



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32241

Entry Year 2021

Acreage: 1,275

County Marquette

Management Area: Chain Lakes Moraine

Revision Date: 2019-07-25

Stand Examiner: Rick Hill

Legal Description:

T45N-R28W, sections 30, 31.

Identified Planning Goals:

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

Soil and topography:

Soils range from muck and peat in the lowlands to fine to coarser sands in the uplands. The lowlands are level and the uplands are rolling to slightly hilly.

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

State land surrounds most of this compartment with the exception of the north west side where it is bordered by small non-industrial ownership. The area is used heavily for active and passive recreation.

Unique Natural Features:

Johnson Lake and the Flat Rock Creek are located in this compartment.

Archeological, Historical, and Cultural Features:

Impacts from the early 1900's pine logging days occur in this compartment in the form of old rail road grades and forest openings.

Special Management Designations or Considerations:

Flatrock creek is a trout stream that require buffers for management.

Watershed and Fisheries Considerations:

Northern regions of this compartment contain Johnson Lake and Flat Rock Creek. Flat Rock Creek is designated a Type 1 trout stream less than 50' width and serves as a tributary to the West Branch of the Escanaba River. A 300' buffer is recommended for Flat Rock Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

For Johnson Lake: a 100' plus 5' per 1% increase in slope; buffer is recommended to protect shoreline areas in accordance with Best Management Practices .

Wildlife Habitat Considerations:

Compartment 241 is found within the Chain Lakes Moraine Management Area; on a Disintegration Moraine in Southwestern Marquette County. The dominant Natural Communities are dry mesic northern forests, poor conifer swamps, and mesic northern forests. This management area offers opportunities to increase diversity and perhaps long-term oak sustainability through under planting white and red pine. Another priority is to maintain or increase wildlife corridors especially along riparian corridors. Wildlife management issues in the management area are: mast (hard and soft); habitat fragmentation; mature forest conditions; mesic conifer; course woody debris; and retention or development of large living and dead standing trees (for cavities). This management area represents approximately ¼ of the oak resource on WUP state forest.

The following have been identified as featured species for the Chain Lakes Management Area: black bear, gray jay,

pileated woodpecker, Northern goshawk, red crossbill.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium and coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. The Granite/Gneiss could be used as dimension stone and a rock quarry is located in Section 19. Sand and gravel pits are located in this area and there should be some potential. The abandoned Republic iron mine is located ten miles to the northwest. This Compartment was not previously leased for metallic exploration, but State land to the east was previously leased. There is no economic oil and gas production in the UP.

Vehicle Access:

Road access is good to this compartment. Seasonal county roads access the majority of the compartment. Forest access routes access the rest of the compartment.

Survey Needs:

Any survey needs for timber sale work will be requested well before sale work begins.

Recreational Facilities and Opportunities:

There are no current recreational opportunities in this area beyond dispersed activities. There is little potential for future development.

Fire Protection:

Fuels in this compartment are primarily aspen and mixed upland conifer. Access to the compartment is generally good for mechanized firefighting. Response times are under an hour from Ishpeming allowing for prompt IA.

Additional Compartment Information:

The following reports from the Inventory are attached:

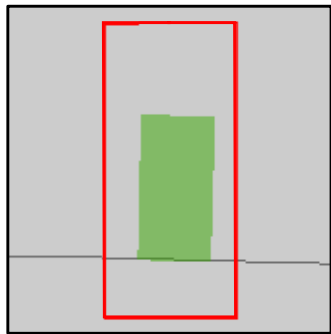
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

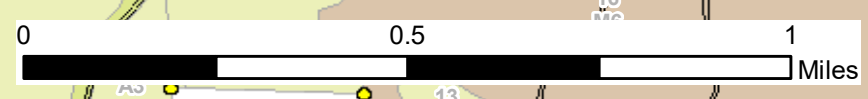
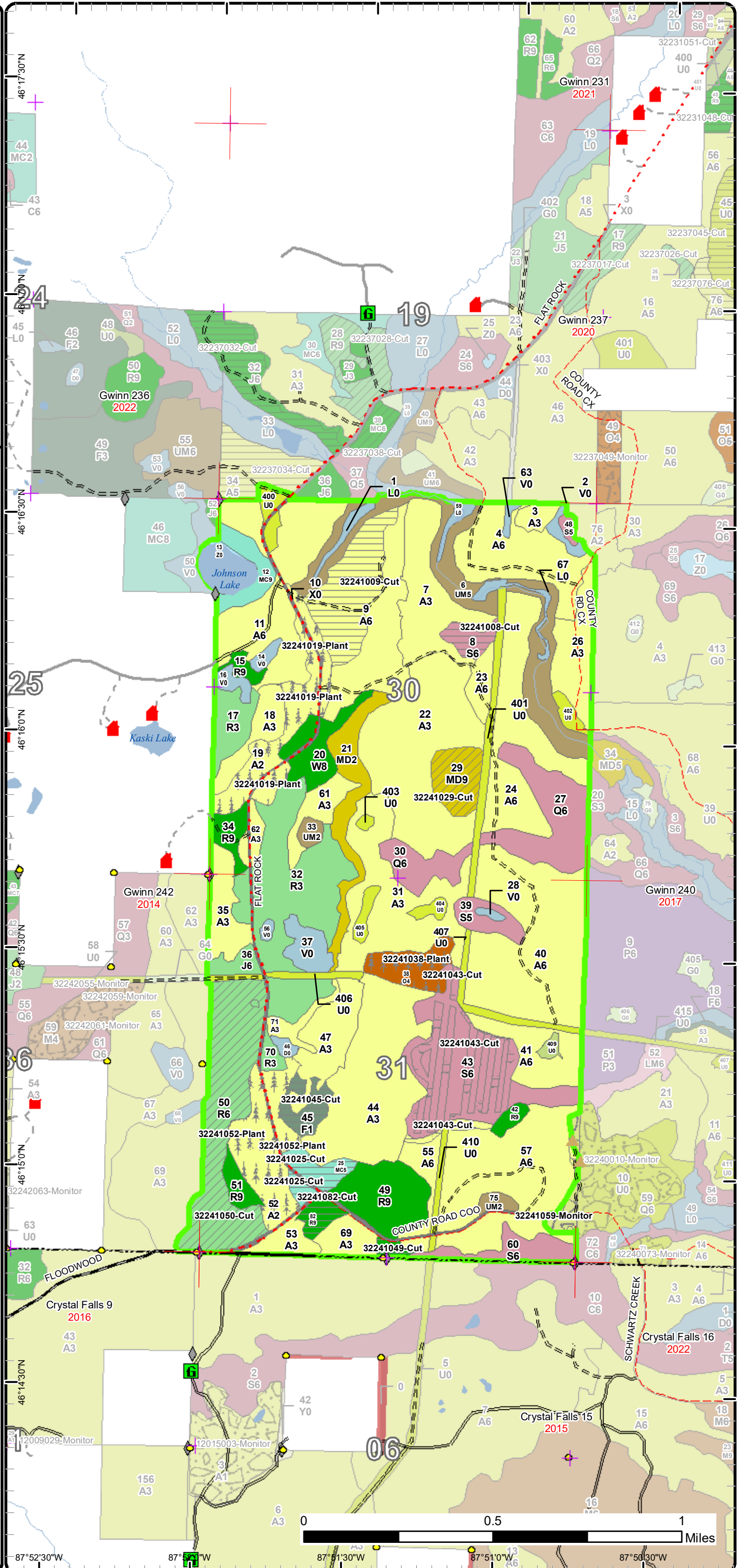
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 241
 T45N, R28W, Sec. 30, 31
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Chain Lakes Moraine
 YOE: 2021
 Acres: 1,275 GIS Calculated
 Examiner: Rick Hill
 Map Revised: 8/19/2019
 Map Phase: Web-Post



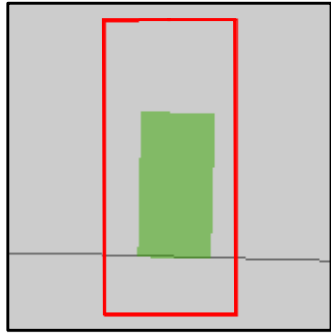
- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- Field Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Cabin
- Berms
- Gate
- Structures
- Compartment Boundary
- Planting (tree species)
- Clearcut (w/Reserves)
- Patch/Strip Cut (Femelschlag)
- Thinning (Crown, Low, Systematic)
- Regeneration Survey
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- Lakes



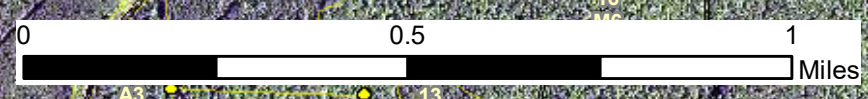
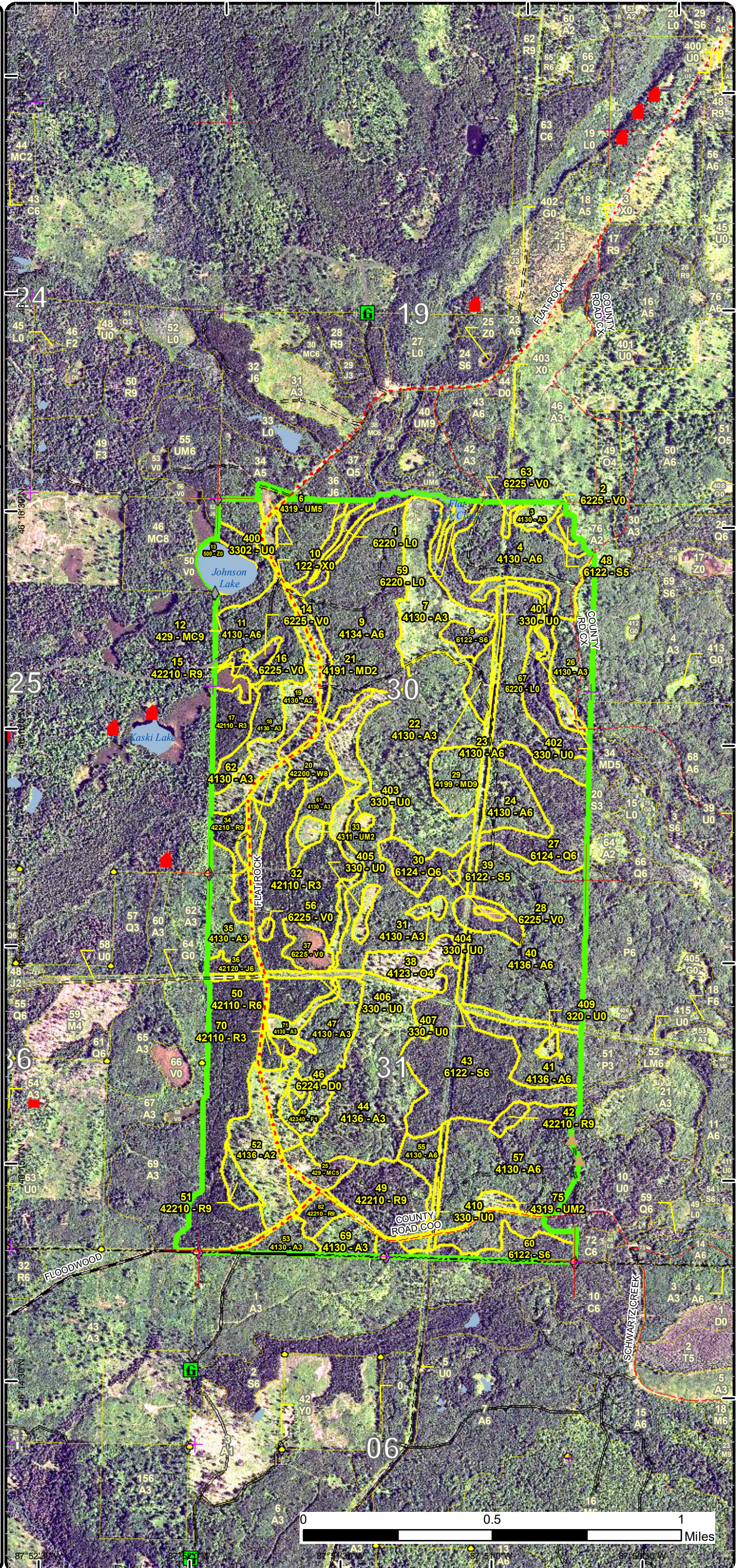
87°52'30"W 87°51'30"W 87°51'0"W 87°50'30"W

Stand Boundary Map

Compartment: 241
 T45N, R28W, Sec. 30, 31
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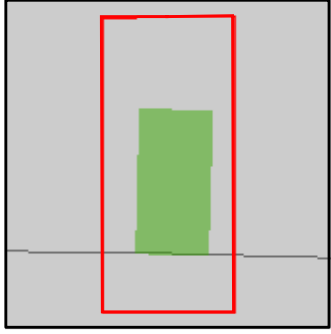


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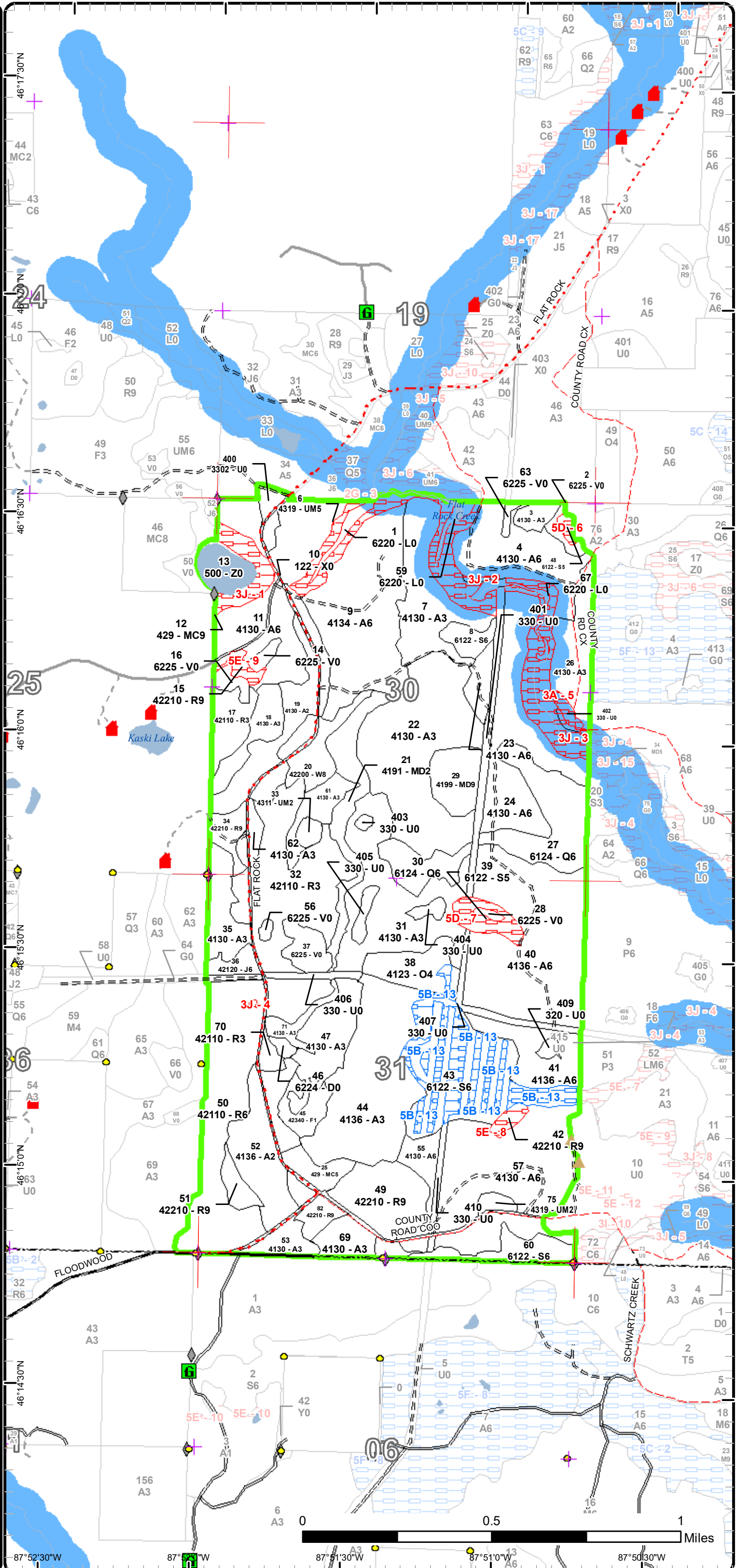


Special Conservation Areas & Site Conditions Map

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- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Cabin
- ▲ Berms
- G Gate
- Structures
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 3A: Conservation Values incompatible with harvest at this time
- 3J: Water quality / BMPs (stream, river, or lake)
- 5D: Unproductive Forest Land
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer



87°52'30"W 87°51'30"W 87°51'0"W 87°50'30"W

Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit
Rick Hill : Examiner

Compartment 241 Year of Entry 2021



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	100	151	110	255	112	0	0	0	0	0	0	0	0	0	0	0	9	737
Bog	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Jack Pine	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Low-Density Trees	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Lowland Conifers	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	30	42
Lowland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	62	2	0	0	0	0	0	0	20	84
Mixed Upland Deciduous	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	33
Oak	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	13
Red Pine	0	0	0	74	56	0	0	0	31	0	0	0	0	0	0	0	0	18	179
Treed Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Conifers	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10	20
Upland Mixed Forest	0	6	0	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	51
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Water	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14
Total	93	126	151	184	316	112	0	10	88	75	2	0	0	0	0	0	0	122	1279



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2021

Acres of Harvest

Compartment 241

Total Compartment Acres: 1,275

Commercial Harvest - 157
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	30	0	0	0	0	0	0	0	0	30
Lowland Spruce/Fir	6	0	27	0	0	0	0	0	0	33
Mixed Upland Deciduous	0	0	0	0	0	13	0	0	0	13
Red Pine	8	0	0	0	0	55	0	0	0	63
Upland Conifers	10	0	0	0	0	0	0	0	0	10
Upland Spruce/Fir	8	0	0	0	0	0	0	0	0	8
Total	61	0	27	0	0	68	0	0	0	157

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	157	0	72	0	0	0	0	0	0	229
Next Step	0	51	60	33	0	53	302	0	0	500
Total	157	51	133	33	0	53	302	0	0	729



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
8	32241008-Cut	5.8	6122 - Black Spruce	Poletimber Well	86	51-80	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all trees leaving only red pine, white pine, paper birch, and oak. leave a small patch of the wettest area for seed and retention.

Specs:

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

Treatments:

Acceptable Black spruce, aspen, fir, maple

Regen:

Other This stand was purchased by state game funds. Treatment will improve or protect habitat for pileated woodpecker.

Comment:

Proposed Start Date: 10/1 /2020

9	32241009-Cut	30.2	4134 - Aspen, Spruce/Fir	Poletimber Well	40	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Clearcut stand using a two-inch spec. Leave only oak, white pine and red pine. Leave retention in the northwest of the stand ensure that white

Specs: spruce is present within the retention area.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, spruce, fir, maple, mixed conifer

Regen:

Other This stand was purchased by state game funds.

Comment:

Proposed Start Date: 1 /2 /2019

19	32241019-Plant	28.9	4130 - Aspen	Sapling Medium	6	Immature	Planting	Interplant	4319 - Mixed Upland Forest	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Flat plant a mix of white pine, red pine, paper birch, and red oak in areas that are currently light in regeneration.

Specs:

Next Step Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable aspen, maple, spruce, fir, red pine, white pine, and oak

Regen:

Other Acceptable regeneration includes aspen, maple, spruce, fir, red pine, white pine, and oak. do not plant in stocked portions of the stand.

Comment:

Proposed Start Date: 10/1 /2020

25	32241025-Cut	9.5	429 - Mixed Upland Conifers	Poletimber Medium	65	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees of at least 2 inches in diameter leaving only oak. Retention pocket will include a few large white pine.

Specs:

Next Step Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release; Planting,

Treatments: Initial Plant; Planting, Replant; SitePrep, Trenching; SitePrep, Roller Chopping; Planting, Repla

Acceptable Red pine, white pine, oak

Regen:

Other Herbicide, trench and plant roller chop if needed plant red pine. Treatment will improve or protect habitat for black bear.

Comment:

Proposed Start Date: 10/1 /2020



S t 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
29	32241029-Cut	13.1	4199 - Other Mixed Upland Deciduous	Sawtimber Well	82	111- 140	Harvest	Crown Thinning	4319 - Mixed Upland Forest	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Thin stand focusing on removal of, aspen, birch, and maple. Residual BA target should be 70SF.

Specs:

Next Step

Treatments:

Acceptable Maple

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2020

38	32241038- Plant	13.3	4123 - Red Oak	Poletimber Poor	85	1-50	Planting	Interplant	4319 - Mixed Upland Forest	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Flat plant a mix of white pine, red pine, paper birch, and red oak in areas that are currently light in regeneration.

Specs:

Next Step Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Oak, birch, fir, spruce, white and red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2020

43	32241043-Cut	27.4	6122 - Black Spruce	Poletimber Well	82	81-110	Harvest	Strip/Patch/Gap Cut (Femelschlag)	612 - Lowland Coniferous Forest	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut with strips of 100 feet wide, cutting all trees within the strips. Retain as much cedar as possible when laying out the strips.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory); Seeding, Machine Seed; Monitoring, Other - Specify

Treatments:

Acceptable Spruce, fir, tamarack cedar.

Regen:

Other

If regeneration fails seed black spruce.

Comment:

Proposed Start Date: 1 /2 /2019

45	32241045-Cut	8.2	42340 - Upland Spruce/Fir	Sapling Poor	28	Immatur re	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees of at least 2 inches in diameter leaving only birch, white pine, and oak. Any thick areas of aspen or red pine regeneration can be excluded and left for retention.

Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Monitoring, Herbicide Use; SitePrep, Rolle

Acceptable red pine, birch, oak, spruce, fir

Regen:

Other

Post-harvest ground spray for site prep avoiding areas with thick aspen, red pine, or birch regeneration. Trench and handplant to red pine. roller chop if necessary. Treatment will improve or protect habitat for black bear.

Comment:

Proposed Start Date: 10/1 /2020



S t 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
49	32241049-Cut	2.5	42210 - Natural Red Pine	Sawtimber Well	77	111- 140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all trees of at least 2 inches in diameter leaving only oak. Also leave any red pine over 24 inches on the stump. Due to small size no other retention is needed.

Specs:

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Planting, Initial Plant; Planting, Interplant; Pesticide, Skidder - Site Prep; Pesticide, Treatments: Skidder - Release; Pesticide, Skidder - Release; Monitoring, Artificial Regen(1yr); Monitoring, Artif

Acceptable Red pine
Regen:

Other Herbicide, trench and plant, roller chop if needed plant red pine. Treatment will improve or protect habitat for black bear.

Comment:

Proposed Start Date: 1 /2 /2019

50	32241050-Cut	55.0	42110 - Planted Red Pine	Poletimber Well	33	141- 170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Third row thin red pine, remove any spruce, fir, jack pine or aspen needed for operations leave all oak, white spruce, and white pine.

Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2020

52	32241052- Plant	30.2	4136 - Aspen, Mixed Conifer	Sapling Medium	6	Immatur re	Planting	Initial Plant	4319 - Mixed Upland Forest	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Flat plant a mix of white pine, red pine, paper birch, and red oak in areas that are currently light in regeneration.

Specs:

Next Step Monitoring, Artificial Regen(1yr); Monitoring, Herbicide Use
Treatments:

Acceptable aspen, maple, spruce, fir, red pine, white pine, and oak.
Regen:

Other Acceptable regeneration includes aspen, maple, spruce, fir, red pine, white pine, and oak. do not plant in stocked portions of the stand.

Comment:

Proposed Start Date: 12/28/2018

10	32241059- Monitor	6.3	330 - Low-Density Trees	Nonstocked	0	Unspec ified	Monitoring	Natural Regen (Re-Inventory)	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Follow-up treatment with a regeneration survey as provided for in "Work Instruction 2.1 Reforestation".

Specs: Refer to the most current Regeneration Survey Manual.

Next Step
Treatments:

Acceptable Aspen, spruce, fir, birch, maple, pine.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2018



S t 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
82	32241082-Cut	5.2	42210 - Natural Red Pine	Sawtimber Well	95	111- 140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Cut all trees of at least 2 inches in diameter leaving only oak. Also leave any red pine over 24 inches on the stump. Due to small size no other retention is needed.

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder - Site Prep; Pesticide, Treatments: Skidder - Release; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Monitoring, Her

Acceptable Red pine
Regen:

Other Herbicide, trench and plant roller chop if needed plant red pine. Note that the trees have char from previous fire exposure. Treatment will improve or protect habitat for black bear.

Proposed Start Date: 10/1 /2020

**Total Treatment
Acreage Proposed: 235.6**

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rick Hill : Examiner

Compartment: 241
Year of Entry: 2021

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions							
		With Condition	Not Available		5B	5F	2G	3A	3J	5D	5E	
736	736	0	1	Aspen		0			1			
20	20	0	0	Bog								
5	5	0	0	Jack Pine								
37	34	0	3	Low-Density Trees				2	1			
42	42	0	0	Lowland Conifers								
9	9	0	0	Lowland Shrub			0		0			
84	44	30	9	Lowland Spruce/Fir	30						9	
33	33	0	0	Mixed Upland Deciduous								
13	13	0	0	Oak								
179	173	0	6	Red Pine					0			6
2	2	0	0	Treed Bog								
19	10	0	10	Upland Conifers					10			
50	5	0	45	Upland Mixed Forest			0		45			
2	2	0	0	Upland Shrub								
8	8	0	0	Upland Spruce/Fir								
13	13	0	0	Urban					0			
9	9	0	0	Water					0			
14	14	0	0	White Pine								
1,275	1,171	30	74	Total Forested Acres	30	0	0	2	56	9		6
	92%	2%	6%	Relative Percent								

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rick Hill : Examiner

Compartment: 241
Year of Entry: 2021

2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	24	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	22	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3A: Conservation Values incompatible with harvest at this time	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5D: Unproductive Forest Land	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	5D: Unproductive Forest Land	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rick Hill : Examiner

Compartment: 241
Year of Entry: 2021

8	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Available	5B: Maintain for regeneration purposes	30	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				



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.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																
1	6220 - Alder/willow	Nonstocked	2.9	0	Unspecified	No																																																																	
2	6225 - Bog	Nonstocked	2.8	0	Unspecified	No																																																																	
3	4130 - Aspen	Sapling Well	4.2	6	Immature	N/A	Harvested in 2012 under TS# 108-11-01.																																																																
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Quaking Aspen	89	Sapling	1	6																																																																			
4	4130 - Aspen	Poletimber Well	33.8	33	Immature	N/A	This stand has abundant spruce-fir in understory, Stand was cut in 1986 under permit 31-004-82 by Charlie Dillion.																																																																
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6	4319 - Mixed Upland Forest	Poletimber Medium	44.7	74	51-80	N/A	A buffer to the Flat Rock Creek, this stand is mostly upland with lowland inclusions.																																																																
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7	4130 - Aspen	Sapling Well	31.5	6	Immature	N/A	Harvested in 2012: TS# 108-11-01. Some areas of patchy regen but stand over all passed walkthrough.																																																																
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8	6122 - Black Spruce	Poletimber Well	5.8	86	51-80	N/A	Operable portions of stand cut in 2012, "Flat Top Rock Sale" by Triest F.P. Southeast portion of stand was left due to Q inclusions.																																																																
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																				
9	4134 - Aspen, Spruce/Fir	Poletimber Well	61.4	40	1-50	N/A	Stand has abundant spruce-fir in understory, areas of fir inclusions. Stand was cut in 1978-79 under permit 32-003-76 "Johnson Lake Sale".																																				
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10	122 - Road/Parking Lot	Nonstocked	12.8	0	Unspecified	No	Flatrock road, and other county roads in compartment.																																				
11	4130 - Aspen	Poletimber Well	50.2	40	81-110	N/A	Abundant spruce-fir in understory of stand. Stand was cut in 1978-79 under 31-003-76 "Johnson Lake Sale".																																				
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12	429 - Mixed Upland Conifers	Sawtimber Well	9.9	91	81-110	N/A	Stand is a buffer along Johnson Lake. Stocking and species composition range widely.																																				
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13	500 - Water	Nonstocked	9.5		Unspecified	No	Johnson Lake.																																				
14	6225 - Bog	Nonstocked	2.2		Unspecified	No																																					
15	42210 - Natural Red Pine	Sawtimber Well	3.1	96	81-110	N/A																																					
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16	6225 - Bog	Nonstocked	3.2		Unspecified	No																																					
17	42110 - Planted Red Pine	Sapling Well	11.2	27	Immature	N/A	Stand was harvested in 1994 under permit 31-023-91 "Flat Rock Bog Sale". Cultivation carried out under C32-252 for red pine regeneration.																																				
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18	4130 - Aspen	Sapling Well	11.3	28	Immature	N/A	Cut in 1991, under sale #23-91: "Flat Rock Bog Sale". All oak were left.																																				
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
19	4130 - Aspen	Sapling Medium	28.9	6	Immature	N/A	Cut by Minerick Logging (32-107-11-01) Sale #32-107-11-01 Flat Rock Conglomerate Sale.		
Canopy Species		% Cover	Size Class	DBH	Age				
Red Maple		10	Sapling	1					
Quaking Aspen		69	Sapling	1	6				
20	42200 - Natural White Pine	Sawtimber Medium	14.2	95	51-80	N/A	Cut by Minerick Logging inc. sale # 32-107-11-01 Flat Rock Conglomerate Sale in the summer of 2014. Summer logging and full tree skidding provided good scarification for the white pine.		
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size
White Pine		80	Log/XLog	17	95	Quaking Aspen	Medium	5 - 10 feet	Sapling
Red Pine		20	Log	16		Balsam Fir	Medium	10 - 20 feet	Sapling
21	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	19.9	5	Immature	N/A	Cut by Minerick Logging (32-107-11-01) Sale #32-107-11-01 Flat Rock Conglomerate Sale.		
Canopy Species		% Cover	Size Class	DBH	Age				
Red Pine		25	Log/Pole/Sap	10					
Red Maple		26	Sapling	1	5				
Quaking Aspen		25	Sapling	1					
22	4130 - Aspen	Sapling Well	67.2	15	Immature	N/A	Harvested in Fall of 2003: TS#108-01-01: "Flat Rock Birch North Sale". Oak, cherry, red/white pine, and cedar was left. An FTP #C31-459 was written for disk trenching here to promote birch regeneration. Disk trenching/anchor chains was done in Fall of 2004. This effort failed primarily due to deer browsing and dry weather.		
Canopy Species		% Cover	Size Class	DBH	Age				
Balsam Fir		6	Sapling	2					
Quaking Aspen		88	Sapling	2	15				
23	4130 - Aspen	Poletimber Well	6.3	31	Immature	N/A	Harvested in 1986-88 under sale #4-79: "Jolly Roger Block". Abundant spruce-fir in understory.		
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size
Quaking Aspen		87	Pole	7	31	White Spruce	Low	5 - 10 feet	Sapling
						Balsam Fir	Medium	5 - 10 feet	Sapling
24	4130 - Aspen	Poletimber Well	43.7	31	Immature	N/A	Harvested in 1986-88 under sale #4-79: "Jolly Roger Block"		
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size
Quaking Aspen		77	Pole	8	31	Witch Hazel	Medium	5 - 10 feet	Tall Shrub
						Balsam Fir	Low	10 - 20 feet	Sapling
25	429 - Mixed Upland Conifers	Poletimber Medium	9.5	65	111-140	N/A	Cut under sale 32-106-11-01 by Minerick Logging. red and white pine and some birch where left in the sale area.		
Canopy Species		% Cover	Size Class	DBH	Age				
Red Maple		15	Sapling	1	6				
Quaking Aspen		20	Sapling	1	6				
Balsam Fir		8	Sapling	1					
Red Pine		35	Pole/Sap/Log	8	65				
White Pine		17	Log	16					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
26	4130 - Aspen	Sapling Well	20.0	25	Immature	N/A	Stand was cut in 1986 under sale # 4-82. This stand burned (regenerated) in a wildfire on 4/23/94. Includes some minor semi-open areas.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Quaking Aspen		85	Sapling	3	25	White Spruce		Low	10 - 20 feet	Sapling
						Balsam Fir		Low	10 - 20 feet	Sapling
						Witch Hazel		Low	5 - 10 feet	Tall Shrub
27	6124 - Lowland Spruce-Fir	Poletimber Well	29.7	75	81-110	N/A	Contains some F types as inclusions around the edges. Contains seeps and is very wet in places.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Balsam Fir		9	Pole	8		Tag Alder		Low	5 - 10 feet	Tall Shrub
Northern White Cedar		20	Pole	8		Balsam Fir		Medium	5 - 10 feet	Sapling
Tamarack		10	Sapling	8						
Black Spruce		45	Pole	8	75					
28	6225 - Bog	Nonstocked	1.0	0	Unspecified	No	Small pond in stand.			
29	4199 - Other Mixed Upland Deciduous	Sawtimber Well	13.1	82	111-140	N/A				
Canopy Species		% Cover	Size Class	DBH	Age					
Sugar Maple		20	Pole/Sapling	7						
Red Maple		23	Log/Pole	10						
Red Oak		50	Log/Pole	14	82					
30	6124 - Lowland Spruce-Fir	Poletimber Well	12.1	75	51-80	N/A	Stand has a small open bog inclusion. White pine and some other miscellaneous species occur around the edges.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Balsam Poplar		10	Pole	8		Tag Alder		Medium	5 - 10 feet	Tall Shrub
Paper Birch		6	Pole	8						
Balsam Fir		24	Pole	8						
Northern White Cedar		10	Pole	8						
Black Spruce		30	Pole	8	75					
31	4130 - Aspen	Sapling Well	45.2	26	Immature	N/A	Was commercially cut in 1991-92, under permit #3-91. All oak and white pine were left.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Bigtooth Aspen		10	Sapling	4		White Spruce		Medium	10 - 20 feet	Sapling
Quaking Aspen		75	Sapling/Pole	4	26	Balsam Fir		Low	5 - 10 feet	Sapling
32	42110 - Planted Red Pine	Sapling Well	60.2	24	Immature	N/A	Stand cut in 1992, under sale #1-91: "ELF Flat Rock Sale". Area was planted in 5/95 under FTP C31-288.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Red Pine		85	Sapling	4	24	Red Oak		Low	5 - 10 feet	Sapling
						Red Maple		Low	5 - 10 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																													
33	4311 - Pine, Aspen Mix	Sapling Medium	2.7	5	Immature	N/A	Cut by Minerick Logging (32-107-11-01) Sale #32-107-11-01 Flat Rock Conglomerate Sale.																																													
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34	42210 - Natural Red Pine	Sawtimber Well	6.4	82	81-110	N/A	Harvested in 2003: permit #109-01: "Koski Lake Sale". Oak, cherry, unmarked pine, and spruce/fir was left, and a few birch were marked with green for aesthetics.																																													
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36	42120 - Planted Jack Pine	Poletimber Well	4.6	33	Immature	N/A	Stand was cut under sale # 32-80, area planted in 1986 under FTP is C31-68.																																													
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41	4136 - Aspen, Mixed Conifer	Poletimber Well	18.5	31	Immature	N/A	Stand cut in 1986-88, under permit #4-79 "Jolly Roger Block".																												
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42	42210 - Natural Red Pine	Sawtimber Well	2.9	80	81-110	N/A	Harvested in 2004: TS#111-01-01. Leave for long term retention and diversity.																												
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44	4136 - Aspen, Mixed Conifer	Sapling Well	61.7	15	Immature	N/A	Harvested in Fall of 2003: TS#110-01-01: "Flat Rock Birch South Sale". Oak, cherry, and cedar was left, as well as green marked birch seed trees.																												
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45	42340 - Upland Spruce/Fir	Sapling Poor	8.2	28	Immature	N/A	Was commercially cut in 1991-92: permit #3-91. All oak, and birch seed trees were left. Heavy to raspberry. The original "MO" was birch, but this was unsuccessful. Semi-open in places. Succeeding to spruce-fir, aspen, and red pine.																												
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46	6224 - Treed Bog	Nonstocked	1.6		Unspecified	No																													
47	4130 - Aspen	Sapling Well	20.3	26	Immature	N/A	Was commercially cut in 1991-92: permit #3-91. All oak and white pine were left.																												
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>80</td> <td>Sapling</td> <td>3</td> <td>26</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	80	Sapling	3	26	<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Red Oak</td> <td>Low</td> <td>5 - 10 feet</td> <td>Sapling</td> </tr> <tr> <td>Hazelnut (Spp.)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Canopy Species	Density	Avg. Height	Size	Red Oak	Low	5 - 10 feet	Sapling	Hazelnut (Spp.)	Low	5 - 10 feet	Tall Shrub										
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48	6122 - Black Spruce	Poletimber Medium	1.7	95	51-80	N/A																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
49	42210 - Natural Red Pine	Sawtimber Well	26.2	77	111-140	N/A	Harvested in winter of 2002-2003: TS#111-01-01: "Floodwood Pine Sale". Stocking ranges.		
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size
Red Pine		75	XLog/Log	18	77	Quaking Aspen	High	>20 feet	Sapling
White Pine		23	XLog/Log	18		White Pine	Low	>20 feet	Sapling
						Red Maple	Medium	>20 feet	Sapling
						Red Pine	Low	>20 feet	Sapling
						Paper Birch	Low	>20 feet	Sapling
						Red Oak	Low	>20 feet	Sapling
						Balsam Fir	Full	>20 feet	Sapling
50	42110 - Planted Red Pine	Poletimber Well	55.5	33	141-170	N/A	Stand was planted in 1986 under FTP C31-68. Stand was harvested in 1983 under 31-32-80. Area has moved into pole size now.		
Canopy Species		% Cover	Size Class	DBH	Age				
Red Pine		94	Pole/Sapling	7	33				
51	42210 - Natural Red Pine	Sawtimber Well	5.2	75	51-80	N/A	Understory is mostly plantation established when adjacent stand was treated. Largely small groves of R9 with some individual trees.		
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size
Red Pine		88	Log/Pole	14	75	Quaking Aspen	Full	10 - 20 feet	Sapling
52	4136 - Aspen, Mixed Conifer	Sapling Medium	30.2	6	Immature	N/A	Cut under sale 32-106-11-01 by Minerick Logging. Red and white pine and some birch where left in the sale area.		
Canopy Species		% Cover	Size Class	DBH	Age				
Red Maple		20	Sapling	1	6				
Quaking Aspen		54	Sapling	1	6				
Balsam Fir		8	Sapling	1					
Red Pine		8	Log	14					
53	4130 - Aspen	Sapling Well	7.4	16	Immature	N/A	Harvested in winter of 2002-03 TS#111-01: "Floodwood Pine Sale". Oak was left and green marked birch along Floodwood Road.		
Canopy Species		% Cover	Size Class	DBH	Age				
Quaking Aspen		88	Sapling	1	16				
55	4130 - Aspen	Poletimber Well	10.0	35	51-80	N/A	Was cut in 1984 under sale # 4-81: "County Line Block",		
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size
Balsam Poplar		7	Pole	7		Balsam Fir	High	10 - 20 feet	Sapling
Balsam Fir		10	Pole	6					
Quaking Aspen		65	Pole	7	35				
56	6225 - Bog	Nonstocked	1.0	0	Unspecified	No			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
57	4130 - Aspen	Poletimber Well	67.2	35	51-80	N/A	Cut under sale 32-106-11-01 by Minerick Logging. Red and white pine where left in the sale area.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Balsam Poplar		7	Pole/Sapling	7		Balsam Fir		Medium	10 - 20 feet	Sapling
Bigtooth Aspen		7	Pole	7		Red Maple		Medium	10 - 20 feet	Sapling
Quaking Aspen		75	Pole	7	35	Hazelnut (Spp.)		Low	5 - 10 feet	Tall Shrub
59	6220 - Alder/willow	Nonstocked	2.4	0	Unspecified	No				
60	6122 - Black Spruce	Poletimber Well	12.1	75	51-80	N/A				
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species	Density	Avg. Height	Size	
Tamarack		6	Pole/Log	8		Tag Alder	Medium	5 - 10 feet	Tall Shrub	
Balsam Fir		6	Pole/Log	8						
Balsam Poplar		10	Pole	8						
Northern White Cedar		20	Pole/Sapling	7						
Black Spruce		58	Pole	8	75					
61	4130 - Aspen	Sapling Well	9.3	24	Immature	N/A	Stand cut in 1992, under sale #1-91 "ELF Flat Rock Sale".			
Canopy Species		% Cover	Size Class	DBH	Age					
Bigtooth Aspen		12	Sapling	3						
Quaking Aspen		80	Sapling	2	24					
62	4130 - Aspen	Sapling Well	4.3	24	Immature	N/A	Stand cut in 1992, under permit #1-91, "ELF Flat Rock Sale".			
Canopy Species		% Cover	Size Class	DBH	Age					
Quaking Aspen		72	Sapling	4	24					
63	6225 - Bog	Nonstocked	1.3	0	Unspecified	No				
67	6220 - Alder/willow	Nonstocked	3.4		Unspecified	No				
69	4130 - Aspen	Sapling Well	8.8	17	51-80	N/A	Harvested in winter of 2002-2003: TS#111-01-01: "Floodwood Pine Sale". Stocking ranges. A patch of the stand south of the Flat Rock and Floodwood roads intersection was prescribed burned to controll competeting vegetation: FTP-32-644.			
Canopy Species		% Cover	Size Class	DBH	Age					
Quaking Aspen		76	Sapling	3	17					
70	42110 - Planted Red Pine	Sapling Well	3.0	24	Immature	N/A	Stand cut in 1992, under sale #1-91 "ELF Flat Rock Sale". Stand was planted 5/95, under FTP C31-288.			
Canopy Species		% Cover	Size Class	DBH	Age					
Red Pine		90	Pole/Sapling	5	24					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																															
71	4130 - Aspen	Sapling Well	5.2	5	Immature	N/A	Cut by Minerick Logging (32-107-11-01) Sale #32-107-11-01 Flat Rock Conglomerate Sale.																																																															
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Quaking Aspen	70	Sapling	1	5																																																																		
75	4319 - Mixed Upland Forest	Sapling Medium	2.8	4	51-80	N/A	Stand was harvested in the fall of 2016. TS# 108-16, Toivo's Cookstove. Aspen has started to regenerate back into the stand but in some areas is sparse.																																																															
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82	42210 - Natural Red Pine	Sawtimber Well	5.2	95	111-140	N/A	Harvested in winter of 2002-2003: TS#111-01-01: "Floodwood Pine Sale". Stocking ranges. The stand was prescribed burned to controll competeting vegetation: FTP-32-644.																																																															
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400	3302 - Low Density Conifer Trees	Nonstocked	4.4		Unspecified	Managed Opening																																																																
401	330 - Low-Density Trees	Nonstocked	10.2		Unspecified	No	Abandoned ELF RoW.																																																															
402	330 - Low-Density Trees	Nonstocked	3.0		Unspecified	No	old opening. presntly slowly filling in with trees.																																																															
403	330 - Low-Density Trees	Nonstocked	1.0		Unspecified	Managed Opening	Mowed in 9/2001.																																																															
404	330 - Low-Density Trees	Nonstocked	2.3		Unspecified	Managed Opening	Mowed in 9/2001.																																																															
405	330 - Low-Density Trees	Nonstocked	3.0		Unspecified	Managed Opening	Mowed in 9/2001.																																																															
406	330 - Low-Density Trees	Nonstocked	4.4		Unspecified	No	Abandoned ELF RoW																																																															
407	330 - Low-Density Trees	Nonstocked	5.6		Unspecified	No	Abandoned ELF RoW.																																																															
409	320 - Upland Shrub	Nonstocked	1.6		Unspecified	Managed Opening	This opening was created, disked and seeded in the summer of 1989.																																																															



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
410	330 - Low-Density Trees	Nonstocked	3.5		Unspecified	No	Abandoned ELF RoW.