimber Medium	39.1	89	51-80	Rx burn completed 04/24/17, to establish oak regeneration and release it from competition. Shelterwood harvest 2011. Chelsea Oak 73-003-10-01. Monitor regeneration until full stocking is achieved. 70 BA/AC residual oak.
167	4131 - Aspen, Oak	Poletimber Well	40.5	49	111-140	Stand is made up valley's, swales, slopes and ridges areas of the stand appear to be seasonally wet.
168	4126 - White, Black, N. Pin Oak	Poletimber Well	72.7	89	81-110	Part of timber sale contract 73-018-15-01. Bird Dawg Mix. 07/09/2014 Stand should regenerate to a medium stocked oak stand if not interplant with red pine.
169	4131 - Aspen, Oak	Sapling Well	9.8	21	Immature	Final harvest 1996. 2" spec.
170	4131 - Aspen, Oak	Poletimber Well	31.0	59	111-140	Excellent aspen. Part of timber sale contract 73-018-15-01. Bird Dawg Mix. Final harvest with reserves to regenerate aspen.

S	Gladwir	Gladwin Mgt. Unit				Stands Compartment: 24 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
171	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	45.1	42	51-80	Inter-planted red pine understory released in 2001 with oak salvage sale. The stand is a mix of pole sized red pine and oak in the understory. Red pine has open grown form, not a plantation.  Scattered semi open areas.
172	4131 - Aspen, Oak	Sapling Medium	38.0	5	Immature	Clearcut 2011. Chelsea Oak 73-003-10-01.
173	4199 - Other Mixed Upland Deciduous	Sawtimber Well	11.7	94	81-110	Steep stand on slope above Hoister Lake, no treatment.
174	4126 - White, Black, N. Pin Oak	Sapling Medium	19.9	5	Immature	Clearcut 2011. Chelsea Oak 73-003-10-01.
175	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	13.0	94	Unspecified	Lowland cedar adjacent to Hoister Lake. Some blow done. Areas of white pine as well.
176	4139 - Aspen, Mixed Deciduous	Poletimber Well	10.1	54	81-110	Long narrow stand along main East West Corridor Road. Lots of species and size diversity.
177	4199 - Other Mixed Upland Deciduous	Sawtimber Well	52.3	94	81-110	Lower quality oak than found in adjacent stands. Dead oak was removed from the north half of stand in the 90's.
179	4130 - Aspen	Sapling Well	25.4	6	Immature	The stand is undulating containing knobs and ridges that have steep sides. The south edge of the stand becomes lower and wetter due to a wet area that drains to the east. It is heavy to aspen but has pockets of oak in it. The soil under the stand is Rubicon. The stand is to be final harvested. The stand should regenerate well to aspen. Harvested under contract number 73-014-09-01, C24 Southeast January 2012. Harvested all trees 2" and up without retention for field trial use. A heavier than normal slash load was left but was distributed evenly.
180	4126 - White, Black, N. Pin Oak	Sawtimber Poor	39.4	94	1-50	Harvested February, 2015. Three Lakes Oak 73-016-14-01. All red and pin oak were cut and marked hazard trees at camp sites were cut. (residual BA/AC 36) Uncut buffers were left on the banks above the lakes. The overall goal was to remove hazard trees and reduce the proportion of pin oak in an effort to prevent oak wilt issues in the future. Trees in the stand are very open grown. Campground loops are within this stand.
181	6120 - Lowland Cedar	Poletimber Well	8.1	89	81-110	Stand extends as a draw that connects House and Trout lakes. Areas of blow down within stand. Also includes steep bank leading out of low drainage area.
183	4124 - Red with White Oak	Sawtimber Medium	43.3	94	51-80	Selection harvest 2/2015 Three Lakes Oak. 73-016-14-01. (residual BA/AC 72) Uncut buffer was left around the lake. The overall goal was to remove hazard trees and reduce the proportion of pin/red oak in an effort to prevent oak wilt issues in the future. Stand has the west loop of Trout Lake campground in it.
184	4133 - Aspen, Mixed Pine	Sapling Well	14.6	20	Immature	Final harvest 1997.

S t	Gladwin	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
185	4199 - Other Mixed Upland Deciduous	Sapling Well	107.2	14	Immature	Final harvest 2003, all oak 4" DBH and less was left. Species composition is mixed in this stand.
186	4130 - Aspen	Poletimber Well	19.6	41	81-110	Hold ten years and re-evaluate. Try to manage with adjacent stands due to size of stand.
187	4130 - Aspen	Sapling Well	11.5	20	Immature	Final harvest 1997. 2" spec.
188	4126 - White, Black, N. Pin Oak	Sawtimber Well	16.7	90	81-110	
189	4125 - Black, N. Pin Oak	Sapling Well	30.7	14	Immature	Final harvest 2003. 4" spec. Nice mix of natural regeneration.
190	4130 - Aspen	Poletimber Well	16.2	41	81-110	The stand is mainly a ridge including the north facing aspect of the ridge. The species in the stand goes from red maple aspen on the north aspect going to mainly aspen with some oak on the ridge.
191	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	53.6	19	Immature	Salvage harvest 1998 all red pine was left. Scattered open areas.  The red pine is reaching pole size.
192	4199 - Other Mixed Upland Deciduous	Sapling Well	38.3	5	Immature	Seedtree harvest 2012. West Gate Sale. 73-019-09-01.Residual oak is 10 - 20 BA/AC.
193	4125 - Black, N. Pin Oak	Sapling Well	20.6	14	Immature	Final harvest 2003. 4" spec. Nice mix of natural regeneration.
194	4199 - Other Mixed Upland Deciduous	Sapling Medium	20.3	5	Immature	Clearcut 2011. Chelsea Oak 73-003-10-01.
195	4199 - Other Mixed Upland Deciduous	Sapling Well	20.6	14	Immature	Final harvest 2003. 4" spec. Nice mix of natural regeneration.
196	4131 - Aspen, Oak	Sapling Well	12.5	20	Immature	Final harvest 1997 2" spec.
197	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	9.2	31	51-80	Mixed stand.
198	4130 - Aspen	Poletimber Well	15.2	41	81-110	Nice mixed stand.
199	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	8.1	31	51-80	
200	4131 - Aspen, Oak	Poletimber Well	4.3	49	81-110	Aspen with mixed oak and red maple.
201	4126 - White, Black, N. Pin Oak	Sawtimber Well	5.0	94	51-80	Small oak stand. Hold ten years and re-evaluate. Try to manage with adjacent stands due to size of stand.

s	Gladwin	Gladwin Mgt. Unit				Stands Compartment: 24 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
202	4130 - Aspen	Poletimber Well	57.1	49	81-110	Aspen stand with oak and red maple mixed in. Hold due to the amount of clearcuts proposed in the area. Could be harvest this YOE
203	4130 - Aspen	Poletimber Well	10.4	32	51-80	
204	4130 - Aspen	Poletimber Well	3.6	49	81-110	Very nice stand of aspen.
205	4131 - Aspen, Oak	Sapling Well	8.8	20	Immature	OPIC - FMD: The stand is a fairly even mix of aspen and maple and could be called either an A3 or M3. The aspen in the stand has a thicker diameter and greater height so the stand was called an A3. The north end of the stand has a area of oak. This area was established under act 82 as the Gladwin Field Dog Trail Area and as such, it is an HCVA. The management of this area is to maximize Ruffed Grouse habitat to maintain a strong population of natural birds for dog trial events
206	4126 - White, Black, N. Pin Oak	Sawtimber Well	2.9	99	81-110	Small stand of mature poorly formed large diameter oak, leave the stand for future den trees, mast, diversity, horizontal structure and coarse wood debris.
 207	4199 - Other Mixed Upland Deciduous	Sapling Poor	42.4	1	1-50	Seed tree harvest 2016. Bird Dawg Mixx, 73-018-15-01. 20 BA was marked to leave. Half of the residual was marked with the standard slash with the focus being wind firm oak. The other half of the residual was marked with a green X as wildlife trees. Wildlife plans to push the trees over for drumming logs, trees not pushed over as
						of old white pine stumps in it and it looks like the area has had some salvage in the past. The stand has some openings in it that have good regeneration. In addition, the aspen and maple in the stand increases going west. The stand should be shelter wooded retaining 40-50 BA and it would be expected to regenerate to a mix of oak and aspen. This area was established under act 82 as the Gladwin Field Dog Trail Area and as such, it is an HCVA. The management of this area is to maximize Ruffed Grouse habitat to maintain a strong population of natural birds for dog trial events. This stand is to be held and harvested in 2014 to maintain more high quality habitat for ruffed grouse.
208	4125 - Black, N. Pin Oak	Poletimber Well	24.4	24	Immature	Final harvest 1992. Good mixed oak regeneration. Scattered white pine. White pine was left when stand was cut. Clones of aspen are present.
209	4125 - Black, N. Pin Oak	Sapling Well	5.1	17	Immature	Salvage cut in 2000, all species but pine were cut. Gypsy moth salvage. Stand is mainly in a swale.
210	4125 - Black, N. Pin Oak	Sapling Well	6.3	17	Immature	Final harvest 2000. All pine was left and oak 6" DBH and less was left.
211	4130 - Aspen	Poletimber Well	35.0	54	81-110	Fully stocked aspen stand.

S t	Gladwin		Report 7	- Forested	Stands Compartment: 24 Year of Entry: 2019	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
212	4131 - Aspen, Oak	Poletimber Medium	3.6	54	1-50	Small diverse stand that has been left when surrounding stands have been managed. There is a gate within the stand. Stand contains some open grown mature oak trees. Leaving this stand will protect the gate and aid in maintaining the closed road. Also ads diversity and structure to a an area that is intensively managed.
213	4124 - Red with White Oak	Sawtimber Medium	23.7	94	1-50	Shelterwood harvest 2012. West Gate Sale. 73-019-09-01. Prescribed burned 4/30/2015 under FTP # C73-968. This set the understory back to zero. Maple stump sprouts are re-sprouting along with encroaching aspen along the west boarder of the burn area.
214	4126 - White, Black, N. Pin Oak	Sawtimber Well	21.3	89	51-80	Shelter wood harvest in 2003. All maple, aspen, birch, ash removed and oak residual marked down to 60 BA/AC. Maple, aspen and oak in understory. Possible to hold 10 years and then remove the over story.
215	4131 - Aspen, Oak	Poletimber Well	7.6	26	Immature	Final harvest 1991. 2" spec.
216	4139 - Aspen, Mixed Deciduous	Poletimber Well	4.0	26	Immature	Final harvest 1991. 2" spec.
217	4139 - Aspen, Mixed Deciduous	Poletimber Well	7.1	26	Immature	Final harvest 1991. 2' spec.
219	4310 - Pine, Oak Mix	Poletimber Well	5.3	32	Immature	
220	4133 - Aspen, Mixed Pine	Poletimber Well	9.4	32	51-80	Clear cut 1985.
222	4125 - Black, N. Pin Oak	Poletimber Well	38.5	24	Immature	Final harvest 1992. Good mixed oak regeneration. Scattered white pine mainly to the north end of stand. White pine was left when stand was cut. Clones of aspen are present.
223	4131 - Aspen, Oak	Sapling Well	36.8	17	Immature	Final harvest 2000. The stand is fully stocked however, its not uniformly one cover type. It goes from aspen to maple to oak and areas are mixed as well. The clones also widely transition from one to the next.
224	4199 - Other Mixed Upland Deciduous	Sapling Well	6.4	17	Immature	
225	4199 - Other Mixed Upland Deciduous	Poletimber Well	13.8	32	51-80	Clear cut 1985. Mix of aspen, maple and oak.
226	4199 - Other Mixed Upland Deciduous	Sapling Well	16.5	4	Immature	Final harvest 2012. West Gate Sale. 73-019-09-01.
227	4131 - Aspen, Oak	Poletimber Well	15.0	32	Immature	Clear cut 1985.
228	4130 - Aspen	Sapling Well	6.3	4	Immature	Final harvest 2012. West Gate Sale. 73-019-09-01.

S t	Gladwin	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
229	4125 - Black, N. Pin Oak	Sapling Well	36.8	5	Immature	Final harvest 2012. West Gate Sale. 73-019-09-01. Monitor regeneration untill full stocking is achieved.
230	4130 - Aspen	Poletimber Well	3.0	46	111-140	Mixed aspen, red maple and oak.
231	4130 - Aspen	Poletimber Well	4.8	44	111-140	A little wind along the pipeline.
232	4130 - Aspen	Sapling Well	7.5	1	Immature	Final harvest 2016. Bird Dawg Mix 73-018-15-01. Desired stocking achieved.
233	4126 - White, Black, N. Pin Oak	Sapling Well	14.9	1	1-50	Shelterwood seed harvest 2016. Bird Dawg Mix 73-018-15-01. 20 BA/AC of mixed hardwood was left. Half of the residual was marked with the standard slash to be left with the focus being wind firm oak. The other half of the residual was marked with a green X with Wildlife Division planning to hire a contractor to push these trees over to create drumming habitat after harvest is complete.
						stand.  The stand has some mortality and the soundness is lower then average. The stand could be shelter wooded retaining 50-70 BA leaving the trees between M-18 and the distribution powerline. The stand is expected to regenerate as an oak mixed with maple. This area was established under act 82 as the Gladwin Field Dog Trail Area and as such, it is an HCVA. The management of this area is to maximize Ruffed Grouse habitat to maintain a strong population of natural birds for dog trial events. This stand is to be held and harvested in 2014 to maintain more high quality habitat for ruffed grouse.
234	4126 - White, Black, N. Pin Oak	Sawtimber Well	11.1	96	81-110	OPIC - FMD: The north end of the stand has a drainage in it that is more of an O7E3. The terrain is rolling hills so the slope if harvest could be a problem. There are areas in the stand are more of an A4A2 while most of the stand is oak. Hold the stand for 10 years then final harvest to regenerate a mix oak aspen stand. This area was established under act 82 as the Gladwin Field Dog Trail Area and as such, it is an HCVA. The management of this area is to maximize Ruffed Grouse habitat to maintain a strong population of natural birds for dog trial events
235	4131 - Aspen, Oak	Poletimber Well	4.6	49	111-140	A mix of aspen and oak.
236	4130 - Aspen	Sapling Well	5.9	14	Immature	Final harvest 2003. Good mix of natural regeneration.
237	4125 - Black, N. Pin Oak	Sawtimber Well	12.1	94	81-110	Mature oak stand possible to shelterwood harvest or hold 10 years.
238	4130 - Aspen	Sapling Well	36.8	17	Immature	Final harvest 2000. All pine was left and oak 6" DBH and less was left. The oak and pine that was left is mainly located in the south central area of the stand. There are areas that are heavier to aspen as well as areas that are heavier to oak or red maple. The residual white pine has weevil damage.

S t	Gladwin	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
239	4130 - Aspen	Poletimber Well	63.2	54	111-140	Well stocked aspen stand. Snowmobile Trail bisects stand. North half of stand was cut in 2016.
241	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	11.6	54	51-80	Stand was cut with surrounding aspen stands. Aspen regeneration failed in most parts of the stand leaving opportunities for maple, birch, and ash to grow. The ash has since died out reducing the canopy closure to around 75%. Trace of cedar, white pine, and spruce in this stand. A small perennial stream flows through the stand.
246	4125 - Black, N. Pin Oak	Sapling Well	5.7	19	Immature	Harvested under contract number 73-046-95-01, Old fire Tower in June of '98. The southern 2/3 of the stand is an O3 with the north edge being more of a M3 near the 2-track.
247	4199 - Other Mixed Upland Deciduous	Sawtimber Well	12.3	94	81-110	The stand is on slopes associated with the Cedar River and Hoister Lake. The area of the stand along the East West Corridor has a fair amount of over mature aspen. The rest of the stand is an oak/maple/pine mix. Heavy understory of white pine through out the stand of variable diameter, height, and density.
250	4125 - Black, N. Pin Oak	Poletimber Medium	12.4	37	1-50	The stand was burned in 1980 after it was cut. The ground cover is mainly sweet fern, grasses, and rain-deer moss. The oak is very bushy and mainly black oak with some red and white but not much. Harvest in 1980 under contract # 56-80A, clear cut 4" and up. This stand and stand 30 had a higher stem density and smaller size class than stand 31 prior to harvest. This along with a presumably higher SI most likely attributed to the better regeneration, not the burn.
251	4130 - Aspen	Poletimber Well	8.8	40	1-50	This stand is a mix of choke cherry and poorly formed trembling aspen. There is some oak but it is sparse. The ground cover is grasses and bracken fern but there is a fair amount of sweet fern and some pockets of blueberry. Harvested under contract # 49-77A which totaled 96 acres in 8 cutting blocks.
252	4126 - White, Black, N. Pin Oak	Sapling Well	6.2	19	Immature	Harvested under contract number 73-046-95-01, Old fire Tower in June of '98. The stand has a south aspect and is mainly a O3 with very little aspen, maple, or pine. The pine that is present is scattered and mainly white pine. The slope has a lot of pulp wood that was left when the stand was harvested. At the very south end of the stand is a deep depression with a spring in it. This area was dammed and used as a water holding structure. Dam has since been removed.
253	4130 - Aspen	Poletimber Well	45.7	49	111-140	The stand is a nice aspen stand and is scheduled to be cut in 2014 after stand 43 has met green up requirements. The stand is expected to regenerate as a well stocked aspen stand and because of the field, trail area should be exempt from the retention guidelines.
254	4126 - White, Black, N. Pin Oak	Sawtimber Poor	16.0	91	1-50	Harvested under contract number 73-060-93-01, Bee Hive Salvage in '95. This stand is unit one which was cut all trees 2" and up. All white oak were left and all red pine 10" and up were left. Overall the understory is brushy with choke cherry. The residual from the harvest is still considered the over-story. Within the stand there are areas of good advance oak regeneration but for the most part it is fairly open.

S t	Gladwin	Gladwin Mgt. Unit			<ul><li>Forested</li></ul>	Stands Compartment: 24 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
256	4130 - Aspen	Sapling Well	32.4	8	Immature	Final harvested in February of 2009 under contract # 73-003-07-01, GFTA 2007 Aspen. This stand was agreed upon at the Dec. 15, 2006 review to be cut early as a 2" clear cut without reserve. The stand has regenerated to a fully stocked aspen stand with scattered oak, maple. The stand is undulating and has about four small vernal ponds with in it. The vernal ponds are less than 1/2 an acre in size and most are concentrated along the south boundary.
257	4130 - Aspen	Poletimber Well	32.0	54	111-140	This stand is part of stand 48 that is to be cut in 2014 if after stands 256 and 258 meet greenup requirements. The stand is expected to regenerate as a well stock aspen stand. Because of the field trail area, this stand should be exempt from the retention guidelines. Three large vernal ponds are located with in this stand.
258	4131 - Aspen, Oak	Sapling Well	29.0	8	Immature	The topography is somewhat undulating. This stand has a few small vernal ponds in the north 1/4 of the stand; most of the ponds are less than a 1/4 acre in size. Stand has regenerated to an adequate level with areas of dense aspen mixed with pockets of oak, maple mix. Final harvested in February of 2009 under contract # 73-003-07-01, GFTA 2007 Aspen. The harvest was a 2" clear cut with no reserve as agreed upon at the compartment review Dec. 15, 2006.
260	4125 - Black, N. Pin Oak	Poletimber Medium	11.5	44	1-50	Harvested February 2001 under contract number 73-001-00-01, South East corner. Left all white pine and red oak as well as trees < 4" DBH. The stand has regenerated as an A3 with a oak and pine overstory. The overstory goes from O4 to O7. The stand is a good A3 along the road but thins out a little going away from the road.
261	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	6.5	31	1-50	This area is a low wet E2 with tag alder and maple in the south end, going to an E3 of maple, paper and yellow birch, and trembling aspen north. The boundary between stand 261 and 88 is some what subjective. Harvested under contract number 73-027-85-01, South Side Sale closed February '87. Cut all trees 4" and up.
267	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	4.9	90	111-140	Stand was planted in rows but they are very hard to follow. It appears that there was a substantial amount of mortality in the red pine after it was planted. Also it appears that moisture is a major limiting factor in the red pine survival and growth. The red pine in depression was 3-4 stick tall and on the droughty ridges it was only 1-3 sticks tall. This stand was not harvested between 1987 - 2005 when the adjacent stands were harvested.
269	4130 - Aspen	Poletimber Well	44.7	54	111-140	Part of timber sale contract 73-018-15-01. Bird Dawg Mix.
270	42200 - Natural White Pine	Poletimber Well	3.4	59	51-80	Small stand in a valley with semi steep banks. No treatment.
274	4131 - Aspen, Oak	Poletimber Well	22.4	50	81-110	Stand is on timber sale contract for final harvest to naturally regenerate a mix of aspen and mixed hardwood. Bird Dawg Mix 73-018-15-01.
276	6112 - Lowland Aspen	Sawtimber Well	6.4	50	51-80	Low wet stand, to wet for commercial harvest.

S	Gladwin	Gladwin Mgt. Unit			– Forested	Stands Compartment: 24 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
277	4130 - Aspen	Sapling Well	13.8	17	Immature	Final harvest 2000. Good aspen regeneration with mixed oak and red maple regeneration mixed in as well. Scattered mature oak, maple and beech left when stand was cut. (Approximately 10 sq. ft.)
278	42200 - Natural White Pine	Poletimber Well	5.5	44	51-80	
279	4122 - Oak, Pine	Sawtimber Poor	9.6	94	1-50	Harvested February, 2015. Three Lakes Oak 73-016-14-01. All pine and white oak left. 2" spec cut all species except white oak and all pine species. (residual BA/AC 26) The overall goal was to remove hazard trees and reduce the proportion of pin oak in an effort to prevent oak wilt issues in the future.
280	4125 - Black, N. Pin Oak	Poletimber Well	13.5	36	51-80	The stand is rolling and the species are variable according to aspect. The southern aspect are heavier to oak the northern ones are heavy to red maple. A deep valley runs through the center of the stand, north to south. Some of the slopes contain a high percentage of seed source oak which is still sapling size. Part of timber sale # 56-80A which was harvested 4" and up in October of '81. This stand was salvaged after a large wildfire in 1980.
281	4126 - White, Black, N. Pin Oak	Sawtimber Poor	20.2	94	1-50	Stand had Rx-burn 4/30/2015. Shelterwood harvest winter 2012/2013.
285	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	12.2	40	51-80	The stand had the overstory removed and it is now mainly a mixed stand of white pine and red maple with some scattered oak and trembling aspen. Harvested under contract # 49-77A, clear cut 4" and up.
286	4119 - Mixed Northern Hardwoods	Poletimber Well	4.6	36	51-80	This stand is an area in stand 50 that past bearver activity has converted to a M-Type. It is a M6 of mostly red maple with some hybrid oak and white oak. Originally harvested January '81 under contract number 57-80A. Cut all species 4" and up.
287	4130 - Aspen	Poletimber Well	10.3	40	81-110	The stand is rolling with the south edge being fairly steep. Some of the southern aspects of the stand are heavier to oak and maple. Oak and maple are also mixed throughout the stand. Part of timber sale # 49-77A which was 8 blocks totaling 96 acres in Sec. 3 & 4.
289	4310 - Pine, Oak Mix	Sawtimber Well	5.7	94	141-170	Two-aged stand. The primary age is 94 which is associated with the historic logging era. This stand also contains pine which were not cut during that era and are now at or approaching 200. This stand does not however meet old growth criteria however be cause of it logging history a and young primary age. Both red and white pine also vary in age from 94 to 200+ years with the majority being 188.
293	6112 - Lowland Aspen	Poletimber Well	5.2	42	81-110	Lowland aspen, maple, birch stand which was habitat cut for grouse and woodcock habitat.
311	4123 - Red Oak	Sawtimber Well	18.2	94	81-110	This stand was a leave strip to address visual along Hoister and Trout lake. The stand has a steep slope especially along Hoister lake.

S t a n d	Gladwin Mgt. Unit			Report 7	– Forested	Stands Compartment: 24 Year of Entry: 2019
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
366	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	6.1	90	81-110	This area was established under act 82 as the Gladwin Field Dog Trail Area and as such, it is an HCVA. The management of this area is to maximize Ruffed Grouse habitat to maintain a strong population of natural birds for dog trial events.

Compartment: 24 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
5	6233 - Wet Meadow	5.5	No	N. Branch of the cedar river flows through the stand. The stand is dominated by wetland grass/sedge with some lowland brush. Old beaver floodings.
6	500 - Water	3.0	No	RUST EATON LAKE.
14	623 - Emergent Wetland	13.4	No	BEAVER POND. Head water N. Branch Cedar River.
28	3301 - Low Density Deciduous Trees	5.4	No	This stand is an open stand of mainly sweet fern with some scattered black cherry poles. Overall the stand is a U-Type. The stand was trenched and planted to autumn olive but failed except for scattered individuals which do not appear to be thriving.
43	3301 - Low Density Deciduous Trees	1.2	No	The area is mainly scattered oak trees with some white pine and aspen around the edge. Harvested under contract number 73-025-85-01, Tower Hill Sale. Clear cut 4" and up. Management objective at the time was oak.
46	6239 - Mixed Emergent Wetland	17.9	No	This is the Cedar River corridor and associated grassy area on the flood plain cause by past beaver activity.
57	6220 - Alder/willow	2.4	No	This stand is in a well defined depression that is very wet and heavy to brush. There are some scattered black spruces and red maples in it. The edges of the stand seem to have a narrow band of open water. Currently the stand is a L-Type that is seeding in so it may become a Q-Type in 10 years.
67	62399 - Marsh (OI)	12.3	No	This stand is a series of old beaver flooding in which the dams have been removed and the beaver traped out. Currently the stand is a marsh of marsh grass and cattails.
74	6220 - Alder/willow	2.4	No	This area is mainly a L-type that has some tamerack showing up as well as balsam fir. It may become a Q-Type or T-Type in 20 years depending on beaver activity.
90	500 - Water	9.3	No	Stand is a beaver flooding that appears to be active. The damn is located on private property.
109	623 - Emergent Wetland	3.5	No	Stand is an old beaver flood but now has become a marsh. Some encroachment of conifers is occurring which may eventually re-forest this stand.
121	500 - Water	25.8	No	TROUT LAKE.
122	500 - Water	28.0	No	HOISTER LAKE.
131	500 - Water	4.7	No	House Lake.
137	622 - Lowland Shrub	14.7	No	

Compartment: 24 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
145	500 - Water	4.2	No	Beaver activity.
178	622 - Lowland Shrub	5.6	No	Stand is a swale that extends north from House Lake. It is mainly tag alder with areas of cattails and also includes the slope area leading up out of the tag alder.
243	6220 - Alder/willow	1.3	No	Vernal pond.
245	3301 - Low Density Deciduous Trees	1.3	No	This area was used as a landing for Rust Eaton Salvage in '93 and Tower Hill Sale in '87.
248	3301 - Low Density Deciduous Trees	1.0	No	The stand is part of 30 that was burned in 1980. This stand is c deep bowl between ridges. Most likely did not regenerate be cause it acts as a frost pocket.
255	6220 - Alder/willow	1.3	No	The stand is a well defined depression of lowland brush. The brush is mainly michigan holly and tag alder.
259	3205 - Mixed Upland Shrub	2.1	No	This stand is a natural opening of sweet fern. There are some widely scattered oak in the stand but they are less than 10 BA.
263	6220 - Alder/willow	2.3	No	The stand is in a bowl and is very wet. It is a Q2 along the edges and is heavy to white pine and black spruce. Overall the stand is non-forested with a ground cover of tag alder.
264	330 - Low-Density Trees	1.3	No	This stand is a landing which was used during the adjacent 96-97 cut and 2005 cut.
265	6233 - Wet Meadow	2.8	No	Stand appears to be an old beaver flooding that is filling in with white pine and tamarack. Currently the dominant cover is lowland for ben and alder.
268	310 - Herbaceous Openland	1.2	No	OPIC - FMD: DEAD OAK REMOVED IN 1992 (unsure of '92 harvest) Harvested under contract number 73-046-95-01, Old fire Tower in June of '98., The red pine that was left after the harvest is starting to respond to being released but it is slow getting going. The regeneration in the stand is mainly choke cherry with a little black cherry and maple. This is an old landing for the above mentioned timber sale.
288	330 - Low-Density Trees	1.1	No	Overlook area for Rust Eaton Lake. Grass and scattered pole size cherry.
290	710 - Sand, Soil	1.1	Yes	House Lake beach area.
291	623 - Emergent Wetland	5.3	No	This stand contains the N. Branch Cedar River. This section of the river contains numerous small beaver damns of varying ages and integrity. This section of the river was never successfully damned however because of its wide floodplain allowing the river to work its way around the damns.
400	3102 - Grass	19.4	No	Transmission powerline and a pipeline.

Gladwin Mgt. Unit

## Report 8 - Nonforested Stands

Compartment: 24 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
401	3102 - Grass	3.7	No	Grass with some scattered cherry and oak.
403	3103 - Rubus-Fern	1.6	Yes	This stand was the old landing for the harvest of the neighboring stands. Prior to these harvests it was referred to as a wildlife opening. It is currently sweet fern, and grasses with some black berry in it.
404	31029 - Grass (OI)	11.5	Yes	This stand is a maintained wildlife opening that has been planted to a pasture mix.
405	3102 - Grass	4.2	Yes	