

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52021 Entry Year 2022 Acreage: 2,824

County Otsego

Management Area: Grayling Outwash

Revision Date: 2020-03-19

Stand Examiner: Matthew Foster

Legal Description:

T29N R04W Sec. 23, 25, 26, 35 and 36

Identified Planning Goals:

To provide for the protection, integrated management and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan.

Soil and topography:

This compartment ranges from flat to rolling hills to very steep. Dominant upland soil types include Kalkaska and Rubicon sand. These soils are excessively drained, rapidly permeable and common on moraines and outwash plains in this area. The Kolke Creek drainage is dominated by Ausable-Bowstring mucks and scattered poorly drained depressions consist of Dawson peat.

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

This compartment is mostly State ownership with large blocks of private within and adjacent to its boundary. There are significant amounts of smaller 10-40 acre private parcels to the west. Gas development is common both on State and private.

Unique Natural Features:

Kolke Creek flows south from Lynn Lake.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

This compartment is in the Lynn Lake and Kolke Creek area, within the Au Sable River watershed. There are a number of small bog areas within the compartment. There should be no cutting in these areas and trees should be left adjacent to the bogs if thinning nearby. Skid trails should not be placed next to or through the bogs.

Wildlife Habitat Considerations:

The mix of aspen, hardwoods, pine, upland, and lowland in this compartment make it suitable for a wide range of wildlife species. The various cover types are accessible for wildlife-related recreation, which is popular in the area.

Mineral Resource and Development Concerns and/or Restrictions

Active sand/gravel pits are located within three miles of the compartment, and there is good sand & gravel potential within the compartment. The compartment has been developed for Antrim Shale gas production and some Guelph Formation (Niagaran reef) oil production. All state-owned mineral rights in the compartment are currently under lease and held by production. Additional Antrim production is unlikely, but there may be potential for discovery of additional reefs in the area. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

Access is good throughout the compartment.

Survey Needs:

None.

Recreational Facilities and Opportunities:

A segment of the Starvation Lake Snowmobile trail runs through parts of this compartment.

Fire Protection:

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

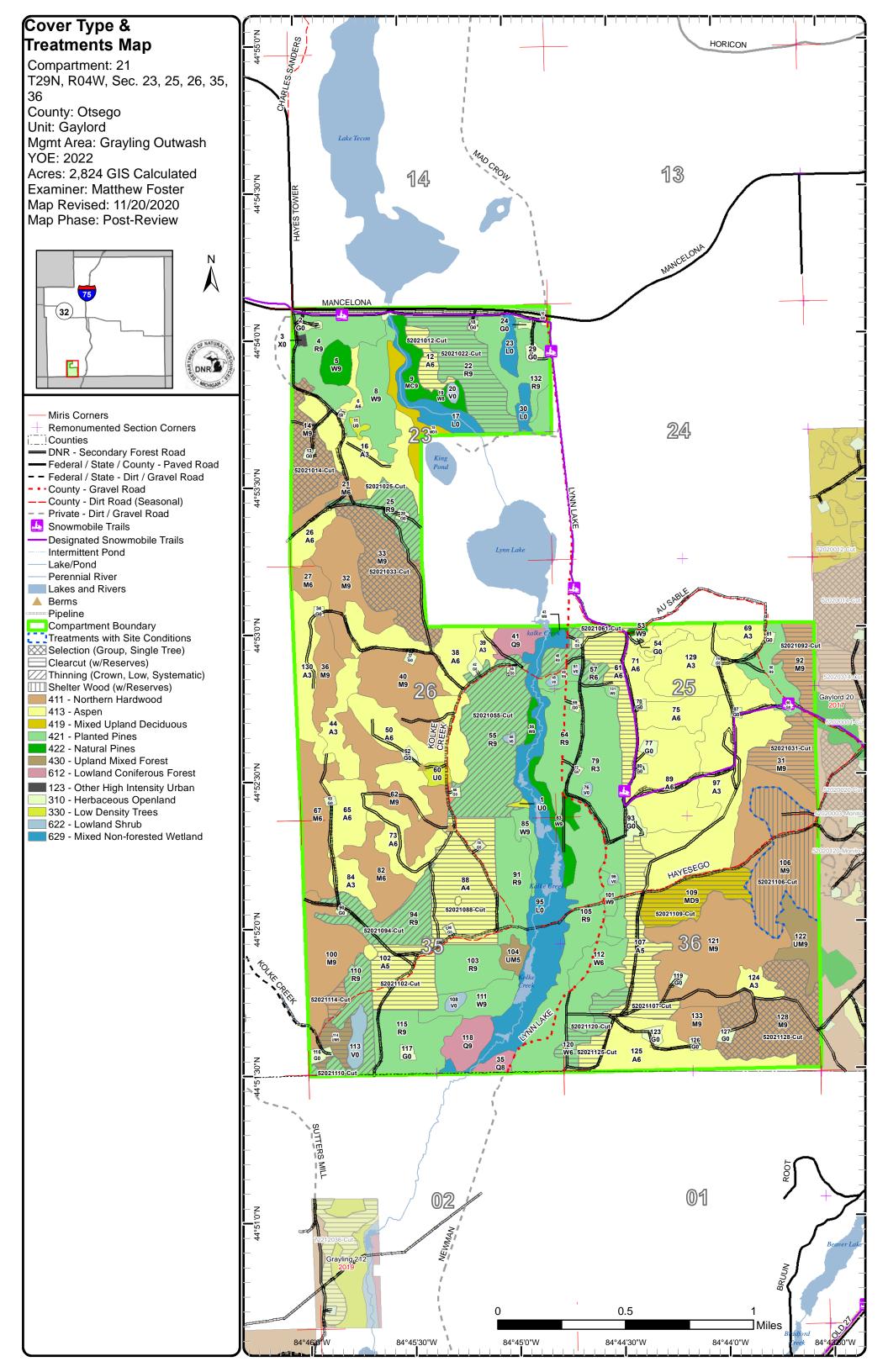
The following information is displayed, where pertinent, on the attached compartment maps:

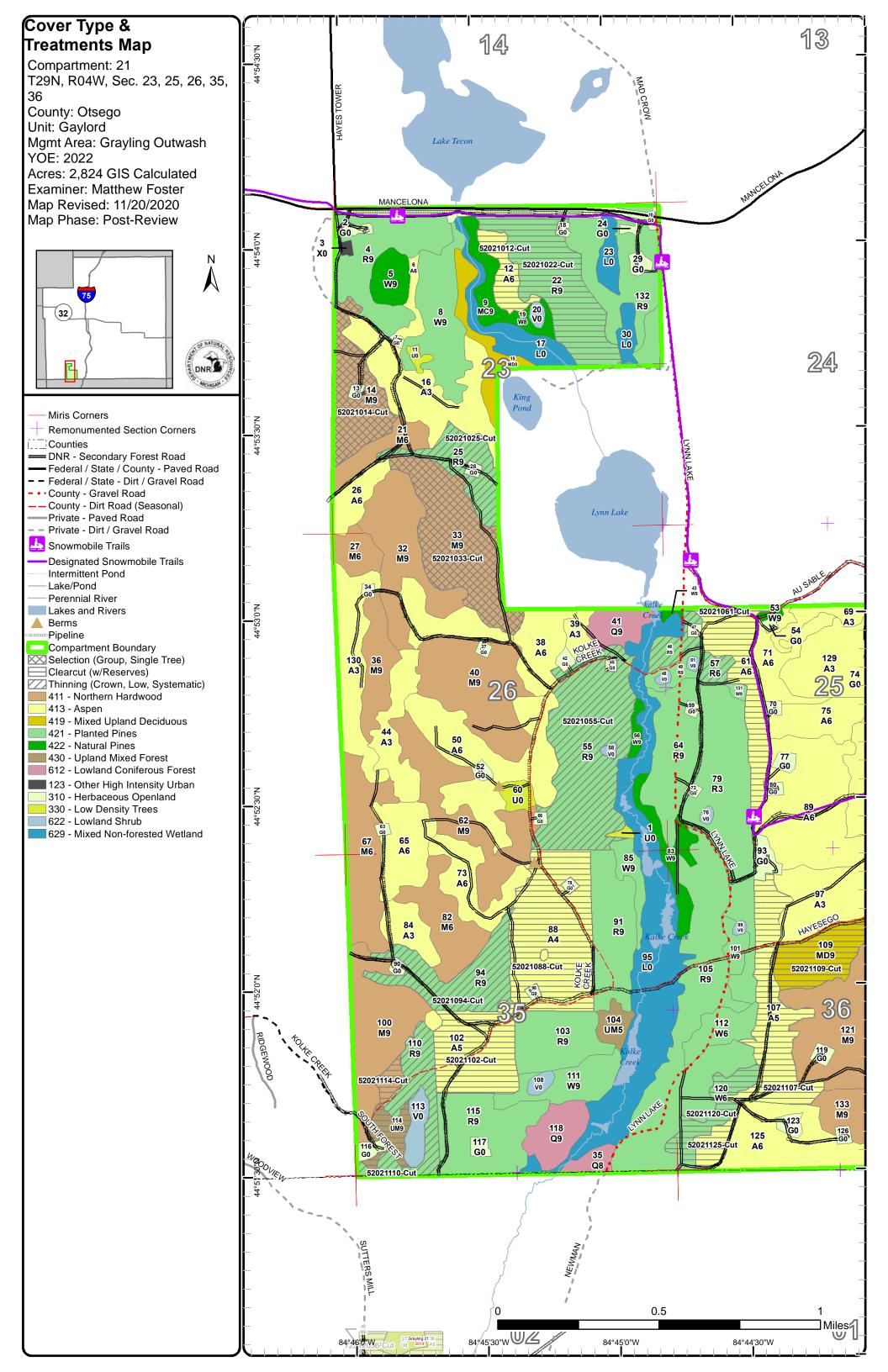
Base feature information, stand boundaries, cover types, and numbers

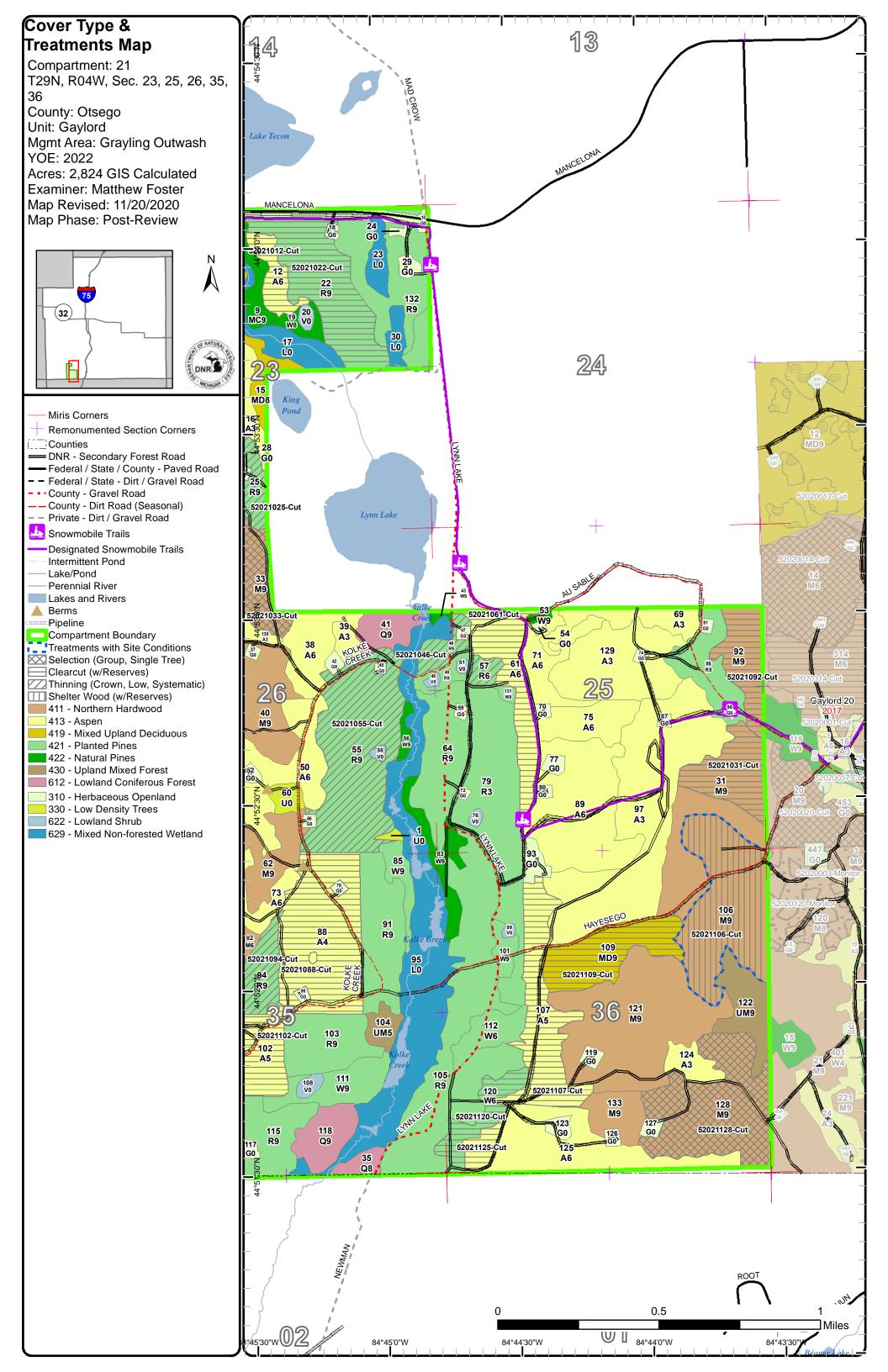
Proposed treatments

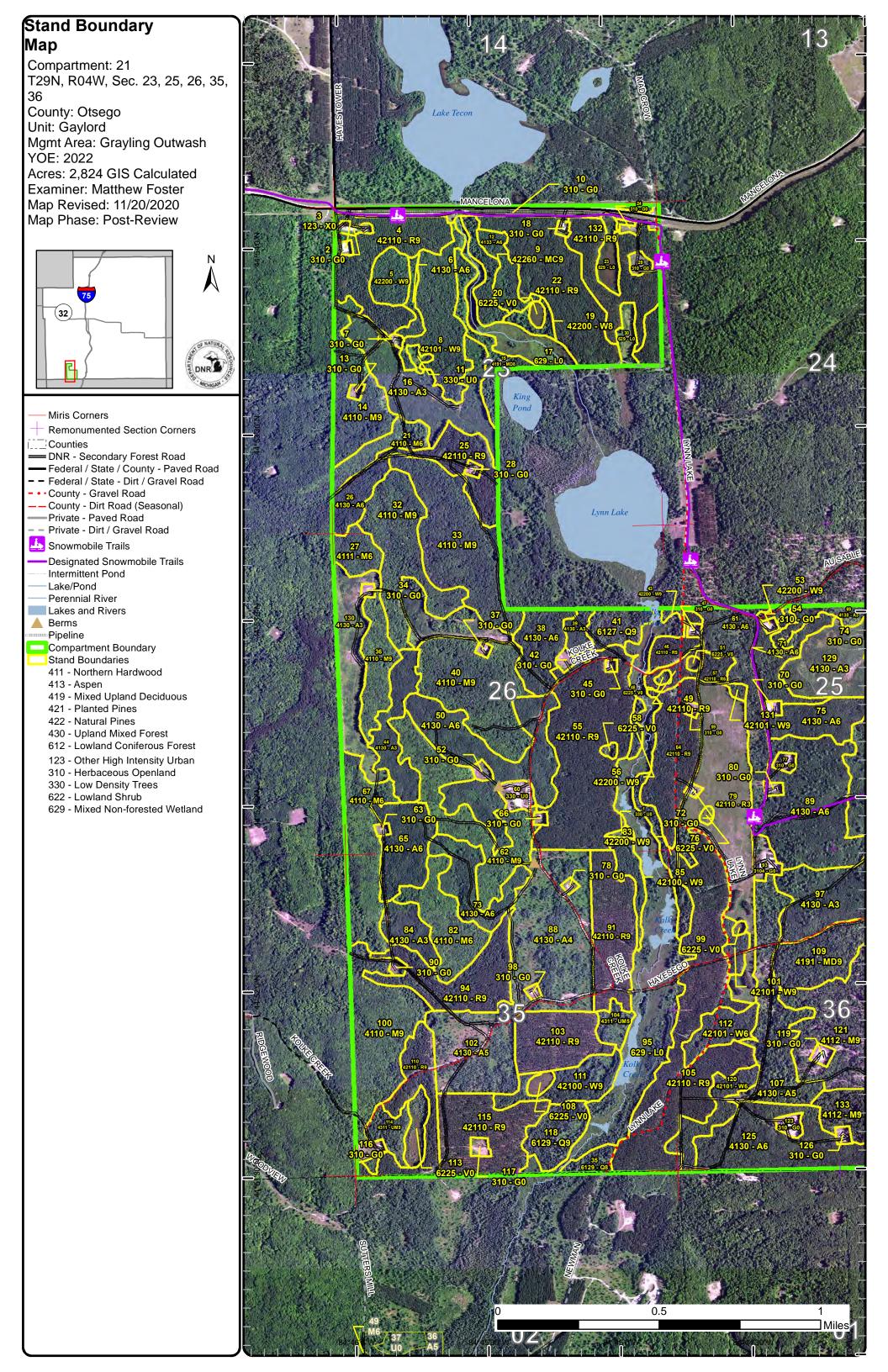
Site condition boundaries

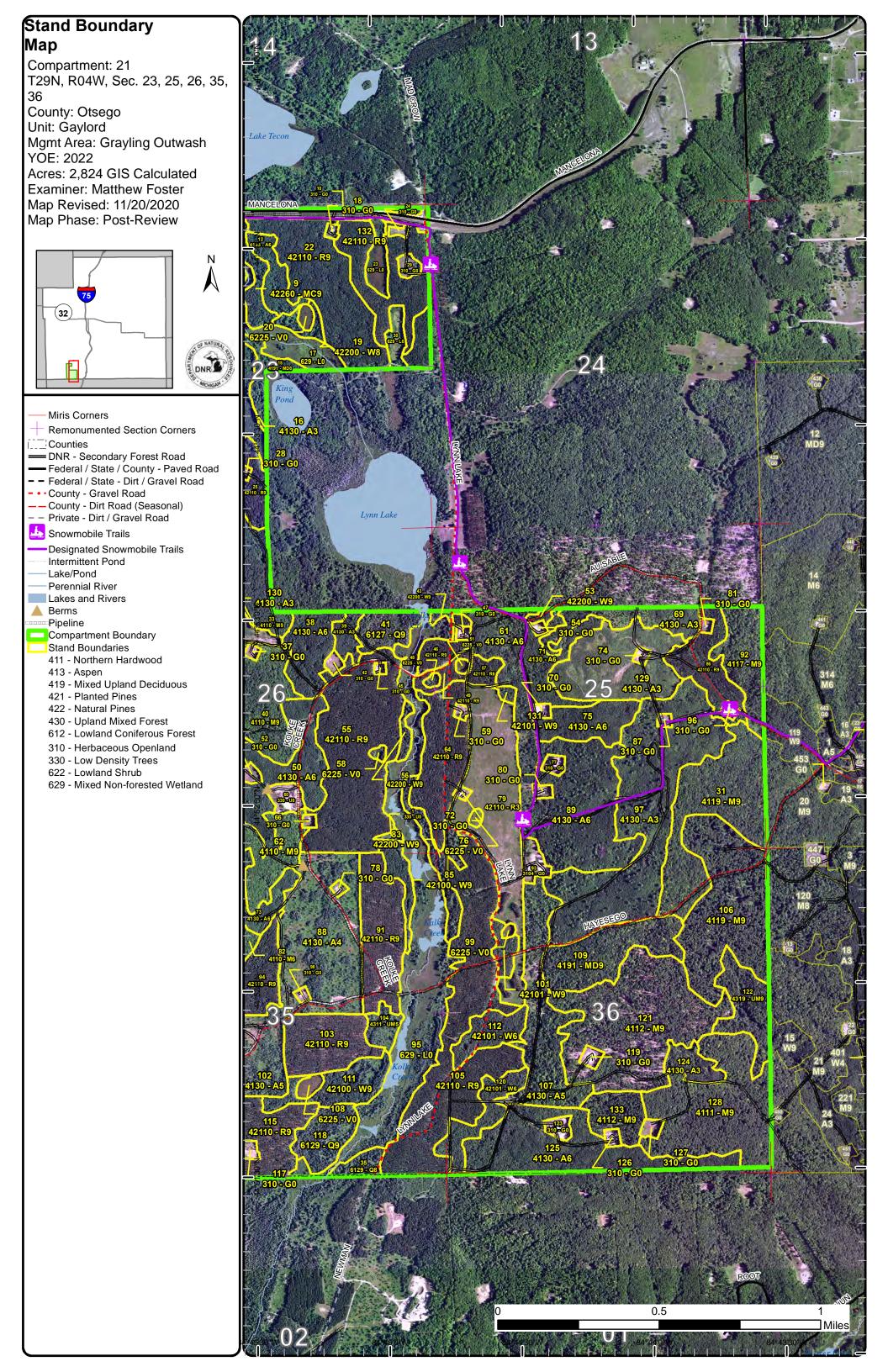
Details on the road access system

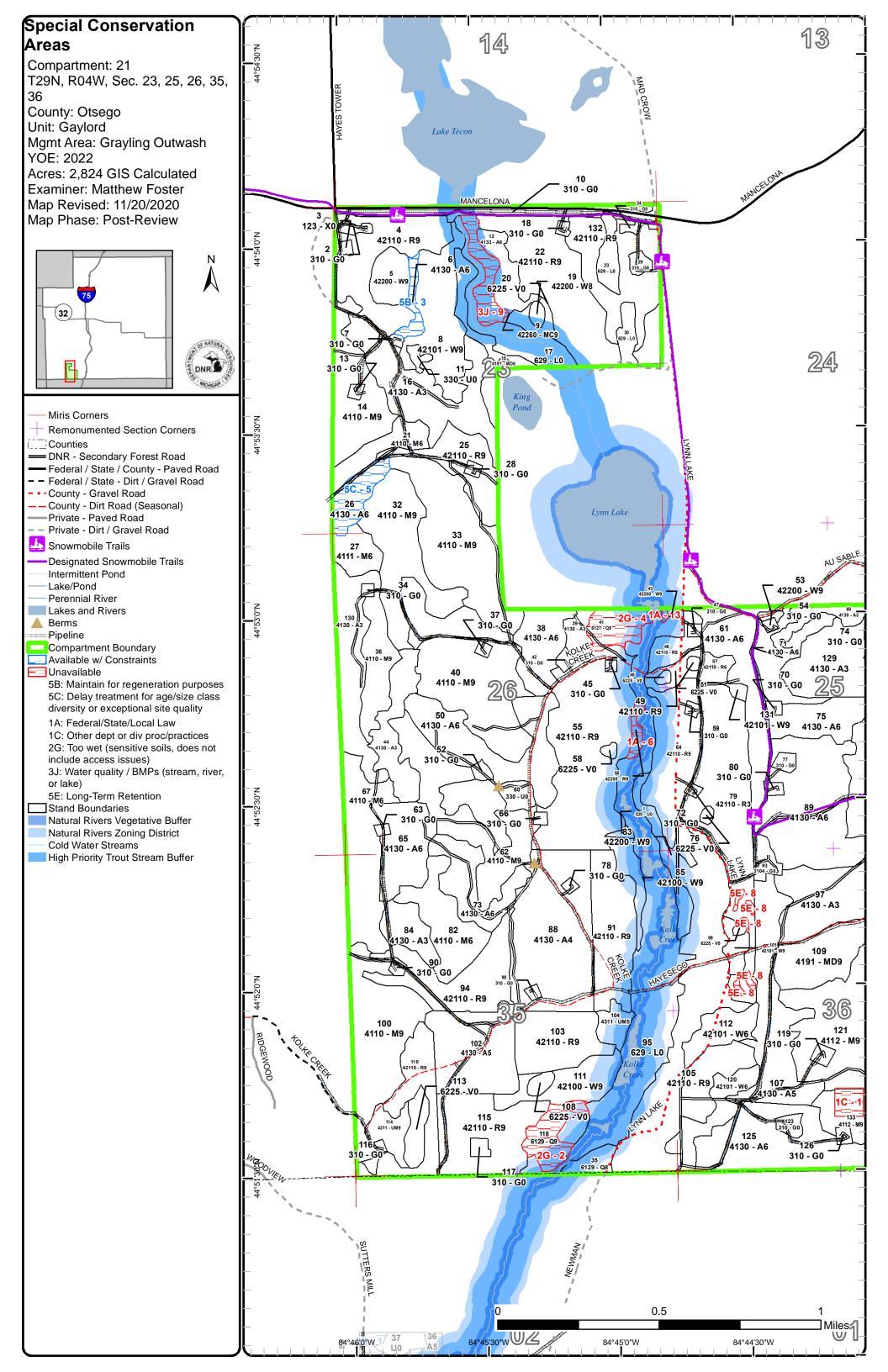


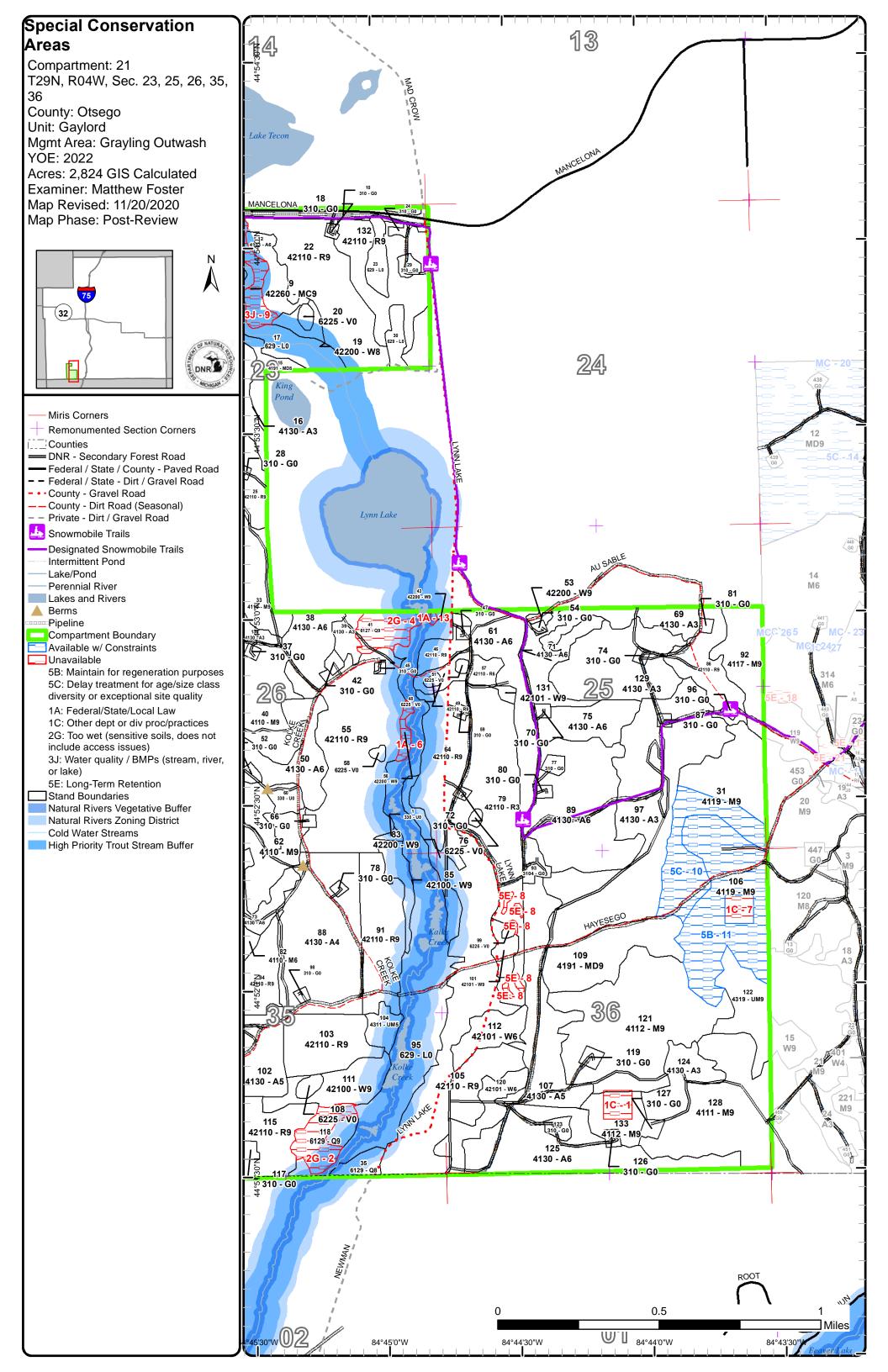












Gaylord Mgt. Unit

Compartment 21 Year of Entry 2022

Matthew Foster: Examiner

Age Class

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Aspen	0	150	71	196	27	187	139	92	0	0	0	0	0	0	0	0	0	0	862
Bog	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Herbaceous Openland	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77
Low-Density Trees	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	0	0	0	13	6	0	0	18	0	0	0	0	0	0	37
Lowland Shrub	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
Mixed Upland Deciduous	0	0	0	0	0	0	0	16	0	0	37	0	0	0	0	0	0	0	53
Natural Mixed Pines	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11
Northern Hardwood	0	0	0	0	0	0	0	90	77	338	174	73	0	0	0	0	0	0	752
Red Pine	0	0	70	0	0	0	213	392	0	0	0	0	0	0	0	0	0	0	675
Upland Mixed Forest	0	0	0	0	0	7	0	0	33	0	0	0	0	0	0	0	0	0	40
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
White Pine	0	0	0	0	0	0	0	132	13	0	0	0	0	0	0	0	0	0	145
Total	249	150	141	196	27	194	352	746	129	338	211	91	0	0	0	0	0	0	2824



Report 2 – Treatment Summary

Gaylord Mgt. Unit Year of Entry: 2022

Acres of Harvest

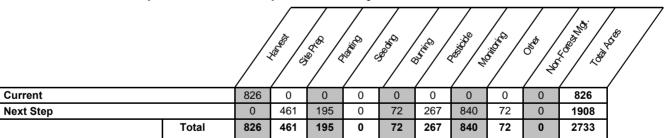
Compartment 21
Total Compartment Acres: 2,824

Commercial Harvest - 754 Harvests with Site Condition - 72 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

	-											
		/ (\$ 10 mg	Burger L	O Line Control of the	No. No. of the last of the las	**************************************	E Z	\$
Aspen		217	0	0	0	0	0	0	0	0	217	
Mixed Upland Deciduous		37	0	0	0	0	0	0	0	0	37	
Northern Hardwood		54	168	0	0	72	0	0	0	0	295	
Red Pine		56	0	0	0	0	189	0	0	0	244	
Upland Mixed Forest		16	0	0	0	0	0	0	0	0	16	
White Pine		17	0	0	0	0	0	0	0	0	17	
	Total	397	168	0	0	72	189	0	0	0	826	

Proposed and Next Step Treatments by Method



Gaylord Mgt. Unit

s t Report 3 -- Treatments

Compartment: 21 Year of Entry: 2022



Treatment Stand Size Stand ВА **Treatment Treatment** Cover Type **Acres** Age Habitat Method Objective Name CoverType Density Age Range Type Structure Cut

Approved Treatments:

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52021012-Cut 12.3 4133 - Aspen, Poletimber 60 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No Mixed Pine Well Retention

Prescription Final harvest all trees 2" and up, leave minimum retention. Place retention at the south end to protect the adjacent bog. Add snowmobile trail

Specs: protection specs.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen

Regen: Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

34.4 4110 - Sugar Maple Sawtimber 411 - Northern 52021014-Cut 85 111-Harvest Single Tree Even-Aged No Association Well 140 Selection Hardwood

Prescription Mark stand down to 80 BA, crop tree release and create regeneration gaps. Create at least one regeneration gap per five acres, minimum

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Mix of northern hardwoods representative of the stand canopy that meets stocking requirements.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

22 52021022-Cut 55.6 42110 - Planted Sawtimber 141-Harvest Clearcut with 4211 - Planted Even-Aged No Red Pine Well Red Pine 170 Retention

Prescription Final harvest with standard retention. Leave retention in an area that will not impact future site prep activities. Add snowmobile trail protection

Specs: specs.

SitePrep, Trenching: Pesticide, Skidder - Site Prep; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); Planting, Initial

Treatments: Plant; SitePrep, Roller Chopping

Acceptable Red Pine

Regen: Other Comment: Site Condition

Prescription Thin stand down to 120 BA, first priority is to remove suppressed and poor formed trees.

Specs:

Next Step Treatments:

Acceptable Regen:

Other

Comment:

Site Condition

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 21 s Year of Entry: 2022 t а **Treatment** Stand BA **Treatment Treatment** Cover Type Acres Stand Size Age Habitat n Name CoverType Density Age Range Type Method Objective Structure Cut d 55 52021055-Cut 87.0 42110 - Planted Sawtimber 171-Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine Well 200 Red Pine Prescription Thin stand down to 120 BA, first priority is to remove suppressed and poor formed trees. Follow BMP's, if needed, along stand 95 (Kolke Specs: Creek). Use appropriate woodland raptor and eagle specs/buffers as necessary. Next Step Treatments: Acceptable Red Pine Regen: Other While thinning north of Kolke Creek Trail, rows will need to be marked out. Doesn't look like this was thinned previously. Comment: Site Condition Proposed Start Date: 10/1 /2021 42110 - Planted 60 171-4211 - Planted 52021057-Cut 5.1 Poletimber Harvest Crown Thinning Even-Aged Nο Red Pine Well 200 Red Pine Prescription Thin stand down to 120 BA. Focus on removing poor formed and suppressed trees. Specs: Next Step **Treatments:** Acceptable Regen: Other Rows are squirrelly, will need to be marked out in spots for equipment access. Comment: Site Condition Proposed Start Date: 10/1 /2021

61 52021061-Cut 34.2 4130 - Aspen Poletimber 50 1-50 Harvest Clearcut with 413 - Aspen Even-Aged No Well Retention

Prescription Final harvest all trees 2" and up, leave standard island retention. Add snowmobile trail protection specs.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

88 52021088-Cut 73.6 4130 - Aspen Poletimber 60 1-50 Harvest Clearcut with 4211 - Planted Even-Aged No Poor Retention Red Pine

<u>Prescription</u> Harvest all trees 2" and up, leave standard island retention. Leave retention around areas with beneficial wildlife shrubs. Protect gas well <u>Specs:</u> sites and pipelines. Follow BMP's around wet area in the middle of the stand (already cut out of treatment layer).

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

Acceptable Red Pine

Regen:

Other Reduce follow up treatment by leaving 10 acres of this stand unplanted as an opening (U type) along the eastern edge of the stand.

Comment:

Site Condition

Sizo

Stand



Treatment

Year of Entry: 2022

Cover Type Age Habitat

d	Name	710100	CoverType		Age	Range	Туре	Method	Objective	Structure	Cut
92	52021092-Cut	24.9	4117 - Mixed N. Hardwood - Pine	Sawtimber Well	70	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No

Treatment

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Prescription Final harvest 2" and up, leave minimum island retention. Also leave the few large white pine (>18" DBH). Add snowmobile trail protection

Specs: specs.

Treatment

Next Step Monitoring, Natural Regen (Re-Inventory)

Stand

Treatments:

Acceptable Red maple, aspen, sugar maple white pine. South end is expected to be more aspen and north end expected to be more maple/beech.

Regen:

t a

Other Comment:
Site Condition

Proposed Start Date: 10/1 /2021

94 52021094-Cut 36.9 42110 - Planted Sawtimber 57 171- Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine Well 200 Red Pine

Prescription Thin stand down to 120 BA, first priority is to remove suppressed and poor formed trees.

Specs:

Next Step Treatments:

Acceptable Red Pine

Regen:

Other West end has some sparse areas, might just need to walk through or cut out of the treatment area.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

102 52021102-Cut 41.0 4130 - Aspen Poletimber 50 1-50 Harvest Clearcut with 413 - Aspen Even-Aged No Retention

Prescription Final harvest all trees 2" and up, leave minimum island retention. Follow BMP's along the two wet areas at the north end of the treatment

<u>Specs:</u> (already excluded from treatment area).

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, cherry. There will be lower stocked areas/U type and these are acceptable.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

106 52021106-Cut 72.1 4119 - Mixed Sawtimber 85 81-110 Harvest Shelterwood 412 - Oak Types Even-Aged No Northern Hardwoods Well

Prescription Harvest all trees except oak. Follow up activities may include herbicide, roller chopping, burning, scarification, and fencing.

Specs:

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Scarification; SitePrep, Roller Chopping; Burn, Understory; Pesticide, Skidder - SitePrep, Treatments: Prep; Other,

Acceptable oak, maple

Regen:

Other This treatment is depending on funding for post harvest fencing. This stand would be used as an experimental area for oak management and

Comment: regeneration.

Site Condition Shelterwood/Seed Source

Mix Well Mixed

Prescription Final harvest all trees 2" and up, leave no retention due to small stand size. Follow BMP's along adjacent bog, try to protect hawthorn.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable aspen, maple

Regen: <u>Other</u>

Expanded final harvest treatment into adjacent stand 100 to cover area with aspen/poor quality hardwood (<5 acres).

Comment:

Site Condition

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 21 s Year of Entry: 2022 t а **Treatment** Stand Size Stand BA **Treatment Treatment** Cover Type Acres Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d 120 52021120-Cut 17.4 42101 - Planted Poletimber 171-Harvest Clearcut with 4139 - Aspen. Even-Aged No Mixed White Pine, Mixed Well 200 Retention Deciduous Deciduous Prescription Final harvest all trees 2" and up, leave minimum island retention. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Aspen, maple, white pine. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 125 52021125-Cut 7.1 4130 - Aspen Poletimber 47 81-110 Harvest Clearcut 413 - Aspen Even-Aged No Well Prescription Final harvest, no retention due to small treatment size. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Aspen Regen: <u>Other</u> Cutting small portion of this stand to help expand aspen into adjacent stand 120. Comment: Site Condition Proposed Start Date: 10/1 /2021 128 52021128-Cut 72.7 4111 - S.Maple, Sawtimber 105 111-Harvest 411 - Northern No Single Tree Even-Aged Hard Mast Well 140 Selection Hardwood Association Prescription Mark stand down to 80 BA, crop tree release and create regeneration gaps. Create at least one regeneration gap per five acres, minimum

<u>Prescription</u>
Specs:

Mark stand down to 80 BA, crop tree release and create regeneration gaps. Create at least one regeneration gap per five acres, minimum 100 ft in diameter. When marking in areas with beach, focus on removing the beach to release maple crop trees. Use appropriate woodland raptor and eagle specs/buffers as necessary.

Monitoring, Natural Regen (Re-Inventory)

Next Step Treatments:

Acceptable Mix of northern hardwoods representative of the stand canopy that meets stocking requirements.

Regen:

<u>Other</u>

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Total Treatment 825.7 Acreage Proposed:

Report 4 – Site Conditions

Gaylord Mgt. Unit

Matthew Foster : Examiner





Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	s		
Acres	Available	With Condition	Not Available		5B	5C	1A	1C	2G	3J	5E
862	843	18	0	Aspen	5	13					
19	19	0	0	Bog							
77	77	0	0	Herbaceous Openland	0						
9	9	0	0	Low-Density Trees							
37	10	0	27	Lowland Conifers					27		
143	143	0	0	Lowland Shrub							
53	53	0	0	Mixed Upland Deciduous							
11	0	0	11	Natural Mixed Pines						11	
751	641	100	10	Northern Hardwood	67	33		10			
675	672	0	3	Red Pine							3
41	41	0	0	Upland Mixed Forest							
1	1	0	0	Urban							
146	142	0	4	White Pine	0		4				
2,824	2,650	119	55	Total Forested Acres	72	46	4	10	27	11	3
	94%	4%	2%	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
I	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walters Research P	roject: Long-term beech rege	eneration	monitoring, up to 20 years	(through 2039)		
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Gaylord Mgt. Unit

Matthew Foster : Examiner



3	Available	5B: Maintain for regeneration purposes	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	1A: Federal/State/Local Law	3	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments: Over half of stand f	falls within the Natural River Buf	fer for	Kolke Creek.			
7	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walters Research	Project: Long-term beech regen	eratior	n monitoring, up to 20 years	(through 2039)		
8	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
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Report 4 – Site Conditions

Gaylord Mgt. Unit

Matthew Foster : Examiner

Compartment: 21
Year of Entry: 2022



9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Adjacent to Kolke C	reek.					
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	33	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Available	5B: Maintain for regeneration purposes	67	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Hold treatment until	funding can be secured for po	st harves	st fencing.			
13	Unavailable	1A: Federal/State/Local Law	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Natural River Buffer						

11/20/2020 11:37:15 AM - Page 3 of 3 SWARTZN3

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				

Gaylord Mgt. Unit Compartment: 21





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	n Type	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 condi- stocked trout populations and those of other coldwater fish speci- year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high d communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, iversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spapproved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
1	330 - Low-l	Density Tre	es	Nonsto	cked	1.2			No		Opening with some pine, cherry, and aspen.
2	310 - Herbac	eous Open	land	Nonsto	ocked	2.1	L	Inspecified			East half is a gas well, State Hayes 1-23. West half is a grass depression, old borrow pit.
3	123 - Other Hig	h Intensity	Urban	Nonsto	ocked	1.1	ι	Inspecified			FENCED IN CPF WITH TWO BUILDINGS. Enervest Operating ASE #7 C CPF.
4	42110 - Pla	nted Red P	'ine	Sawtimb	er Well	41.1	60	141-170	N/A		Thinned in 2004, south end is more open with lower BA, total BA is 155
-	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	from 6 plots. RP SI = 60.
	Red Pine	98	Log/Pole				d Maple	Medium	5 - 10 feet	Sapling	
	White Pine	2	Log	12			ck Cherry	Low	10 - 20 feet	Sapling	
							Beech	Medium	5 - 10 feet	Sapling	
5	42200 - Natu	ural White F	 Pine	Sawtimb	er Well	11.7	75	141-170	N/A		Pretty good quality, diameters throughout are variable. WP SI = 70.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	9	Log/Pole				d Maple	High	10 - 20 feet	Sapling	
	White Pine	85	Log/Pole	13	75	Bla	ck Cherry	Low	5 - 10 feet	Tall Shrub	
	Black Cherry	3	Log/Pole	10			Beech	Medium	5 - 10 feet	Sapling	
	Red Maple	3	Pole/Log	9							
6	4130	- Aspen		Poletimb	er Well	5.3	60	51-80	N/A		Poor quality strip of aspen. TA SI = 60.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	5	Pole	7		Re	d Maple	High	10 - 20 feet	Sapling	
	Quaking Aspen	75	Pole	8	60	Sug	ar Maple	Low	5 - 10 feet	Sapling	
	White Pine	15	Log	14		Bla	ck Cherry	Medium	5 - 10 feet	Sapling	
	Black Cherry	5	Pole	8							
7	310 - Herbac	eous Open	land	Nonsto	ocked	1.4	ι	Inspecified			Gas well, Enervest Operating State Hayes 6-23.
8	42101 - Planted Dec	White Pine iduous	, Mixed	Sawtimb	er Well	38.2	60	111-140	N/A		White pine mixed with aspen, some of the white pine is starting to die out. A lot of maple in the understory. WP SI = 55.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Log/Pole				d Maple	High	10 - 20 feet	Sapling	
	Quaking Aspen	25	Pole	9		Bla	ck Cherry	Medium	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	5	Log	13			Beech	Low	5 - 10 feet	Sapling	
	White Pine	60	Log/Pole	11	60						

Report 7 - Stands



Stand	l Level 4 C	over Type		Size De	ensity	Acres	Stand Age E	BA Range	Managed 9	Site	General Comments
9	42260 - Natural Pi	ne, Mixed D	Deciduous	Sawtimb	er Well	11.3	60	141-170	N/A		Good quality red and white pine, aspen is dying out. Some of the smaller
	Canopy Species	% Cover	Size Class	s DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	white pine is also dying out.
	Bigtooth Aspen	30	Log	14		Wh	nite Pine	Low	10 - 20 feet	Sapling	
	White Pine	50	Log/Pole	13	60						
	Red Pine	20	Log/Pole	12							
10	310 - Herbac	eous Open	land	Nonst	ocked	20.2			No		Grass, multiple pipelines and snowmobile trail along Mancelona Road.
11	330 - Low-I	Density Tre	es	Nonst	ocked	2.1			No		Opening with some scattered cherry.
12	4133 - Aspe			Poletim		12.3	60	81-110	N/A		Variable size and quality aspen mixed with pine, good amount of white pine in the understory.
	Canopy Species		Size Class		H Age		nopy Species		Avg. Height	Size	
	Quaking Aspen	45	Pole	9	60	Wh	nite Pine	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	20	Pole	9							
	White Pine	25	Log	16							
	Red Pine	10	Log	15							
13	310 - Herbac	eous Open	land	Nonst	ocked	1.2		Immature			Gas well, Enervest Operating State Hayes 9-23
14	4110 - Sugar N	/laple Assoc	ciation	Sawtimb	er Well	34.4	85	111-140	N/A		Thinned in 2003, good quality hardwood on rolling hills. BA is 122 from 4
	Canopy Species	% Cover	Size Class	s DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	plots. HM SI = 60.
	Sugar Maple	80	Log/Pole	12	85	E	Beech	Medium	10 - 20 feet	Sapling	
	Basswood	10	Log	12		Iro	nwood	High	5 - 10 feet	Sapling	
	Beech	7	Log/Pole	12		Sug	ar Maple	Low	Variable	Sapling	
	Yellow Birch	1	Log/Pole	11							
	Red Maple	2	Log/Pole	10							
15	4191 - Mixed Upla Co	and Decidu	ous with §	Sawtimbe	r Mediur	m 15.7	60	51-80	N/A		Stand is mostly along Kolke Creek, clumpy maple, decent aspen pocket at the north end. WP SI = 60.
	Canopy Species	% Cover	Size Class	s DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	25	Pole/Log	9		Wh	nite Pine	Low	10 - 20 feet	Sapling	
	Quaking Aspen	25	Log/Pole	12		Blac	ck Cherry	Medium	5 - 10 feet	Tall Shrub	
	a aararig / top or r										
	White Pine	40	Log/Pole		60	Re	d Maple	Medium	10 - 20 feet	Sapling	



Range	BA Ra	Stand Age I	Acres Star	Acres	ty Acre	sity	Size Den	Siz						е	er Type	Туре	Туре	er Type	over Typ	over Typ	er Type	pe		S	Size I	ze De	ensi	sity	Acres	Stan	nd Age E	BA Ra	ange	Mar	naged Si	ite	General Comments
mature	Imma	7	48.2	48.2																- Aspen					-				48.2		7	Imma	ature		N/A		Harvested in spring of 2013, great aspen regeneration mixed with a few white pine that were left during harvest.
														er S																							
					7	7									60													7									
															3							_															
													· · · · · · · · · · · · · · · · · · ·		15																						
															7																						
									· ·		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			10								· ·														
							1		apling	Sapling	Saplir	Saplin	Sapli		5	5	5	5	5	5	5		Sapling	g	1	1											
			20.5	20.5	ed 20.5	ked	Nonstoo	N	d	etland	vetland	vetland	wetland	l wet	rested v	ested	ested v	rested	n-forested	n-forested	orested	ed wetl	land	ļ	Nons	onsto	ocke	ked	20.5						No		Kolke Creek, marsh with some tag alder.
mature	Immaí		1.1	1.1	ed 1.1	ked	Nonstoo	N		and	land	land	nland	enlar	us Open	oper	Open	us Opei	eous Ope	eous Ope	us Oper	penlan	nd		Nons	onsto	tocke	ked	1.1			lmma	ature				GAS WELL - VALVE SYSTEM. KNAPWEED. Enervest Operating Statement Hayes 3-23, some red pine seeding in.
1-50	1-5	60	5.2	m 5.2	edium 5.2	Mediu	wtimber I	Sawt	S	ine	Pine	Pine	Pine	Pin	l White I	Vhite	Vhite F	l White	ural White	ural White	I White	te Pine	e s	Sav	awtimt	imber	er Me	1edium	m 5.2	6	60	1-5	50		N/A		White pine of all sizes surrounding a bog, some beaver activity.
Density A	es De	nopy Species	Sub-Canopy	Sub-Car	ge Sub-	Age	DBH	s	Class	Size Clas	Size Cla	Size Cla	Size CI	er S	6 Cover	Cove	Cover	6 Cove	% Cove	% Cove	% Cover	ver S	ize Class	SS	DI	DBH	Н Ас	Age	Sub-Ca	anopy	Species	De	ensity	Avg. H	eight	Size	
Low 5	ı	nite Pine	White P	Wh			5		Pole	Pole	Pole	Pole	Pol		10	10	10	10	10	10	10		Pole		5	5			WI	hite Pi	ine		Low	5 - 10	feet	Sapling	
Low 1	-	ck Cherry	Black Ch	Blac	E		11	Э	g/Pole	Log/Pol	Log/Po	Log/Po	Log/P		5	5	5	5	5	5	5		Log/Pole	ole	1	11			Bla	ck Ch	erry		Low	10 - 20) feet	Sapling	
							7		Pole	Pole	Pole	Pole	Pol		10	10	10	10	10	10	10		Pole		7	7											
					0	60	13	Log	Pole/XLo	Log/Pole/X	Log/Pole/	Log/Pole/	Log/Pole	Lo	75	75	75	75	75	75	75	Lo	g/Pole/XL	XLog	g 1	13	6	60									
			2.0	2.0	ed 2.0	ked	Nonstoc	N							Bog	og	og	Bog	5 - Bog	5 - Bog	Bog			ĺ	Nons	onsto	ocke	ked	2.0						No		Bog with some spruce, white pine, and tamarack.
1-110	81-1	85	13.9	13.9	Well 13.9	r Wel	oletimbe	Pol	1	iation	ciation	ciation	ciation	ocia	ole Asso	Assc	Asso	ole Asso	laple Ass	laple Ass	ole Asso	ssociat	tion	Po	Poletir	etimb	ber V	Well	13.9	8	85	81-1	110		N/A		Mostly a steep southeast facing slope, east end is flat. Bottom of slope
Density A	es De	nopy Species	Sub-Canopy	Sub-Car	ge Sub-	Age	DBH	s	Class	Size Clas	Size Cla	Size Cla	Size Cl	er S	6 Cover	Cove	Cover	6 Cove	% Cove	% Cove	% Cover	ver S	ize Class	SS	DI	DBH	ΗAς	Age	Sub-Ca	anopy	Species	De	ensity	Avg. H	eight	Size	has aspen mixed with the hardwood. Quality varies throughout, BA is 1 from 3 plots. HM SI = 65.
Medium	Me	jar Maple	Sugar Ma	Sug	5 5	85	9	3	le/Log	Pole/Lo	Pole/L	Pole/L	Pole/I		65	65	65	65	65	65	65		Pole/Log	og	ć	9	8	85	Sug	gar Ma	aple	M	1edium	>20	feet	Sapling	
Low 5	ı	3eech	Beech	Е			11	Э	g/Pole	Log/Pol	Log/Po	Log/Po	Log/P		15	15	15	15	15	15	15		Log/Pole	ole	1	11				Beech	า		Low	5 - 10	feet	Sapling	
Low 5	ı	onwood	Ironwoo	Irc			10	9	g/Pole	Log/Pol	Log/Po	Log/Po	Log/P		5	5	5	5	5	5	5		Log/Pole	ole	1	10			Ire	ronwoo	od		Low	5 - 10	feet	Sapling	
							10	9	g/Pole	Log/Pol	Log/Po	Log/Po	Log/P		10	10	10	10	10	10	10		Log/Pole	ole	1	10											
							7		Pole	Pole	Pole	Pole	Pol		5	5	5	5	5	5	5		Pole		7	7											
11-170	141-1	60	62.4	62.4				Sav		ne	ine	ine	Pine	Pine	d Red P	Red F	Red P	d Red F	nted Red	nted Red	ed Red F	d Pine)	Sa					62.4	(60	141-	170		N/A		Used to be same as stand 132, this portion was not thinned. BA is 170 from 7 plots. Rows are squirrelly, red pine is limby in areas, scattered
Density A	es De	nopy Species	Sub-Canopy	Sub-Car	ge Sub-	Age	DBH	s	Class	Size Clas	Size Cla	Size Cla	Size CI	er S	6 Cover	Cove	Cover	6 Cove	% Cove	% Cove	% Cover	ver S	ize Class	SS	DI	DBH	ΗĄ	Age	Sub-Ca	anopy	Species	De	ensity	Avg. H	eight	Size	aspen pockets throughout.
							7			Pole					10																		Low	10 - 20		Sapling	
Low 5		d Maple	Red Ma	Re	0	60	10	9	g/Pole	Log/Pol	Log/Po	Log/Po	Log/P		85	85	85	85	85	85	85		Log/Pole	le	1	10	6	60	Re	ed Ma	ple		Low	5 - 10	feet	Sapling	
Low 5	ı	3eech	Beech	E			11	9	g/Pole	Log/Pol	Log/Po	Log/Po	Log/P		1	1	1	1	1	1	1		Log/Pole	ole	1	11				Beech	1		Low	5 - 10	feet	Sapling	
<u> </u>		-					14		Log	Log	Log	Log	Log		2	2	2	2	2	2	2		Log		1	14					-						
							12		Log							_	_	_		2	0																
mature 1-50 Density Av Low 5 Low 1 1-110 Density Av Medium Low 5 Low 6 Low 6 Low 6 Low 6 Low 7 Low 1 Low 5 Low 1 Low 6 Low 1 Low 5 Low 1 Low 5 Low 1 Low 1 Low 5 Low 1 Low 5 Low 1 Low 1 Low 1 Low 1 Low 5 Low 1 Low 1 Low 1 Low 1 Low 1	1-50 De	Im 8	7 Im 60 Species ine erry 85 8 Species aple n od 60 14 Species erry ple	7 Im 60 nopy Species ite Pine ik Cherry 85 8 nopy Species ar Maple Beech nowood 60 14 nopy Species ik Cherry d Maple	2 7 Im 60 Canopy Species White Pine Black Cherry 8 8 8 Canopy Species Gugar Maple Beech Ironwood 4 60 14 Canopy Species Black Cherry	20.5 1.1 Im 1.1 Im 1.2 60 Sub-Canopy Species White Pine Black Cherry 2.0 1.13.9 85 8 Sub-Canopy Species Sugar Maple Beech Ironwood 1.62.4 60 14 Sub-Canopy Species Black Cherry Red Maple	Well	Apply Appl	Sapling Well	Sapling Well 48.2 7 Im	Sapling Well 48.2 7 Image	Sapling Well 48.2 7 Im	Sapling Well 48.2 7 Image	Sapling Well 48.2 7 Im Size Class DBH Age Sapling 2 7 Log/Pole 10 Sapling 2 Sapling 2 Sapling 1 Sapling 1 Sapling 1 Sapling 1 Wetland Nonstocked 20.5 Pine Sawtimber Medium 5.2 60 Pine Sawtimber Medium 5.2 60 Pine Sawtimber Medium 5.2 60 Pole 5 White Pine Log/Pole 11 Pole 7 Log/Pole/XLog 13 60 Nonstocked 2.0 Occiation Poletimber Well 13.9 85 8 Pole/Log 9 85 Sub-Canopy Species Pole/Log 9 85 Sub-Canopy Species Pole/Log 9 85 Sub-Canopy Species Size Class DBH Age Sub-Canopy Species Log/Pole 10 Ironwood Log/Pole 10 Pole 7 Pine Sawtimber Well 62.4 60 14 Pole 7 Red Maple Log/Pole 10 Go Red Maple Log/Pole 11 Beech Log/Pole 10 Go Red Maple Log/Pole 11 Beech Log/Pole 10 Go Red Maple Log/Pole 11 Beech Log/Pole 11 Beech Red Maple B	Sapling Well 48.2 7 Im	Sapling Well 48.2 7 Im	Sapling Well 48.2 7 Im	Sapling Well	Sapling Well	ing Well 48.2 7 Im BH Age 2	Well 48.2 7 Im Age 7 Im Im cked 20.5 Im Im Medium 5.2 60 60 Age Sub-Canopy Species White Pine Black Cherry 60 Cked 2.0 2.0 2.0 er Well 13.9 85 8 Age Sub-Canopy Species Sugar Maple Beech Ironwood Ironwood 2.0 3.0 er Well 62.4 60 14 Age Sub-Canopy Species 3.0 3.0 Black Cherry 60 1.0 3.0 Red Maple 3.0 3.0 3.0 3.0	Sub-Canopy Species Sugar Maple Beech Ironwood	20.5 1.1 Im 5.2 60 Sub-Canopy Species White Pine Black Cherry 2.0 13.9 85 8 Sub-Canopy Species Sugar Maple Beech Ironwood 62.4 60 14 Sub-Canopy Species Black Cherry Red Maple	7 Im 60 nopy Species hite Pine ck Cherry 85 8 nopy Species gar Maple Beech ponwood 60 14 nopy Species ck Cherry ed Maple	7 Im 50 Species ne erry 35 8 Species aple nod 50 14 Species erry ole	8 8 11 ⁴	1-5 De 31-1 De	ature ature 50 ensity Low 110 ensity ledium Low 170 ensity Low Low 170 Low Low	Avg. H 5 - 10 10 - 20 5 - 10 5 - 10 5 - 10 5 - 10	N/A No N/A leight feet No N/A leight feet feet feet feet feet feet feet feet feet	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Kolke Creek, m GAS WELL - V Hayes 3-23, so White pine of a Bog with some Mostly a steep has aspen mix from 3 plots. H					



Stand	Level 4 Co	Level 4 Cover Type Size Dens 310 - Herbaceous Openland Nonstock	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments		
24	310 - Herbace	eous Oper	nland	Nonsto	cked	1.1			No		Grass depression, old borrow pit.
25	42110 - Plan	ited Red F	Pine	Sawtimb	er Well	23.8	57	171-200	N/A		Thinned in 1996, some porky damage near adjacent hardwood stand.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Areas of thick hardwood understory. Stand BA is 185 from 5 plots. RP SI = 65.
	Basswood	3	Log	12		Red	d Maple	Medium	10 - 20 feet	Sapling	00.
	Red Pine	97	Log/Pole	12	57	В	Beech	Medium	5 - 10 feet	Sapling	
26	4130 -	Aspen		Poletimb	er Well	13.2	55	81-110	N/A		Fairly open understory, decent aspen. BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	10	Pole	8			ar Maple	Medium	>20 feet	Sapling	
	Red Maple	5	Pole	8							
	Bigtooth Aspen	60	Pole/Log	9	55						
	Quaking Aspen	25	Pole	9							
27	4111 - S.Maple, Ha	rd Mast A	ssociation	Poletimb	er Well	11.3	95	81-110	N/A		Flat to steep slopes, quality is variable, aspen scattered throughout.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Understory in west half is more open. BA is 110 from 3 plots. HM SI = 65.
	Sugar Maple	60	Pole/Log	9	95	В	Beech	Low	10 - 20 feet	Sapling	00.
	Basswood	15	Log/Pole	10		Iro	nwood	Medium	5 - 10 feet	Sapling	
	Beech	10	Log/Pole	11							
	Bigtooth Aspen	10	Log	14							
	Ironwood	5	Pole	8							
28	310 - Herbace	eous Oper	nland	Nonsto	cked	1.2	ι	Jnspecified			Gas well, Enervest Operating State Hayes 12-23
29	310 - Herbace	eous Oper	nland	Nonsto	cked	2.6		Immature			TWIN GAS WELLS - BOTH VALVE SYSTEMS. KNAPWEED. Enervest Operating State Hayes 8-23 and 4-23
30	629 - Mixed non	-forested v	wetland	Nonsto	cked	6.0			No		DRIED UP POND - MOSTLY MARSH. SOME SCATTERED WHITE PINE. BUFFER OF CHERRY SHRUBS AND GRASS BETWEEN LOWLAND AND RED PINE PLANTATION. lowland shrub and pine around the edges
31	4119 - Mixed No	rthern Har	dwoods	Sawtimb	er Well	62.1	85	111-140	N/A		Mostly flat, rolling hills in the north half. Good amount of large diameter
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	nopy Species	Density	Avg. Height	Size	good quality red oak. The amount of oak in the stand diminishes as you go north, far north end is basically red maple/beech dominated. Heavy
	Sugar Maple	10	Log/Pole	12		В	Beech	High	5 - 10 feet	Sapling	beech understory. Average BA is 115 from 9 plots. HM SI = 60.
	o agai mapio										1
	Red Maple	30	Log/Pole	13		Suga	ar Maple	Low	Variable	Sapling	
	<u> </u>	30 30	Log/Pole Log/XLog				ar Maple d Maple	Low	Variable	Sapling Sapling	



Stand			Managed S	ite	General Comments						
32		-					95	81-110	N/A		Thinned in 2005, pretty good quality, BA is 100 from 6 plots. Thick understory with some steep hills. HM SI = 65.
	Canopy Species		Size Class		Age		anopy Species gar Maple	Density	Avg. Height	Size	
	Sugar Maple Basswood	65 25	Log/Pole		95	30	<u> </u>	Low	>20 feet 5 - 10 feet	Sapling	
	Beech	10	Log/Pole	12			Beech	Medium	5 - 10 feet 5 - 10 feet	Sapling Sapling	
	beech	10	Log	12			Oriwood	Medium	5 - 10 leet	Sapility	
33	4110 - Sugar N			Sawtimb		ll 61.3	95	111-140	N/A		Thinned in 1996, good quality hardwoods. East half is flat, west half is rolling to steep hills. Understory is dense in areas, hillsides are a little
	Canopy Species		Size Class		H Age		anopy Species		Avg. Height	Size	more open. Stand BA is 125 from 8 plots. HM SI = 65.
	Sugar Maple	75	Log/Pole		95	1	ronwood	High	10 - 20 feet	Sapling	
	Basswood	19	Log/Pole	13		V	/hite Ash	Low	10 - 20 feet	Sapling	
	Red Maple	3	Log/Pole	11			Beech	Low	5 - 10 feet	Sapling	
	Beech	3	Log/Pole	11		Su	gar Maple	Medium	Variable	Sapling	
34	310 - Herbac	eous Open	land	Nonst	ocked	1.0	U	nspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Operating State Hayes A 1-26.
35	6129 - Mixed Co Fo	oniferous Lo prest	owland S	Sawtimbe	r Medi	um 6.3	70	51-80	N/A		Mixed stand near Kolke Creek.
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Balsam Fir	25	Pole/Log	9	70	В	alsam Fir	Medium	Variable	Sapling	
	Tamarack	10	Pole/Log	9		Т	ag Alder	Medium	5 - 10 feet	Tall Shrub	
	Black Spruce	5	Pole/Log	9		W	hite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	20	Log/Pole	12		. L					
	Quaking Aspen	15	Pole/Log	9							
	Red Pine	25	Log	12							
36	4110 - Sugar N	laple Assoc	ciation	Sawtimb	er We	II 20.8	65	81-110 N/A			Density and quality are variable in this stand, aspen scattered
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	throughout. Stand BA is 100 from 4 plots. HM SI = 60.
	Sugar Maple	60	Log/Pole				gar Maple	Medium	>20 feet	Sapling	
	Basswood	20	Log/Pole	10			Beech	Low	5 - 10 feet	Sapling	
	Ironwood	5	Pole	9		1	ronwood	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	10	Log	11							
	Beech	5	Log/Pole	10							
37	310 - Herbac	eous Open	land	Nonst	ocked	1.1	U	nspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Operating State Hayes B 2-26.
38	4130	- Aspen		Poletimb	er We	ll 21.4	40	51-80	N/A		Pole sized aspen, good amount of sugar maple saplings in the
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	understory.
	Sugar Maple	3	Pole	5		Su	gar Maple	Medium	>20 feet	Sapling	
	Bigtooth Aspen	85	Pole	7	40	1	ronwood	Low	5 - 10 feet	Sapling	
	Quaking Aspen	10	Pole	7		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	2	Pole	8							



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
39	4130	- Aspen		Sapling Well	6.5	14	Immature	N/A		Thick regeneration, scattered white pine left from the harvest. BTA SI : 65.
	Canopy Species	% Cover		DBH Age						00.
	Quaking Aspen	65	Sapling	3 14						
	Bigtooth Aspen	20	Sapling	3						
	White Pine	5	Log	14						
	Black Cherry	5	Sapling	3						
	Red Maple	5	Sapling	3						
40	4110 - Sugar N	Maple Asso	ciation	Sawtimber Well	55.3	95	81-110	N/A		Thinned in 2005, good quality hardwood on rolling hills, a few steep
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	slopes. Most of the understory is dense with ironwood and beech. Sta BA is 100 from 6 plots.
	Sugar Maple	75	Log/Pole	12 95	Su	gar Maple	Low	>20 feet	Sapling	Bit to the mean opiote.
	Basswood	20	Log	14		Beech	Medium	10 - 20 feet	Sapling	
	Quaking Aspen	1	Log	11	Ir	onwood	Medium	10 - 20 feet	Sapling	
	Beech	3	Log/Pole	11	W	hite Ash	Low	5 - 10 feet	Sapling	
	Paper Birch	1	Pole/Log	9					-	
41	6127 - Lo	owland Pine	e	Sawtimber Well	12.9	60	111-140	N/A		Wet, white pine mixed with tamarack, spruce, and tag alder.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Black Spruce	30	Pole	8	Re	ed Maple	Low	>20 feet	Sapling	
	Tamarack	5	Pole	9	Bla	ck Spruce	Medium	Variable	Sapling	
	White Pine	65	Log	15 60	Т	ag Alder	Medium	5 - 10 feet	Tall Shrub	
42	310 - Herbac	eous Oper	land	Nonstocked	1.8			No		Old well site.
43	42200 - Nati	ural White	Pine	Sawtimber Well	1.3	60	141-170	N/A		Small stand of white pine on edge of wet area.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Black Spruce	15	Log/Pole	11	Bla	ck Spruce	Low	10 - 20 feet	Sapling	
	Tamarack	5	Log	11						
	White Pine	75	Log/Pole	13 60						
	Red Pine	5	Log/Pole	12						
44	4130	- Aspen		Sapling Well	22.6	14	Immature	N/A		Dense aspen stand, BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Quaking Aspen	40	Sapling	3		ed Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	45	Sapling	3 14	Bla	ick Cherry	Low	5 - 10 feet	Sapling	
	Sugar Maple	5	Sapling	3		-			. 3	1
	Red Maple	5	Sapling	3						
	Black Cherry	5	Sapling	3						
45	310 - Herbac	eous Oper	land	Nonstocked	0.8		Immature			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Energy State Hayes B4-26.



Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Ra	nge	Managed S	ite	General Comments
46	42110 - Pla	nted Red F	Pine	Sawtimb	er Well	8.8	57	171-2	200	N/A		Thinned in 2003, nice red pine, BA is 180 from 3 plots. Understory is
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Speci	es De	nsity	Avg. Height	Size	pretty open. RP SI = 60.
	Red Pine	96	Log/Pole	11	57	W	hite Pine		Low	Variable	Sapling	
	White Pine	2	Log	12			Beech		Low	5 - 10 feet	Sapling	
	Red Oak	2	Log/Pole	11				•				-
47	310 - Herbac	eous Oper	nland	Nonsto	cked	1.2		Unspec	cified			GAS WELL - PUMP JACK. KNAPWEED. Enervest Operating State Hayes 3-25.
48	6225	5 - Bog		Nonsto	cked	1.1				No		SCATTERED WHITE PINE AND TAMARACK SAPS. filling in with wp could be considered forester soon
49	42110 - Pla	nted Red F	Pine	Sawtimb	er Well	6.1	57	141-1	170	N/A		Stand thinned in 2013, average BA is 145 from 2 plots.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Speci	es De	nsity	Avg. Height	Size	
	Red Pine	98	Log/Pole	10			hite Pine		Low	Variable	Sapling	
	White Pine	2	Log/Pole	11					I			1
50	4130	- Aspen	1	Poletimb	er Well	59.5	23	51-8	30	N/A		Just becoming a pole stand, rolling hills, BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH	Age							
	Bigtooth Aspen	70	Pole/Sapling	g 5	23							
	Red Maple	5	Sapling	4								
	Ironwood	5	Sapling	4								
	Black Cherry	5	Sapling	4								
	Quaking Aspen	15	Pole/Sapling	g 5								
51	6225	5 - Bog		Nonsto	cked	1.0				No		bog with some wp seeding in
52	310 - Herbac	eous Oper	nland	Nonsto	cked	1.9				No		Grass opening with some rubus.
53	42200 - Natu	ural White I	Pine	Sawtimb	er Well	1.6	70	111-1	140	N/A		Small stand of white pine. WP SI = 60.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Speci	es De	nsity	Avg. Height	Size	
	Red Maple	10	Pole	8		Re	ed Maple		Low	5 - 10 feet	Sapling	
	White Pine	85	Log/Pole	12	70		Beech	I	Low	5 - 10 feet	Sapling	
	Red Oak	5	Log	13		Suç	gar Maple		Low	5 - 10 feet	Sapling	
54	310 - Herbac	eous Oper	nland	Nonsto	cked	1.0		Unspec	cified			GAS WELL - PUMP JACK. Enervest Operating State Hayes 6-25
55	42110 - Pla	nted Red F	Pine	Sawtimb	er Well	87.0	57	171-2	200	N/A		Thinned 1996, west half has some porky damage and hardwood in the
	Canopy Species		Size Class		Age	Sub-Ca	nopy Speci	es De	nsity	Avg. Height	Size	understory. West half seems to be better quality and has an open understory. Stand BA is 180 from 10 plots.
	Red Pine	99	Log/Pole	11	57	Re	ed Maple	Me	edium	5 - 10 feet	Sapling	,
	Quaking Aspen	1	Pole	9			Beech	Me	edium	5 - 10 feet	Sapling	



Stand	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
56	42200 - Natu	ıral White	Pine S	Sawtimb	er Well	3.3	60	111-140	N/A		Limby white pine stand along Kolke Creek. WP SI = 60.
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	92	Log/Pole/XLog	g 15	60	Re	d Maple	Low	5 - 10 feet	Sapling	
	Tamarack	2	Log	11		Blac	k Cherry	Low	5 - 10 feet	Sapling	
	Red Maple	2	Log	12		Е	Beech	Low	5 - 10 feet	Sapling	
	Balsam Fir	2	Pole	8		Wh	ite Pine	Low	5 - 10 feet	Sapling	
	Quaking Aspen	2	Pole	8							•
57	42110 - Pla	nted Red F	Pine F	oletimb	er Well	5.1	60	171-200	N/A		Small red pine plantation, a couple of small unplanted areas with
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	deciduous. Stand BA is 180 from 2 plots. Rows are squirrely. Doesn't look like its been thinned.
	Red Maple	5	Log/Pole	10		E	Beech	Low	5 - 10 feet	Sapling	Took like to book tillings.
	Bigtooth Aspen	5	Pole/Log	9		Wh	ite Pine	Low	5 - 10 feet	Sapling	
	White Pine	5	Log	13							1
	Red Pine	80	Pole/Log	9	60						
	Red Oak	5	Log	11							
58	6225	5 - Bog		Nonst	ocked	1.2			No		Bog with white pine around the edge, a few white pine seeding into the bog.
59	310 - Herbac	eous Oper	nland	Nonst	ocked	1.2	U	nspecified			GAS WELL - VALVE SYSTEM. KNAPWEED. Enervest Operating Sta Hayes 4-25
60	330 - Low-I	Density Tre	ees	Nonst	ocked	5.5	0		No		Old gravel pit, patches of jack pine that survived planting in 1997. Still lot of exposed ground.
61	4130	- Aspen	F	Poletimb	er Well	34.2	50	1-50	N/A		Poor quality, patchy stocking in some areas, range of size classes. BT
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	SI = 55.
	Red Maple	5	Pole	7		Re	d Maple	Low	5 - 10 feet	Sapling	
	Quaking Aspen	40	Pole	7	50	Blac	k Cherry	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	40	Pole	7		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	White Pine	15	Log	11		Wh	ite Pine	Low	Variable	Sapling	
62	4110 - Sugar M	laple Asso	ociation S	Sawtimb	er Well	47.3	80	81-110	N/A		Not the best quality, areas with clumpy maple. Diameters are variable,
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	north end is more pole sized. Average BA is 108 from 5 plots. HM SI = 60.
	Sugar Maple	40	Log/Pole	10	80	Sug	ar Maple	Medium	>20 feet	Sapling	
	Red Maple	10	Log/Pole	10		Iro	nwood	Low	5 - 10 feet	Sapling	
	Basswood	40	Log/Pole	11		E	Beech	Low	5 - 10 feet	Sapling	
	Beech	5	Log/Pole	10				1		, , ,	1
	Quaking Aspen	5	Log	15							
63	Quaking Aspen 5 Log 15 310 - Herbaceous Openland Nonstock					1.0	U	nspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Operating



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age B	BA Range	Managed S	ite	General Comments
64	42110 - Pla	inted Red Pi	ine	Sawtimber Well	36.7	60	141-170	N/A		Thinned in 2003, white pine logs scattered throughout the stand.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stocking is variable, some areas are pretty limby. Some of the higher stocked pockets could use a thin, but overall should hold this stand 10
	White Pine	15	Log	14		Beech	Low	5 - 10 feet	Sapling	years before entering again. Average BA is 160 from 6 plots.
	Red Pine	85	Log/Pole	11 60	Bla	ck Cherry	Low	5 - 10 feet	Sapling	
					W	hite Pine	Low	Variable	Sapling	
65	4130	- Aspen		Poletimber Well	26.7	38	51-80	N/A		Harvested in 1982, rolling hills. BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	70	Pole	7 38	Su	gar Maple	Low	10 - 20 feet	Sapling	
	Sugar Maple	5	Pole	8		Beech	Low	5 - 10 feet	Sapling	
	Red Maple	5	Pole	7						
	Quaking Aspen	20	Pole	6						
66	310 - Herbac	ceous Open	land	Nonstocked	1.1	U	Inspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Operating State Hayes D 3-26.
67	4110 - Sugar N			Poletimber Well	40.8	65	81-110	N/A		Rolling hills, mostly poor quality, scattered aspen pockets. Average BA 90 from 4 plots.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	90 nom 4 piots.
	Sugar Maple	75	Pole	8 65		Beech	Low	10 - 20 feet	Sapling	
	Red Maple	5	Pole	8	Ir	onwood	Low	5 - 10 feet	Sapling	
	Basswood	5	Log/Pole	10	Su	gar Maple	Medium	10 - 20 feet	Sapling	
	Quaking Aspen	5	Log	11						
	Bigtooth Aspen	5	Log/Pole	11						
	Beech	5	Pole	9						
69	4130	- Aspen		Sapling Well	18.5	14	Immature	N/A		Aspen regeneration is thick, hardwood areas came back a little more
	Canopy Species	% Cover	Size Class	DBH Age						open. East half is fairly flat, west half is hilly. Thick beech pockets, a few scattered oak logs.
	Red Maple	10	Sapling	1						
	Beech	23	Sapling	1						
	Bigtooth Aspen	55	Sapling	2 14						
	White Pine	1	Pole	8						
	Quaking Aspen	10	Sapling	2						
	Red Oak	1	Log/Pole	12						



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
71		- Aspen		Poletimb		20.2	45	81-110	N/A		Dense stand, some scattered oak and white pine. Rolling hills. BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	00.
	Bigtooth Aspen	75	Pole	7	45	Re	d Maple	Medium	Variable	Sapling	
	White Pine	3	Log/Pole	10		E	Beech	Low	5 - 10 feet	Sapling	
	Quaking Aspen	10	Pole	7		Wite	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Red Oak	2	Log/Pole	13							
	Red Maple	5	Pole	6							
	Paper Birch	5	Pole	7							
72	310 - Herbac	eous Open	land	Nonsto	ocked	1.0	I	Unspecified			GAS WELL - VALVE SYSTEM. KNAPWEED. Enervest Operating State Hayes 5-25
73	4130	- Aspen	F	Poletimb	er Well	24.8	23	1-50	N/A		Borderline sapling/pole stand, rolling hills with some steep slopes. Some scattered log sized oak left from the harvest. BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Scattered log sized bak left from the narvest. BTA SI = 65.
	Red Maple	10	Sapling/Pole	4		Re	d Maple	Low	10 - 20 feet	Sapling	
	Quaking Aspen	19	Pole/Sapling	5							
	Bigtooth Aspen	70	Pole/Sapling	5	23						
	Red Oak	1	Log/Pole	12							
74	310 - Herbac	eous Open	land	Nonsto	ocked	1.2	ı	Unspecified			GAS WELL - PUMP JACK. KNAPWEED. Enervest Operating State Hayes 10-25.
75		- Aspen		Poletimb		20.9	40	51-80	N/A		Basically the same stand as to the south without the scattered oak. BTA
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	
	Bigtooth Aspen	80	Pole	6	40		k Cherry	Medium	5 - 10 feet	Sapling	
	Quaking Aspen	10	Pole	6		Wite	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Red Maple	10	Pole/Sapling	5							
76	6225	5 - Bog		Nonsto	ocked	1.2			No		Bog with some scattered white pine and tamarack.
77	310 - Herbac	eous Open	land	Nonsto	ocked	2.3			No		Opening, old well site.
78	310 - Herbac	eous Open	land	Nonsto	ocked	1.0		Unspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Energy State Hayes A 3-35.
79	42110 - Pla			Sapling		70.1	10	Immature	N/A		Trenched in 2011, pre planting herbicide treatment completed in 2011, planted 2012. Year 1 and 3 regen survey's complete and stand is off to
	Canopy Species		Size Class		l Age						the races. Red Oak/White oak saplings planted in 2014 around stand 76
	Red Pine	97	Sapling	1	10						(did not see any during inventory). Stand looks good, 5 retention islands
	Quaking Aspen	1	Sapling	1							left at the south end of the stand during the harvest.
	Black Cherry	2	Sapling	2							



Stand	Level 4 C	over Type		Size Density	Acres	Stand Age I	BA Range	Managed S	ite	General Comments
80	310 - Herbac	eous Open	land	Nonstocked	1.5	ι	Jnspecified			GAS WELL - DISCONNECTED PUMP JACK. KNAPWEED. Enervest Operating State Hayes 8-25
81	310 - Herbac	eous Open	land	Nonstocked	1.1	ι	Jnspecified			EMPTY GAS PAD - NOT OCCUPIED. GUTTED PIPES. KNAPWEED. Enervest Operating State Hayes 11-25.
82	4110 - Sugar N	/laple Assoc	ciation	Poletimber We	ll 28.5	65	81-110	N/A		Rolling hills, stocking and diameters are variable. Better quality at the
	Canopy Species	% Cover	Size Class	DBH Age	Sub-C	anopy Species	Density	Avg. Height	Size	base of the hills. Average BA is 105 from 4 plots.
	Sugar Maple	65	Pole/Log	9 65		Beech	Low	5 - 10 feet	Sapling	
	Basswood	20	Pole/Log	11		Ironwood	Low	5 - 10 feet	Sapling	
	Quaking Aspen	5	Log/Pole	11	S	ugar Maple	Medium	>20 feet	Sapling	
	Red Maple	5	Pole/Log	9						1
	Beech	5	Pole/Log	9						
83	42200 - Nati	ural White F	Pine	Sawtimber We	ll 16.0	60	51-80	N/A		Transition stand between Kolke Creek and upland planted pine. White
	Canopy Species	% Cover	Size Class	DBH Age	Sub-C	anopy Species	Density	Avg. Height	Size	pine of all sizes, old white pine stumps throughout. Some wet areas with lowland shrubs. WP SI = 60.
	Quaking Aspen	5	Pole	7		Vhite Pine	Medium	Variable	Sapling	lowiand sindus. Wi Si = 00.
	Black Spruce	15	Pole	9	ВІ	ack Spruce	Low	5 - 10 feet	Sapling	
	Tamarack	15	Log/Pole	10	. L	·				
	White Pine	65	Log/XLog	16 60						
84	4130	- Aspen		Sapling Well	13.5	15	Immature	N/A		Harvested in 2005, dense aspen mixed with some hardwood. BTA SI =
	Canopy Species	% Cover	Size Class	DBH Age						60.
	Bigtooth Aspen	80	Sapling	3 15						
	Red Maple	10	Sapling	3						
	Ironwood	5	Sapling	3						
	Sugar Maple	5	Sapling	2						
85	42100 - Plar	ited White F	Pine	Sawtimber We	ll 8.7	60	141-170	N/A		Limby and forked, old white pine stumps throughout. WP SI = 55.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-C	anopy Species	Density	Avg. Height	Size	
	Quaking Aspen	3	Pole/Log	9		Beech	Low	5 - 10 feet	Sapling	
	White Pine	95	Log/Pole	12 60	ВІ	ack Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	2	Pole	8						
86	42110 - Pla	nted Red Pi	ine	Sawtimber We	ll 23.2	57	111-140	N/A		Stand third row thinned in spring 2013 as part of Red Squirrely Pine (52- 003-12-01). Average BA is 130 from 3 plots.
	Canopy Species	% Cover	Size Class		Sub-C	anopy Species	Density	Avg. Height	Size	1000-12-01). Average DA 13-130 IIOIII 3 PIOIS.
	Red Pine	85	Log/Pole	12 57	F	Red Maple	Medium	5 - 10 feet	Sapling	
	Quaking Aspen	7	Pole	8		Beech	Medium	5 - 10 feet	Sapling	
	White Pine	5	Log	12						
	Red Maple	3	Pole/Log	9						
87	310 - Herbac	eous Open	land	Nonstocked	1.1	l	Jnspecified			GAS WELL - PUMP JACK. KNAPWEED. Enervest Operating State Hayes 12-25.



Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
88	4130	- Aspen	F	Poletimbe	er Poor	74.0	60	1-50	N/A		Mostly open with scattered aspen clones and cherry, poor quality. Aspen and cherry of all sizes, some mortality, BA is variable. Old white pine
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stumps scattered throughout. TA SI = 55.
	Quaking Aspen	75	Pole	8	60	Blac	ck Cherry	Medium	10 - 20 feet	Sapling	
	Black Cherry	20	Pole	7		Quak	ing Aspen	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	5	Pole	8							
89	4130	- Aspen	F	Poletimb	er Well	65.8	40	51-80	N/A		Scattered oak throughout, pocket of red pine included. BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	80	Pole	7	40	Re	d Maple	Medium	>20 feet	Sapling	
	White Pine	2	Log/Pole	12		Wh	nite Pine	Low	Variable	Sapling	
	Red Pine	1	Log	11		Wit	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Red Oak	5	Log	12							
	Quaking Aspen	12	Pole	6							
90	310 - Herbac	eous Open	land	Nonsto	cked	1.4	L	Inspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Operating State Hayes B 1-35.
91	42110 - Pla	nted Red P	ine S	Sawtimb		37.4	60	111-140	N/A		Thinned in 1996 and in 2016, understory if fairly open, good quality. Stand BA is 140 from 5 plots. RP SI = 60.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand BA is 140 from 5 piots. RF 31 = 00.
	Red Pine	100	Log/Pole	11	60	E	Beech	Low	5 - 10 feet	Sapling	
92	4117 - Mixed N	. Hardwood	I - Pine	Sawtimb	er Well	24.9	70	81-110	N/A		This stand is poor quality, clumpy beech and maple with aspen dying out
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Beech understory is in the north half, south half is mostly aspen near the trail. Old white pine stumps throughout, look to restart this stand.
	Sugar Maple	10	Log/Pole	10		Re	d Maple	Low	5 - 10 feet	Sapling	aum ota mino pino otampo unougitout, tootta tootattuno otama.
	Red Maple	25	Log/Pole	10		E	Beech	Medium	5 - 10 feet	Sapling	
	Beech	25	Log/Pole	11	70	Wł	nite Pine	Low	Variable	Sapling	
	Quaking Aspen	15	Log/Pole	11				'			
	White Pine	15	Log/Pole/XLo	g 11							
	Red Pine	5	Log/XLog	15							
	Black Cherry	5	Log/Pole	10							
93	3104 -	Degraded		Nonsto	cked	5.6	L	Inspecified			CPF OR BOOSTER STATION WITH SHED AND MULTIPLE WELLS. KNAPWEED. Buildings have been removed, wells still here. Enervest Operating State Hayes 5-36 SWD and 3-36
94	42110 - Pla	nted Red P	ine S	Sawtimb	er Well	36.9	57	171-200	N/A		Thinned in 1996, porky damage adjacent to hardwood stand is common.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Higher stocked areas are good quality (southeast portion). Understory is very dense in spots. Average BA is 178 from 5 plots. RP SI = 60.
	Basswood	5	Log/Pole	11			d Maple	Medium	10 - 20 feet	Sapling	very derise in spois. Average DA is 170 HOIII 3 PIOIS. RP SI = 60.
	Red Pine	95	Log/Pole	11	57		Beech	Low	5 - 10 feet	Sapling	
95	629 - Mixed nor	n-forested v	vetland	Nonsto	cked	108.4			No		Kolke Creek, mostly marsh and tag alder. Some scattered trees throughout.



Stand	d Level 4 C	over Type	S	ize De	ensity	Acres St	and Age B	SA Range	Managed S	ite	General Comments
96	310 - Herbac	eous Open	land	Nonst	ocked	1.2	U	Inspecified			GAS WELL - PUMP JACK. KNAPWEED. Enervest Operating State Hayes 14-25.
97	4130	- Aspen	;	Saplin	g Well	111.6	25 I	Immature	N/A		Scattered oak logs, almost a pole stand. BTA SI = 65.
	Canopy Species	% Cover	Size Class	DBH	I Age						
	Bigtooth Aspen	65	Sapling/Pole	4	25						
	Black Cherry	5	Sapling/Pole	4							
	Red Oak	5	Log	14							
	White Pine	3	Log/Pole	11							
	Paper Birch	2	Sapling/Pole	4							
	Quaking Aspen	15	Sapling/Pole	4							
	Beech	5	Sapling	4							
98	310 - Herbac	eous Open	land	Nonst	ocked	1.0	U	Inspecified			GAS WELL - PUMP JACK AND SHED. KNAPWEED. LINN Operating State Hayes B 3-35.
99	6225	5 - Bog		Nonst	ocked	1.0			No		Bog, nothing seeding in.
100	4110 - Sugar N	laple Assoc	ciation Sa		er Well	51.7	75	81-110	N/A		POOR QUALITY HDWD ON ROLLING HILLS. FORKS AND MULTI
100	4110 - Sugar M		Size Class	DBH	I Age	51.7 Sub-Canop			Avg. Height	Size	POOR QUALITY HDWD ON ROLLING HILLS. FORKS AND MULTI STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100
100		% Cover 60					py Species			Size Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES.
100	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Canop	py Species Maple	Density	Avg. Height		STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100
100	Canopy Species Sugar Maple	% Cover 60	Size Class Log/Pole	DB I	I Age	Sub-Canop Sugar I	py Species Maple ech	Density Low	Avg. Height 10 - 20 feet	Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100
100	Canopy Species Sugar Maple Red Maple	% Cover 60 5	Size Class Log/Pole Log/Pole	10 11	I Age	Sub-Canop Sugar I Bee	py Species Maple ech	Density Low Low	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100
100	Canopy Species Sugar Maple Red Maple Basswood	% Cover 60 5 25	Size Class Log/Pole Log/Pole Log/Pole	10 11 12	I Age	Sub-Canop Sugar I Bee	py Species Maple ech	Density Low Low	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100
	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted	% Cover 60 5 25 5 5	Size Class Log/Pole Log/Pole Log/Pole Pole Log/Pole	DBH 10 11 12 8 12	I Age	Sub-Canop Sugar I Bee	py Species Maple ech wood	Density Low Low	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100
	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted	% Cover	Size Class Log/Pole Log/Pole Log/Pole Pole Log/Pole	DBH 10 11 12 8 12 awtimb	75	Sub-Canop Sugar I Bee Ironw	Maple ech wood	Density Low Low Medium	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet	Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI
	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec	% Cover	Size Class Log/Pole Log/Pole Log/Pole Pole Log/Pole , Mixed Sa	DBH 10 11 12 8 12 awtimb	75 rer Well	Sub-Canop Sugar I Bee Ironw	Maple ech wood 60	Density Low Low Medium	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A	Sapling Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI
	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species	% Cover 60 5 25 5 5 white Pine iduous % Cover	Size Class Log/Pole Log/Pole Log/Pole Pole Log/Pole Size Class	DBH 10 11 12 8 12 awtimb	75 rer Well	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop	py Species Maple ech wood 60 py Species ech	Density Low Low Medium 111-140 Density	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI
	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species Quaking Aspen	% Cover 60 5 25 5 5 White Pine iduous % Cover 20	Size Class Log/Pole Log/Pole Pole Log/Pole Additional Salar Class Pole/Log	DBH 10 11 12 8 12 awtimb	r Well	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop	py Species Maple ech wood 60 py Species ech	Density Low Low Medium 111-140 Density Low	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet	Sapling Sapling Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI
101	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species Quaking Aspen White Pine Red Maple	% Cover 60 5 25 5 5 White Pine iduous % Cover 20 75	Size Class Log/Pole Log/Pole Log/Pole Pole Log/Pole Size Class Pole/Log Log/Pole Pole/Log	DBH 10 11 12 8 12 awtimb 9 10 9	r Well	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop Bee Black C	py Species Maple ech wood 60 py Species ech	Density Low Low Medium 111-140 Density Low	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet	Sapling Sapling Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI = 50. Aspen pockets mixed with open areas with cherry (U-type). Mostly poor
101	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species Quaking Aspen White Pine Red Maple	% Cover	Size Class Log/Pole Log/Pole Log/Pole Pole Log/Pole Size Class Pole/Log Log/Pole Pole/Log	DBH 10 11 12 8 12 awtimb 9 10 9 etimbe	rs Well Age 75 Ber Well Age 60	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop Bee Black C	py Species Maple ech wood 60 py Species ech Cherry	Density Low Low Medium 111-140 Density Low Low Low	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Sapling Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI = 50.
101	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species Quaking Aspen White Pine Red Maple	% Cover	Size Class Log/Pole Log/Pole Pole Log/Pole Additional Selection of the selection of th	DBH 10 11 12 8 12 awtimb 9 10 9 etimbe	er Well Age 60 r Mediur	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop Bee Black C	py Species Maple ech wood 60 py Species ech Cherry 50 py Species	Density Low Low Medium 111-140 Density Low Low 1-50	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet N/A	Sapling Sapling Sapling Size Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI = 50. Aspen pockets mixed with open areas with cherry (U-type). Mostly poor quality, some mortality. Cherry and maple coming up underneath the
101	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species Quaking Aspen White Pine Red Maple 4130 Canopy Species	% Cover	Size Class Log/Pole Log/Pole Pole Log/Pole A Mixed Size Class Pole/Log Log/Pole Pole/Log Size Class Pole/Log	10	er Well Age 60 r Mediur	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop Bee Black C m 43.2 Sub-Canop	py Species Maple ech wood 60 py Species ech Cherry 50 py Species Maple	Density Low Low Medium 111-140 Density Low Low 1-50 Density	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet N/A Avg. Height 4 - 10 feet N/A Avg. Height	Sapling Sapling Sapling Size Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI = 50. Aspen pockets mixed with open areas with cherry (U-type). Mostly poor quality, some mortality. Cherry and maple coming up underneath the
100	Canopy Species Sugar Maple Red Maple Basswood Ironwood Quaking Aspen 42101 - Planted Dec Canopy Species Quaking Aspen White Pine Red Maple 4130 Canopy Species Black Cherry	% Cover 60 5 25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Size Class Log/Pole Log/Pole Pole Log/Pole A Mixed Size Class Pole/Log Log/Pole Pole/Log Size Class Pole/Log	DBH 10 11 12 8 12 awtimb 9 10 9 etimbe DBH 7	er Well Age 60 Medium	Sub-Canop Sugar I Bee Ironw 6.0 Sub-Canop Bee Black C m 43.2 Sub-Canop Red M	py Species Maple ech wood 60 py Species ech Cherry 50 py Species Maple Cherry	Density Low Medium 111-140 Density Low Low 1-50 Density Low Low	N/A Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet N/A Avg. Height 10 - 20 feet	Sapling Sapling Sapling Size Sapling Sapling Sapling	STEM COMMON. SOME DECENT SCATTERED CROP TREES. ASPEN PRESENT BUT DYING OUT. HM SI = 55. STAND BA = 100 FROM 5 PLOTS. mostly poor quality, White pine is decent, small aspen pocket at the road intersection. WP SI = 50. Aspen pockets mixed with open areas with cherry (U-type). Mostly poor quality, some mortality. Cherry and maple coming up underneath the

Gaylord Mgt. Unit



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	BA Range	Managed S	Site	General Comments
103	42110 - Pla	inted Red F	Pine	Sawtimb	er Well	29.5	60	111-140	N/A		Thinned in 1996 and 2016, majority of understory is open but there are a
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	few thick spots. Average BA is 120 from 4 plots. RED PINE SI = 60.
	Red Pine	98	Log/Pole	11	60		Beech	Low	5 - 10 feet	Sapling	
	Black Cherry	2	Log/Pole	10		Bla	ck Cherry	Medium	5 - 10 feet	Sapling	
104	4311 - Pin	ie, Aspen M	∕lix F	Poletimber	Mediun	n 7.3	45	1-50	N/A		MOSTLY POOR QUALITY ASPEN. BEAVER ACTIVITY. DRAINAGE
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	ON WEST EDGE WITH THICK TAG ALDER. ASPEN SI = 50. poor quality open stand
	Quaking Aspen	50	Pole	7	45	Bla	ck Cherry	Medium	5 - 10 feet	Sapling	quality open stand
	White Pine	45	Pole/Log	9		Qua	king Aspen	Medium	5 - 10 feet	Sapling	
	Black Cherry	5	Pole	6		Т	ag Alder	Low	5 - 10 feet	Tall Shrub	
	-					W	hite Pine	Low	Variable	Sapling	
105	42110 - Pla	inted Red F	Pine	Sawtimb	er Well	100.2	60	141-170	N/A		Thinned in 2003, average BA is 160 from 11 plots. Stocking is variable,
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	decent quality, some areas are pretty limby. Close to needing a thin but should hold 10 years. RP SI = 55.
	Quaking Aspen	3	Pole/Log	9			Beech	Low	5 - 10 feet	Sapling	
	Red Pine	97	Log/Pole	10	60	Bla	ck Cherry	Low	5 - 10 feet	Sapling	
106	4119 - Mixed No	orthern Har	dwoods	Sawtimb		72.1	85	81-110	N/A		Mostly flat with rolling hills, a lot of large diameter good quality red oak. Selection harvest completed in 2013, average BA is 85 from 5 plots.
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	Seven of the large gaps created during the harvest were sprayed in 2017,
	Sugar Maple	35	Log/Pole				Beech	Full	5 - 10 feet	Sapling	with the exception of these gaps the understory is full of beech, thickest
	Red Maple	26	Log/Pole				gar Maple	Low	Variable	Sapling	at the south end. HM SI = 60.
	Beech	1	Log/XLog	_			ed Maple	Low	Variable	Sapling	
	Red Oak	35	XLog/Log		85	Ir	onwood	Low	5 - 10 feet	Sapling	
	Quaking Aspen	1	Log	12							
	White Pine	2	Log/Pole	12							
107	4130	- Aspen	F	Poletimber	Mediun	n 49.0	50	51-80	N/A		Mostly sparse, poor quality aspen on flat ground. South end has an
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	inclusion of maple and beech with a few aspen pockets. Scattered white pine throughout. BTA SI = 55.
	Red Maple	20	Pole/Log			Re	ed Maple	Low	5 - 10 feet	Sapling	pino anoughout Birroi - oo.
	Red Oak	5	Log/Pole	13		W	hite Pine	Low	10 - 20 feet	Sapling	
	Quaking Aspen	40	Pole/Log	9	50	Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	25	Log/Pole	10		Qua	king Aspen	Medium	5 - 10 feet	Sapling	
	White Pine	5	Log/Pole	11			Beech	Low	5 - 10 feet	Sapling	
	Sugar Maple	5	Pole/Log	9				1			
108	622	5 - Bog		Nonsto	cked	2.9			No		Bog with a few trees seeding in.



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
109	4191 - Mixed Upla Co	and Decidu onifer	ous with	Sawtimb	er Well	36.9	90	81-110	N/A		Rolling hills, white pine has a patchy distribution across the stand. Hardwood is poor quality, clumpy, beech is declining and falling out.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Pockets of aspen scattered throughout.
	Red Maple	30	Log/Pole	12		Е	Beech	High	5 - 10 feet	Sapling	
	Beech	25	Log/Pole	12		Wite	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	White Pine	30	Log/XLog/Pol	e 15	90	Sug	ar Maple	Low	Variable	Sapling	
	Quaking Aspen	10	Log/Pole	10							
	Ironwood	3	Pole	8							
110	42110 - Pla	nted Red P	ine S	Sawtimb	er Well	27.0	57	171-200	N/A		Thinned in 1996, some pockets of porky damage, thick hardwood
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	understory. BA is 200 from 5 plots.RP SI = 60.
	Bigtooth Aspen	3	Log/Pole	12		Sug	ar Maple	Medium	10 - 20 feet	Sapling	
	Red Pine	95	Log/Pole	12	57	Red	d Maple	Medium	5 - 10 feet	Sapling	
	Basswood	2	Log	12		Quak	ing Aspen	Medium	10 - 20 feet	Sapling	
						E	Beech	Medium	5 - 10 feet	Sapling	
111	42100 - Plan			Sawtimb	er Well	20.7	60	111-140	N/A		Mostly planted white pine, a few pockets of red pine mixed in the planting. Wet drainage through the middle of the stand. WP SI = 55.
	Canopy Species	% Cover	Size Class	DBF	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	planting. Wet drainage through the middle of the stand. Wif of = 55.
	Quaking Aspen	10	Pole/Log	9		Bal	sam Fir	Low	10 - 20 feet	Sapling	
	White Pine	75	Log/Pole	13	60	Wh	ite Pine	Low	5 - 10 feet	Sapling	
	Red Pine	15	Log/Pole	12							
112	42101 - Planted Dec	White Pine	e, Mixed F	Poletimb	er Well	14.1	60	141-170	N/A		Decent white pine, aspen poor quality. WP SI = 50.
			0: 0:						A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	% Cover	Pole/Log	DB H	I Age		d Maple	Density Medium	5 - 10 feet	Size Sapling	
	• • • •				I Age	Red					
	Quaking Aspen	15	Pole/Log	9	60	Rec	d Maple	Medium	5 - 10 feet	Sapling	
113	Quaking Aspen Bigtooth Aspen White Pine	15 5	Pole/Log Pole/Log	9	60	Rec	d Maple Beech k Cherry	Medium Low	5 - 10 feet 5 - 10 feet	Sapling Sapling	TAG ALDER AROUND EDGES. SCATTERED TAMARACK AND few WHITE PINE
	Quaking Aspen Bigtooth Aspen White Pine 6225	15 5 80	Pole/Log Pole/Log Pole/Log	9 9	60 cked	Red E Blac	d Maple Beech k Cherry	Medium Low Low	5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling	WHITE PINE
	Quaking Aspen Bigtooth Aspen White Pine 6225	15 5 80 5 - Bog	Pole/Log Pole/Log Pole/Log	9 9 9 Nonsto	60 cked	8.4	d Maple Beech k Cherry	Medium Low Low mmature	5 - 10 feet 5 - 10 feet 5 - 10 feet No	Sapling Sapling	WHITE PINE
	Quaking Aspen Bigtooth Aspen White Pine 6225	15 5 80 5 - Bog	Pole/Log Pole/Log Pole/Log	9 9 9 Nonsto	60 ocked	8.4 10.9 Sub-Car	d Maple Seech k Cherry	Medium Low Low 81-110	5 - 10 feet 5 - 10 feet 5 - 10 feet No	Sapling Sapling Sapling	WHITE PINE
	Quaking Aspen Bigtooth Aspen White Pine 6225 4311 - Pin Canopy Species	15 5 80 5 - Bog e, Aspen M	Pole/Log Pole/Log Pole/Log Size Class	9 9 9 Nonsto	60 ocked er Well	8.4 10.9 Sub-Car	d Maple Beech k Cherry 70 nopy Species	Medium Low Low Medium Low Low Medium Low Low Density	5 - 10 feet 5 - 10 feet 5 - 10 feet No N/A Avg. Height	Sapling Sapling Sapling	WHITE PINE
	Quaking Aspen Bigtooth Aspen White Pine 6225 4311 - Pin Canopy Species Quaking Aspen	15 5 80 5 - Bog e, Aspen M % Cover 48	Pole/Log Pole/Log Pole/Log Mix Size Class Log/Pole	9 9 9 Nonsto	60 ocked er Well	8.4 10.9 Sub-Car Sug Blace	d Maple Beech k Cherry 70 nopy Species ar Maple	Medium Low Low Medium Low Low Medium Low Low Low Medium Low Low Low Low Low Medium Low	5 - 10 feet 5 - 10 feet 5 - 10 feet No N/A Avg. Height 10 - 20 feet	Sapling Sapling Sapling Sapling	WHITE PINE
113	Quaking Aspen Bigtooth Aspen White Pine 6228 4311 - Pin Canopy Species Quaking Aspen White Pine	15 5 80 5 - Bog e, Aspen M **Cover** 48 45	Pole/Log Pole/Log Pole/Log flix Size Class Log/Pole Log/Pole	9 9 9 Nonsto Sawtimb DBH 11 13	60 ocked er Well	8.4 10.9 Sub-Car Sug Blace	d Maple Beech k Cherry 70 nopy Species ar Maple k Cherry	Medium Low Low Medium Low Low Medium Low Low Low Medium Low Low Low Low Low Low	5 - 10 feet 5 - 10 feet 5 - 10 feet No N/A Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling Sapling Size Sapling Sapling	WHITE PINE
	Quaking Aspen Bigtooth Aspen White Pine 6225 4311 - Pin Canopy Species Quaking Aspen White Pine Red Maple	15 5 80 5 - Bog e, Aspen M % Cover 48 45 5	Pole/Log Pole/Log Pole/Log flix Size Class Log/Pole Log/Pole Pole/Log	9 9 9 Nonsto Sawtimb DBH 11 13 9	60 ocked er Well	8.4 10.9 Sub-Car Sug Blace Ire	d Maple Beech k Cherry 70 nopy Species ar Maple k Cherry nwood	Medium Low Low Medium Low Low Medium 81-110 Density Low Low Medium	5 - 10 feet 5 - 10 feet 5 - 10 feet No N/A Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet	Sapling Sapling Sapling Size Sapling Sapling Sapling	



Stand	d Level 4 Co	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
115	42110 - Planted Red Pine			Sawtimber Well		41.9 60		111-140	N/A		Thinned in 1996 and 2016, north half has some hardwood in the
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	understory and south half is pretty open. Average BA is 125 from 4 plots. RP SI = 60.
	Red Pine	100	Log/Pole	11	60	Red	d Maple	Low	5 - 10 feet	Sapling	
						В	eech	Low	5 - 10 feet	Sapling	
						Blac	k Cherry	Low	5 - 10 feet	Sapling	
116	310 - Herbaceous Openland		land	Nonstocked		2.8 Un		nspecified			GAS WELL - PUMP JACK AND SHED. ADJACENT TO AN OLD WELL SITE WITH SCATTERED CHERRY. BOTH HAVE KNAPWEED. LINN Operating State Hayes D 1-35.
117	310 - Herbaco	eous Open	land	Nonsto	cked	2.1			No		Old well site, red pine seeding in.
118	6129 - Mixed Co Fo	oniferous Lo orest	owland	Sawtimb	er Well	18.1	100	81-110	N/A		Lowland conifer stand, small area of upland included in the east half of the stand. TAM SI = 55.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Balsam Fir	20	Pole	7		Bals	sam Fir	Medium	10 - 20 feet	Sapling	
No	orthern White Cedar	10	Pole	7		Tag	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Tamarack	40	Log/Pole	12	100						•
	Black Spruce	22	Pole/Log	9							
	White Pine	5	Log/Pole	12							
	Quaking Aspen	3	Pole/Log	9							
119	310 - Herbace	eous Open	land	Nonsto	cked	2.1	Ur	nspecified			GAS WELL - PUMP JACK AND PROPANE TANK. KNAPWEED.
											LAMBDA Energy State Hayes 4-36.
120	42101 - Planted V	White Pine	, Mixed	Poletimb	er Well	17.4	60	171-200	N/A		Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55.
120		iduous	, Mixed		er Well		60	171-200 Density	N/A Avg. Height	Size	Poor quality white pine and declining aspen, should look to final harvest
120	Deci	iduous	,			Sub-Can				Size Sapling	Poor quality white pine and declining aspen, should look to final harvest
	Deci	iduous % Cover	Size Class	DBH		Sub-Can	opy Species	Density	Avg. Height		Poor quality white pine and declining aspen, should look to final harvest
	Canopy Species Red Maple	% Cover	Size Class Pole/Log	DBH		Sub-Can B Red	opy Species	Density Low	Avg. Height 5 - 10 feet	Sapling	Poor quality white pine and declining aspen, should look to final harvest
	Canopy Species Red Maple Quaking Aspen	% Cover	Size Class Pole/Log Pole/Log	DBH 9 9	Age	Sub-Can B Rec Suga	nopy Species eech d Maple	Density Low Medium	Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest
	Canopy Species Red Maple Quaking Aspen White Pine Black Cherry 4112 - Maple,	% Cover 10 25 62 3	Size Class Pole/Log Pole/Log Pole/Log Log/Pole	DBH 9 9 9 10 Sawtimb	60 er Well	Sub-Can B Rec Suga	eech d Maple ar Maple	Density Low Medium Low	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55. Mostly rolling hills with some flat areas. Beech was salvaged in 2016, a few left with green paint on them. Understory is now beech dominated.
	Canopy Species Red Maple Quaking Aspen White Pine Black Cherry 4112 - Maple,	Cover	Size Class Pole/Log Pole/Log Pole/Log Log/Pole	DBH 9 9 9 10 Sawtimb	60	Sub-Can B Rec Suga Blace	eech Maple ar Maple k Cherry	Density Low Medium Low Medium	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55. Mostly rolling hills with some flat areas. Beech was salvaged in 2016, a few left with green paint on them. Understory is now beech dominated. Stocking is variable due to distribution of the beech. North end near stand
	Canopy Species Red Maple Quaking Aspen White Pine Black Cherry 4112 - Maple, Asso	% Cover 10 25 62 3 Beech, Chociation	Size Class Pole/Log Pole/Log Pole/Log Log/Pole	DBH 9 9 9 10 Sawtimb	60 er Well	Sub-Can B Rec Suga Black 92.7 Sub-Can	eech d Maple ar Maple k Cherry	Density Low Medium Low Medium S1-80	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A	Sapling Sapling Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55. Mostly rolling hills with some flat areas. Beech was salvaged in 2016, a few left with green paint on them. Understory is now beech dominated.
	Canopy Species Red Maple Quaking Aspen White Pine Black Cherry 4112 - Maple, Asso Canopy Species	% Cover 10 25 62 3 Beech, Chociation % Cover	Size Class Pole/Log Pole/Log Pole/Log Log/Pole perry Size Class	DBH 9 9 9 10 Sawtimb	60 er Well	Sub-Can B Rec Suga Black 92.7 Sub-Can	a popy Species eech d Maple ar Maple k Cherry 85 popy Species	Density Low Medium Low Medium 51-80 Density	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Sapling Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55. Mostly rolling hills with some flat areas. Beech was salvaged in 2016, a few left with green paint on them. Understory is now beech dominated. Stocking is variable due to distribution of the beech. North end near stand 109 has a little higher white pine component in the overstory. Average BA
	Canopy Species Red Maple Quaking Aspen White Pine Black Cherry 4112 - Maple, Asso Canopy Species Sugar Maple	% Cover 10 25 62 3 Beech, Chociation % Cover	Size Class Pole/Log Pole/Log Pole/Log Log/Pole perry Size Class Log/Pole	9 9 9 10	60 er Well	Sub-Can B Rec Suga Black 92.7 Sub-Can	a popy Species eech d Maple ar Maple k Cherry 85 popy Species	Density Low Medium Low Medium 51-80 Density	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Sapling Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55. Mostly rolling hills with some flat areas. Beech was salvaged in 2016, a few left with green paint on them. Understory is now beech dominated. Stocking is variable due to distribution of the beech. North end near stand 109 has a little higher white pine component in the overstory. Average BA
	Canopy Species Red Maple Quaking Aspen White Pine Black Cherry 4112 - Maple, Asso Canopy Species Sugar Maple Red Maple	## Cover	Size Class Pole/Log Pole/Log Pole/Log Log/Pole Derry Size Class Log/Pole Log/Pole	DBH 9 9 10 Sawtimb 10 11	60 er Well	Sub-Can B Rec Suga Black 92.7 Sub-Can	a popy Species eech d Maple ar Maple k Cherry 85 popy Species	Density Low Medium Low Medium 51-80 Density	Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Sapling Sapling Sapling	Poor quality white pine and declining aspen, should look to final harvest this stand. WP SI = 55. Mostly rolling hills with some flat areas. Beech was salvaged in 2016, a few left with green paint on them. Understory is now beech dominated. Stocking is variable due to distribution of the beech. North end near stand 109 has a little higher white pine component in the overstory. Average BA



Stand	d Level 4 Cover Type			Size De	nsity	Acres Stand Age BA Range			Managed Site		White pine, deciduous mix. Beech is declining and falling out, a few open	
122	4319 - Mixed Upland Forest		Sawtimber Well		22.4 70		81-110					
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	areas within the stand. Poor quality maple. WP SI = 50.	
	Red Maple	20	Log	14		Sug	gar Maple	Medium	5 - 10 feet	Sapling		
	Quaking Aspen	10	Pole/Log	9		I	Beech	Medium	10 - 20 feet	Sapling		
	White Pine	55	Log	15	70	Wh	nite Pine	Low	Variable	Sapling		
	Beech	10	Log	12							-	
	Red Oak	5	Log	15								
123	310 - Herbad	eous Open	land	Nonsto	cked	3.0	ι	Jnspecified			GAS WELL - VALVE SYSTEM AND PROPANE TANK. LAMBDA Energy State Hayes 1-36 HD-1.	
124	4130	- Aspen		Sapling Well		9.6	16 I	Immature	N/A		Good regeneration, open areas filling in. ASPEN SI = 60.	
	Canopy Species	% Cover	Size Class	DBH	Age							
	Red Maple	10	Sapling	1								
	Beech	15	Sapling	2								
	Quaking Aspen	20	Sapling	3								
	Bigtooth Aspen	50	Sapling	3	16							
	Black Cherry	5	Sapling	3								
125	4130 - Aspen		Poletimber Well		59.0	47	81-110	N/A		GOOD QUALITY THICK ASPEN REGEN. FLAT. MIXED WITH MAR		
	Canopy Species % Cover Size Class		DBH Age		Sub-Canopy Species		Density	Avg. Height Size		SAPS. MOVING WEST TA PRESENCE IS GREATER. SCATTERED PB. BTA SI = 60. STAND BA = 80 FROM 2 PLOTS. nice stand,		
	Bigtooth Aspen	75	Pole/Log	9	47	Sug	gar Maple	Medium	>20 feet	Sapling	scattered oak east end and better quality bra west end lower quality qa	
	Quaking Aspen	20	Pole	8		Iro	onwood	Low	>20 feet	Sapling		
	Red Oak	1	Log/XLog	17		-	Beech	Low	Variable	Sapling		
	Paper Birch	2	Pole	8						1		
	Red Maple	2	Pole	8								
126	310 - Herbac	eous Open	land	Nonsto	cked	1.6	ι	Jnspecified			NEW GAS WELL - PUMP JACK. KNAPWEED. LAMBDA Energy State Hayes 5-36 HD1	
407	310 - Herbad	eous Open	land	Nonsto	cked	2.1			No		GAS PAD NO LONGER OCCUPIED. CLEAN OPENING. filling in with some maple	
127												
127	4111 - S.Maple, H	ard Mast As	ssociation	Sawtimb	er Well	72.7	105	111-140	N/A		Thinned in 2003, good quality stand. Beech mostly dominates the	
	4111 - S.Maple, H		ssociation Size Class		er Well		105 nopy Species		N/A Avg. Height	Size	understory but there are some good pockets of sugar maple	
	• •					Sub-Ca				Size Sapling		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca Sug	nopy Species	Density	Avg. Height		understory but there are some good pockets of sugar maple regeneration. Some scattered oak in the south half, beech BA is higher in	



Stand	Level 4 Co	over Type		Size De	nsity	Acres Stan	d Age BA	A Range	Managed S	ite	General Comments
129	4130 -	- Aspen		Sapling	Well	48.2	7 In	mmature	N/A		Harvested in 2013, mostly thick aspen, a few more open areas with beech/maple. Rolling hills especially the west half.
	Canopy Species	% Cover	Size Class	DBH	Age						beech/maple. Rolling fills especially the west fiall.
I	Bigtooth Aspen	60	Sapling	1	7						
(Quaking Aspen	10	Sapling	1							
	Beech	15	Sapling	1							
	Red Maple	10	Sapling	1							
	Black Cherry	3	Sapling	1							
	Sugar Maple	2	Sapling	1							
130	4130 -	- Aspen		Sapling Well		53.5	7 In	mmature	N/A		Harvested in 2013, a few open areas with rubus. East polygon is mostly a
	Canopy Species	% Cover	Size Class	DBH	Age						steep south facing slope, some areas in the middle were not harvested because it was too steep.
(Quaking Aspen	40	Sapling	1	7						because it was too steep.
	Ironwood	5	Sapling	1							
	Beech	5	Sapling	1							
1	Bigtooth Aspen	30	Sapling	1							
	Red Maple	10	Sapling	1							
	Sugar Maple	10	Sapling	1							
131	42101 - Planted \		, Mixed	Sawtimb	er Well	1.6 6	30 1	111-140	N/A		Small pocket of white pine, mixed with aspen, maple, and a few oak.
		duous % Cover	Sizo Class	DRH	Δαρ	Sub-Canony	Snacias		· 	Siza]
	Canopy Species	% Cover	Size Class		Age	Sub-Canopy		Density	Avg. Height	Size	
	Canopy Species Red Maple	% Cover	Pole/Log	9	Age	Sub-Canopy Beech			· 	Size Sapling	
	Canopy Species Red Maple Quaking Aspen	% Cover 5 10	Pole/Log Pole	9				Density	Avg. Height		
	Canopy Species Red Maple	% Cover	Pole/Log	9	60			Density	Avg. Height		
	Canopy Species Red Maple Quaking Aspen White Pine	% Cover 5 10 80 5	Pole/Log Pole Log/Pole Log	9 8 11	60	Beech		Density	Avg. Height		Thinned in 2013, not much in the understory. Average BA is 140 from 9
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak	% Cover 5 10 80 5	Pole/Log Pole Log/Pole Log	9 8 11 12 Sawtimb	60	Beech	60 1	Density Low	Avg. Height 5 - 10 feet		
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar	% Cover 5 10 80 5	Pole/Log Pole Log/Pole Log	9 8 11 12 Sawtimb	60 er Well	Beech 37.9 6	50 1 Species	Density Low	Avg. Height 5 - 10 feet N/A	Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar Canopy Species	% Cover 5 10 80 5 mted Red P % Cover	Pole/Log Pole Log/Pole Log ine Size Class	9 8 11 12 Sawtimb	60 er Well	37.9 6 Sub-Canopy	50 1 Species erry	Density Low 111-140 Density	Avg. Height 5 - 10 feet N/A Avg. Height	Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar Canopy Species Red Oak	% Cover 5 10 80 5 mted Red P % Cover 3	Pole/Log Pole Log/Pole Log ine Size Class	9 8 11 12 Sawtimb DBH	60 er Well	37.9 6 Sub-Canopy Black Che	50 1 Species erry	Density Low 111-140 Density Low	Avg. Height 5 - 10 feet N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar Canopy Species Red Oak Red Pine Quaking Aspen 4112 - Maple,	% Cover	Pole/Log Pole Log/Pole Log ine Size Class Log Log/Pole Pole	9 8 11 12 Sawtimb DBH 13 10 9	60 er Well Age 60 er Well	37.9 6 Sub-Canopy Black Che Beech Red Map	Species erry ole	Density Low 111-140 Density Low Low	N/A Avg. Height 10 - 20 feet 5 - 10 feet N/A N/A	Size Sapling Sapling Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9 plots. Stand thinned in 2013 as part of Oaky Smokey Hardwoods. Beech was also salvaged at time of harvest, so BA is variable and low in a lot of
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar Canopy Species Red Oak Red Pine Quaking Aspen 4112 - Maple,	% Cover	Pole/Log Pole Log/Pole Log ine Size Class Log Log/Pole Pole	9 8 11 12 Sawtimb DBH 13 10 9 Sawtimb	60 er Well Age 60 er Well Age	37.9 6 Sub-Canopy Black Che Beech Red Map	Species erry ole	Density Low 111-140 Density Low Low Low	N/A Avg. Height 10 - 20 feet 5 - 10 feet N/A Avg. Height Avg. Height Avg. Height	Size Sapling Sapling Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9 plots. Stand thinned in 2013 as part of Oaky Smokey Hardwoods. Beech was also salvaged at time of harvest, so BA is variable and low in a lot of spots this stand. Beech dominates the understory, average BA is 65 from
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar Canopy Species Red Oak Red Pine Quaking Aspen 4112 - Maple, Asso	% Cover	Pole/Log Pole Log/Pole Log sine Size Class Log Log/Pole Pole Pole serry Size Class Log/Pole	9 8 11 12 Sawtimb DBH 13 10 9	60 er Well Age 60 er Well	37.9 6 Sub-Canopy Black Che Beech Red Map	Species erry ole Species Species	Density Low 111-140 Density Low Low Low 51-80	N/A Avg. Height 10 - 20 feet 5 - 10 feet N/A N/A	Sapling Size Sapling Sapling Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9 plots. Stand thinned in 2013 as part of Oaky Smokey Hardwoods. Beech was also salvaged at time of harvest, so BA is variable and low in a lot of
132	Canopy Species Red Maple Quaking Aspen White Pine Red Oak 42110 - Plar Canopy Species Red Oak Red Pine Quaking Aspen 4112 - Maple, Asso Canopy Species	% Cover	Pole/Log Pole Log/Pole Log ine Size Class Log Log/Pole Pole Pole	9 8 11 12 Sawtimb DBH 13 10 9 Sawtimb	60 er Well Age 60 er Well Age	37.9 6 Sub-Canopy Black Che Beech Red Map 15.4 8 Sub-Canopy	Species erry ole Species Species	Density Low Density Low Low Low Low Density Density	N/A Avg. Height 10 - 20 feet 5 - 10 feet N/A Avg. Height Avg. Height Avg. Height	Size Sapling Sapling Sapling Sapling	Thinned in 2013, not much in the understory. Average BA is 140 from 9 plots. Stand thinned in 2013 as part of Oaky Smokey Hardwoods. Beech was also salvaged at time of harvest, so BA is variable and low in a lot of spots this stand. Beech dominates the understory, average BA is 65 from