

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52033 Entry Year 2022 Acreage: 1,908

County Otsego

Management Area: Jordan Valley

Revision Date: 2020-03-08

Stand Examiner: Zach Crew

Legal Description:

T31N R04W Sec. 5, 6 and 7

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 compartments topography ranges from flat on the east half to rolling hills and steep slopes to the west. Dominant upland soil types include East Lake sand, Rubicon sand, Leelanau loamy sand and Mancelona Loamy sand. The better quality soils are well drained and moderately permeable, occurring on moraines. The remaining upland soils are somewhat excessively drained, dominating outwash plains and moraines. We areas are rare in this compartment. The few that occur are very poorly drained Lupton Muck.

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

This compartment is solid State ownership, with another large black of State land to the west. Surrounding private ownership varies in parcel size with heavy agricultural emphasis. Gas development is common in this area.

Unique Natural Features:

The South Branch of the Boyne River is located in the SW corner of the compartment.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The South Branch of the Boyne River is a cold water trout stream.

Watershed and Fisheries Considerations:

This compartment is in the Boyne River watershed, near the South Branch of the Boyne River's headwaters. No treatments appear to be directly adjacent to surface waters.

Wildlife Habitat Considerations:

Northern hardwoods make up the majority of this compartment which provides habitats for a variety of wildlife species that provide recreation opportunities in the form of hunting and birding.

Mineral Resource and Development Concerns and/or Restrictions

Active sand/gravel pits are not located just over one mile to the west, and there is good sand & gravel potential within the compartment. The compartment has been developed for Antrim Shale gas production and all state-owned mineral rights in the compartment are currently under lease and in production. There is currently low potential for any additional oil & gas development in this area in the near future. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

Access is good throughout the compartment, there are plenty of main year round county roads, as well as gas well roads.

Survey Needs:

None

Recreational Facilities and Opportunities:

This compartment contains portions of the Michigan Cross Country Cycle Trail (MCCCT) and Chandler Hills Snowmobile Trail.

Fire Protection:

Fire protection for this area is provided out of the Gaylord Field Office. Forest types in this area do not lend themselves to

large scale fire events.

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

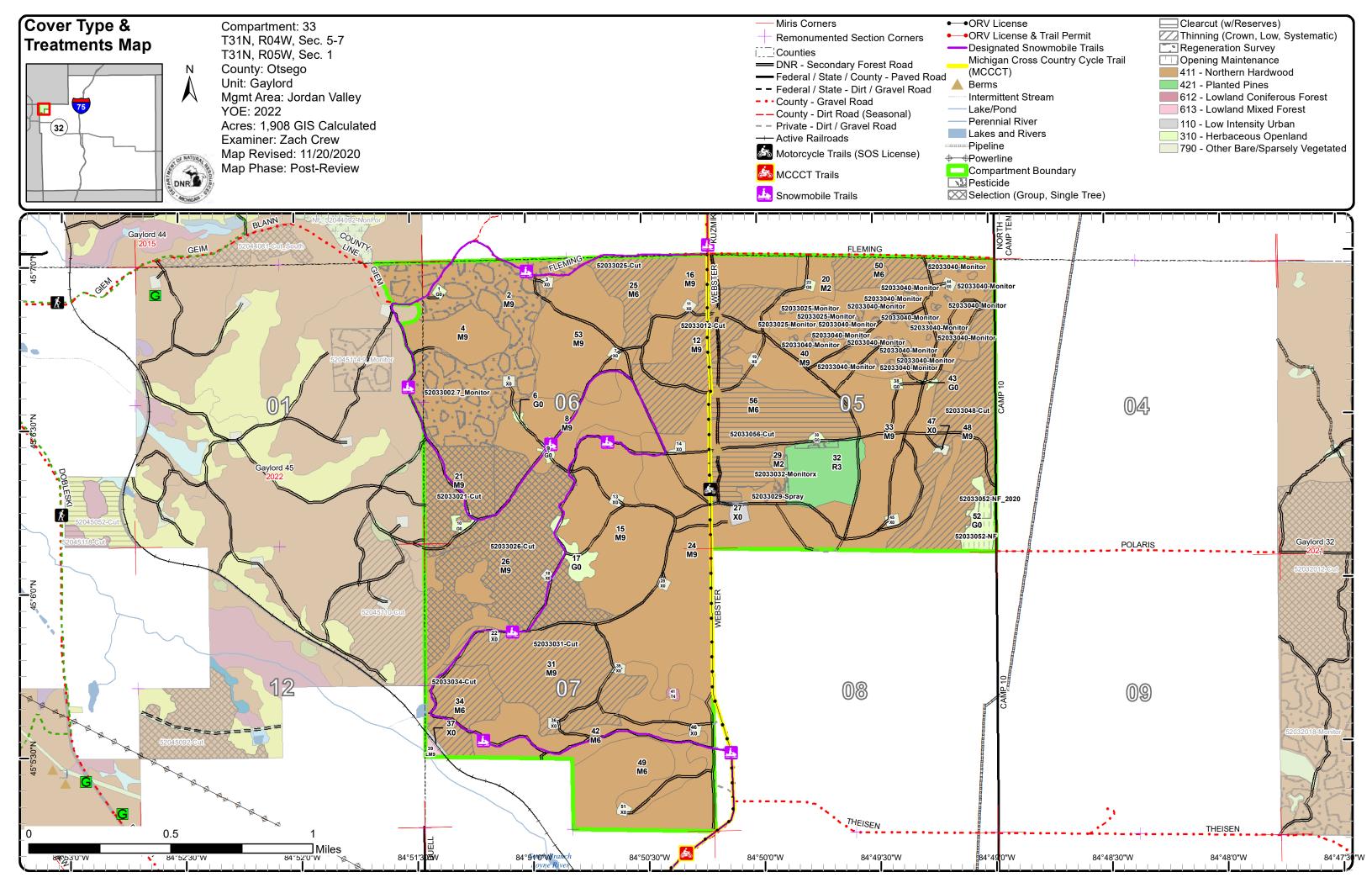
The following information is displayed, where pertinent, on the attached compartment maps:

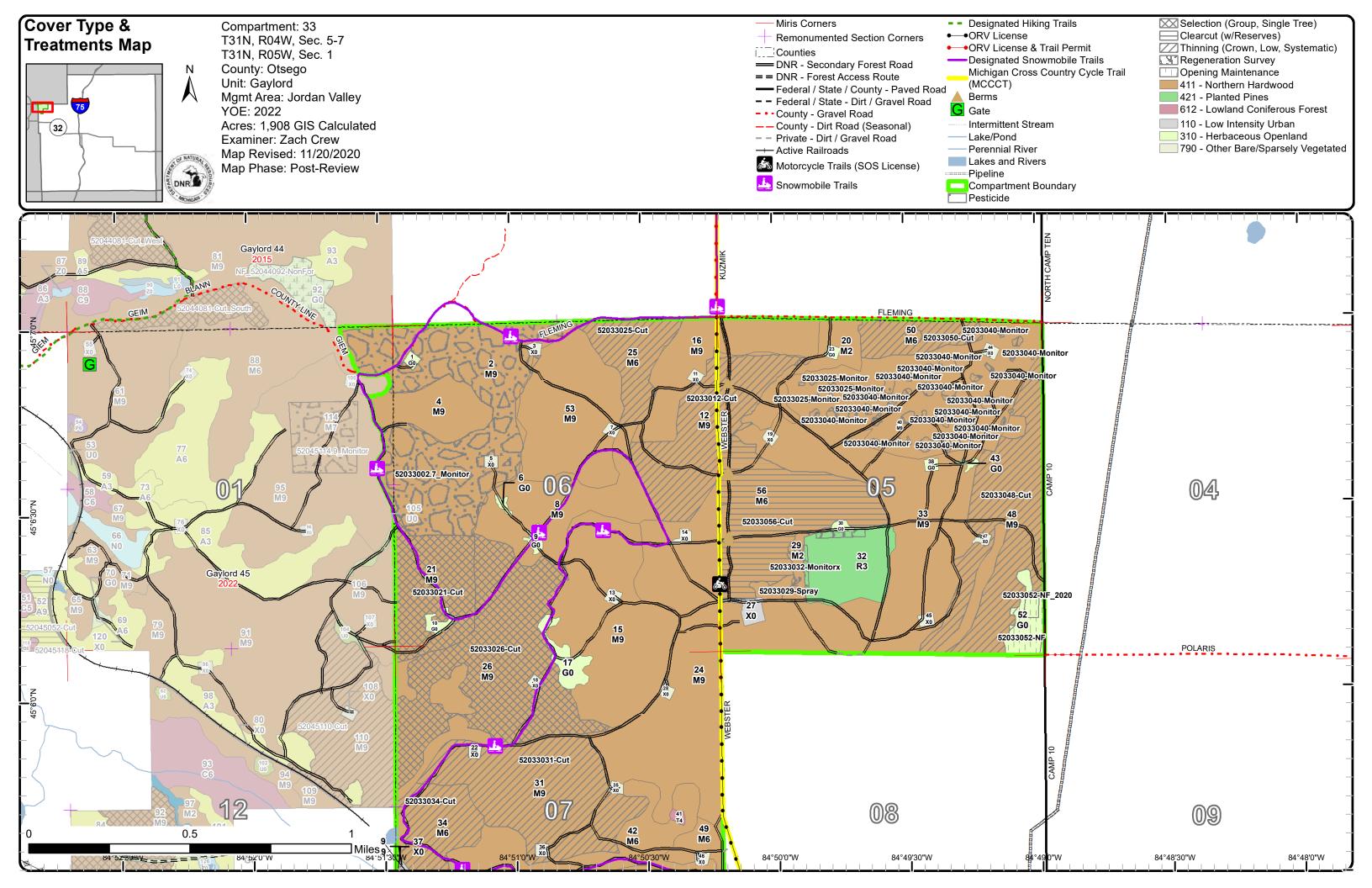
Base feature information, stand boundaries, cover types, and numbers

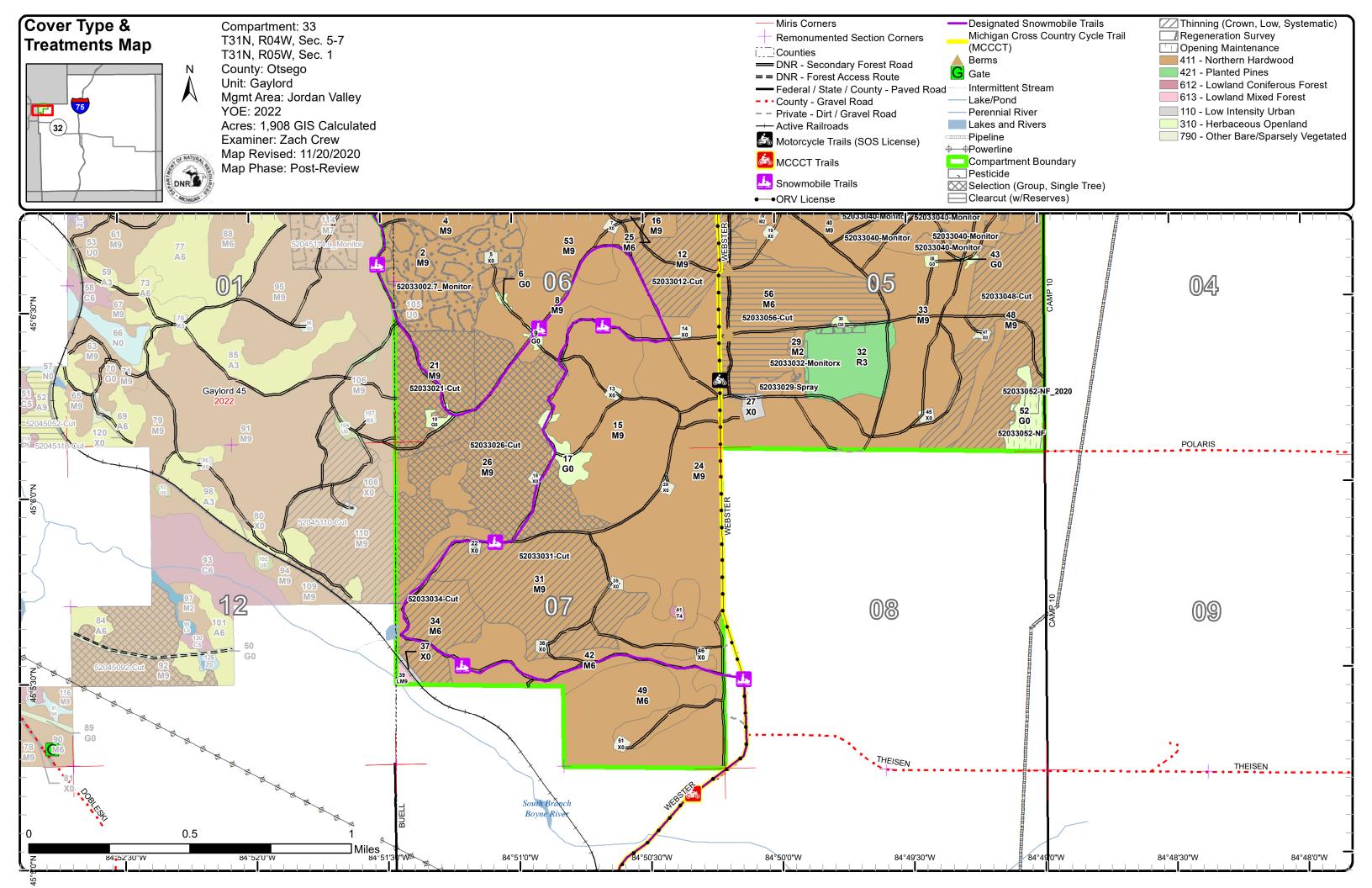
Proposed treatments

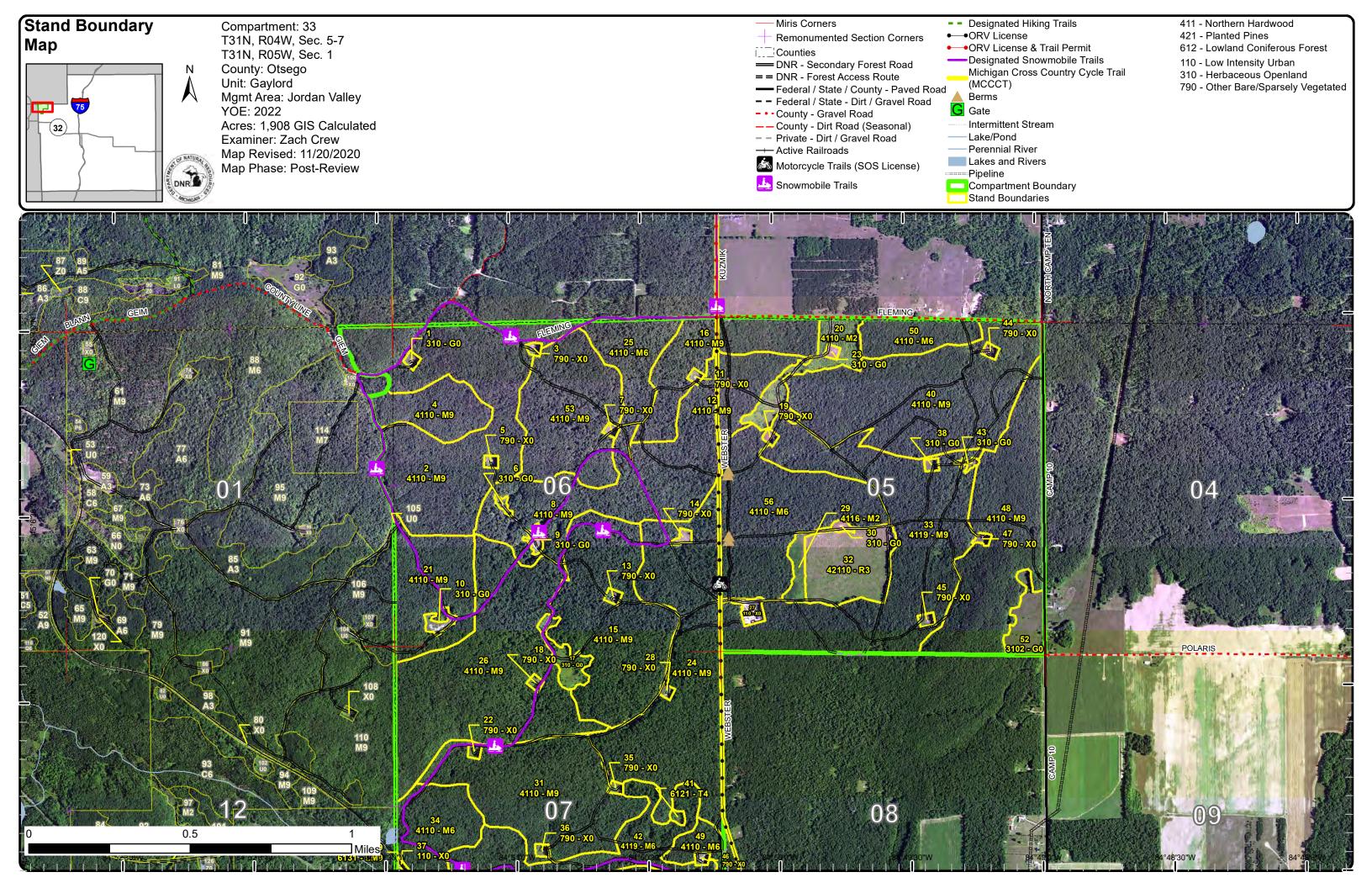
Site condition boundaries

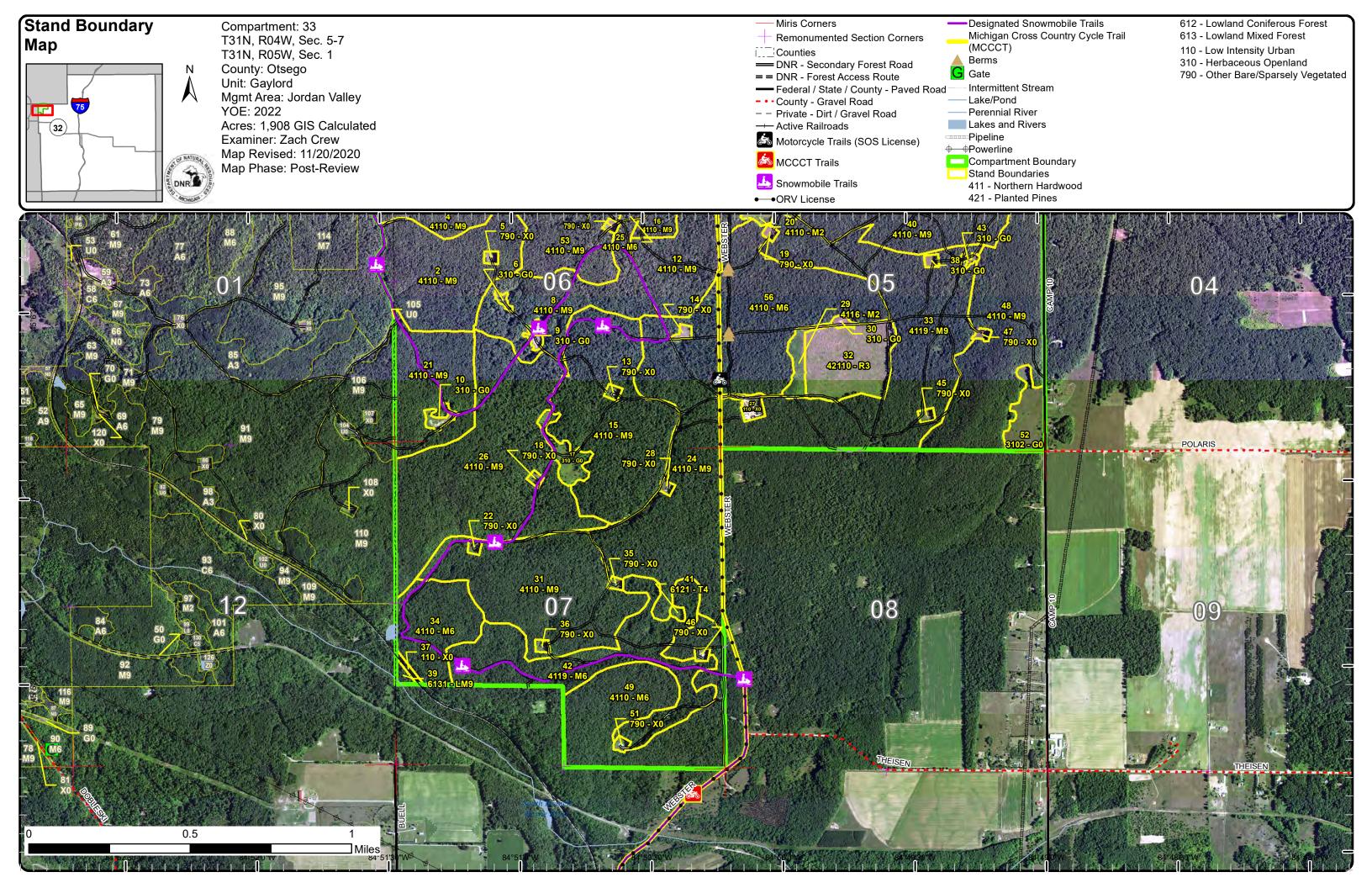
Details on the road access system

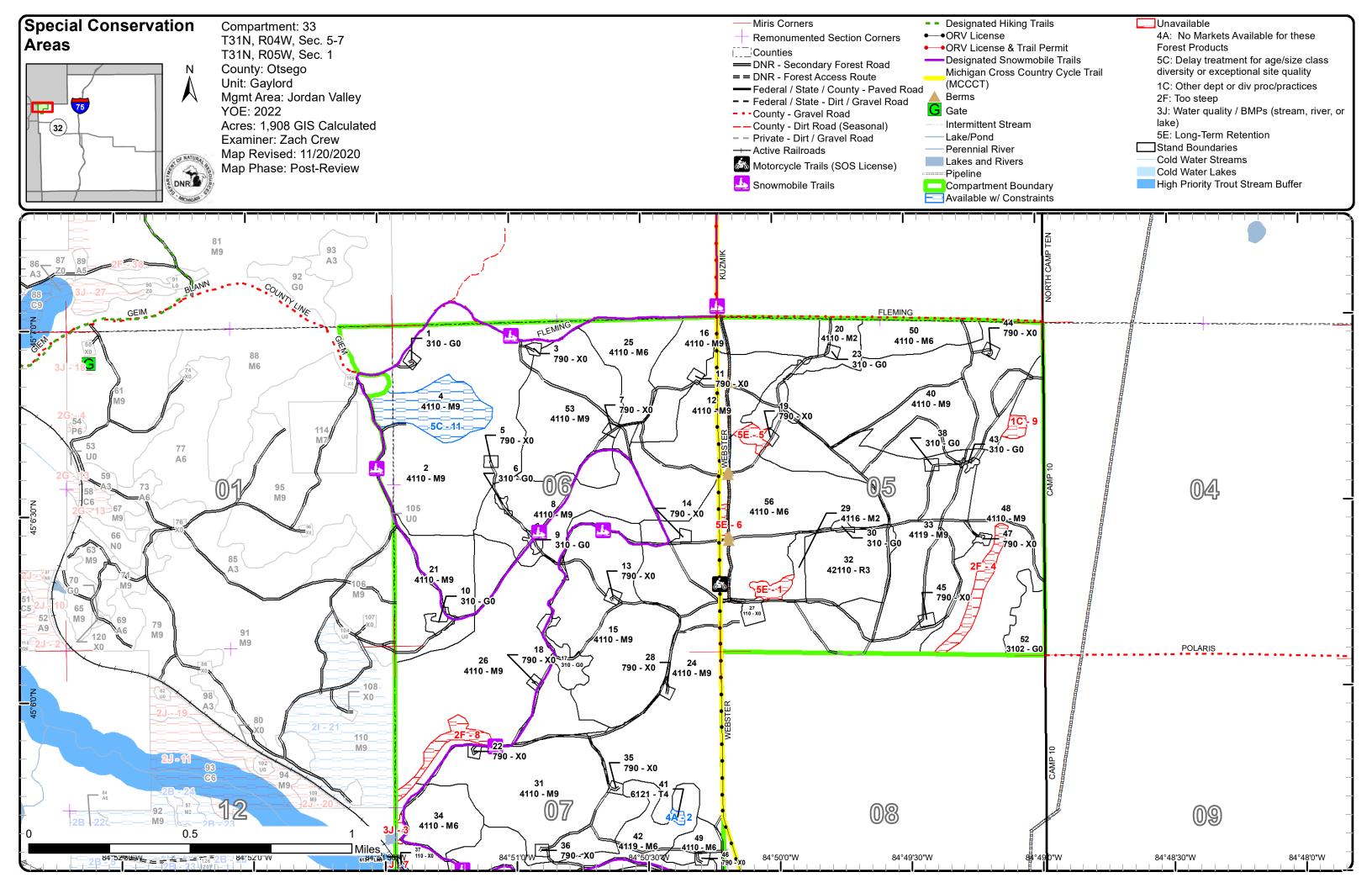


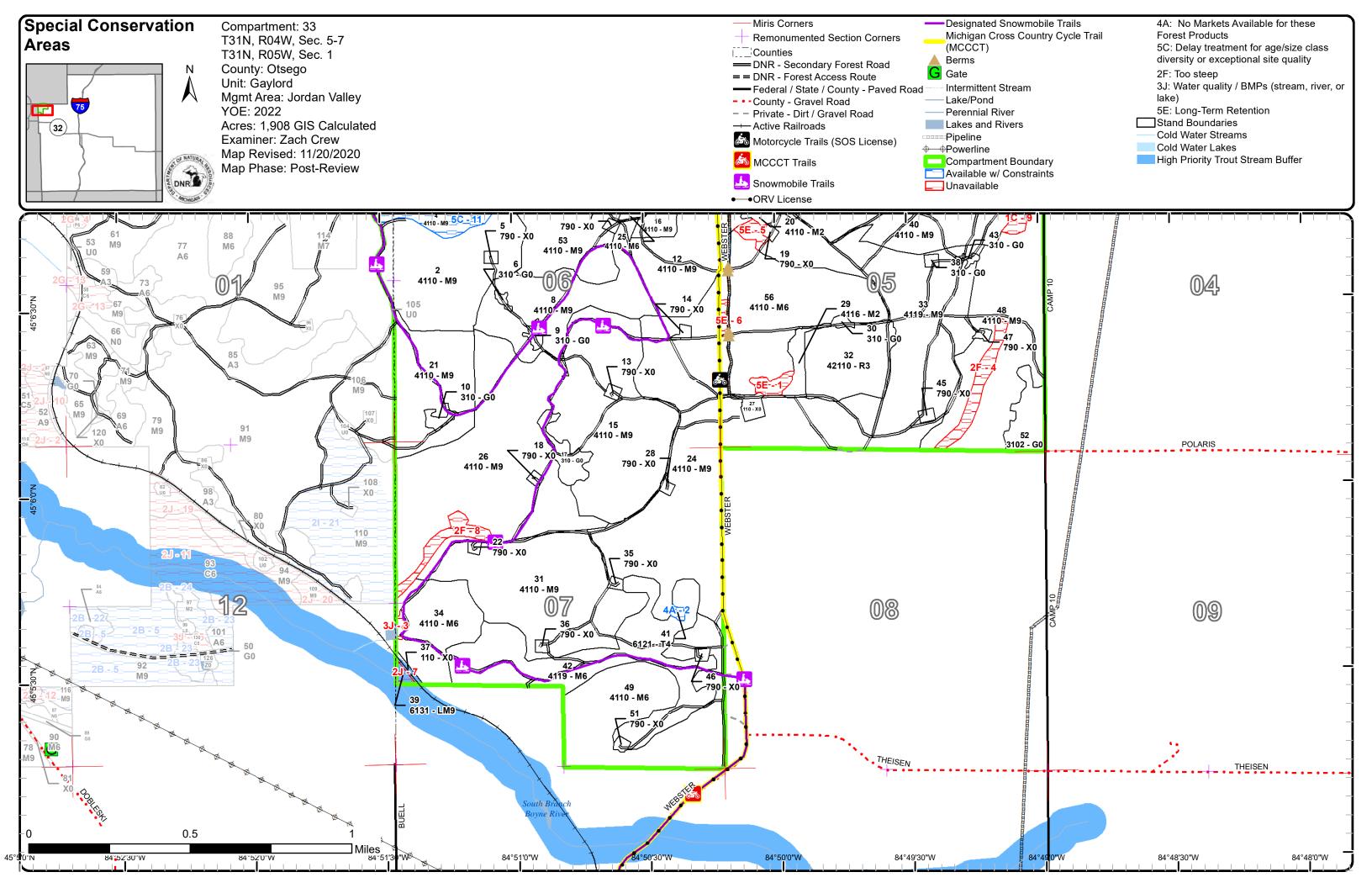












Gaylord Mgt. Unit Zach Crew: Examiner

Compartment 33

Year of Entry 2022

Age Class

	/ .	you /	/ 8 ³ / ₈	Ø / &		, , , , , , , , , , , , , , , , , , ,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	, , , , , , , , , , , , , , , , , , ,	\$ / ₈	R / 8		8 /8	7a, 7a,	, s	,	Z Z Z	NE /	,	A A A A A A A A A A A A A A A A A A A	
Bare/Sparsely Vegetated	18		0	0	0	0	0	0	0	0	0		0		0		0		18	
Herbaceous Openland	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
Northern Hardwood	0	29	0	0	0	0	0	337	284	486	674	0	0	0	0	0	0	0	1810	
Red Pine	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	
Tamarack	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Total	57	67	0	0	0	0	0	337	284	487	674	0	0	0	2	0	0	0	1908	



Report 2 – Treatment Summary

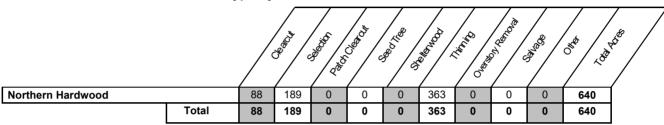
Gaylord Mgt. Unit Year of Entry: 2022

Acres of Harvest

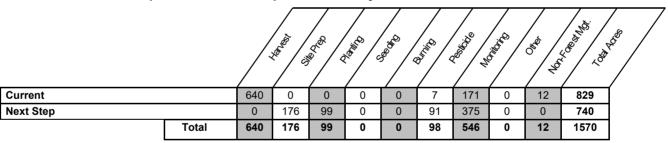
Compartment 33
Total Compartment Acres: 1,908

Commercial Harvest - 640 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



CoverType

Type

Range

Age

Structure

n

d

Treatment Stand Size Stand BA **Treatment Treatment** Acres

Age

Density



Cut

Approved Treatments:

Name

52033002.7 M 148.0 4110 - Sugar Maple Sawtimber 90 51-80 Monitoring Natural Regen 4110 - Sugar Uneven-No onitor Association Well (Intermediate) Maple Aged

Association

Cover Type

Objective

Method

Prescription Natural Regen Survey

Specs:

Next Step Treatments:

Acceptable A mix of desirable northern hardwood species that meets minimum stocking requirements.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

52033012-Cut 72.6 4110 - Sugar Maple Sawtimber 72 111-Harvest Crown Thinning 411 - Northern Even-Aged Nο Association Hardwood

Prescription Mark to cut stand with a target Residual BA of ~80 overall. Focus marking on over mature basswood and pole sized ironwood first.

Specs: Individual areas may range from 60 to 100 BA.

Next Step **Treatments:**

Acceptable Regen:

Stand predominantly maple poles, some over mature basswood and hard maple present. Consider on a per acre basis removing half of the **Other**

Comment: large (16 inch dbh plus) trees of poor quality and leaving the better quality trees as a seed source. Utilize trail protection specs.

Site Condition

Proposed Start Date: 10/1 /2021

52033021-Cut 54.9 4110 - Sugar Maple Sawtimber 111-Harvest Single Tree 411 - Northern Even-Aged No Well 140 Hardwood

Association

Selection

Prescription Thin stand with a target residual BA ~80. Individual areas may range from 0 to 100 BA. Establish Regen Gaps at least 100 feet in diameter

at a rate of roughly 1 per 10 acres. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of sugar maple and basswood that meets minimum stocking requirements.

Regen:

Other Utilize trail protections specs. Lower amount of regen gaps required due to the lower amount of mature timber present in the stand.

Comment:

Site Condition

Stand

CoverType

Acres

Treatment

Name

Compartment: 33 Year of Entry: 2022

Age

Structure

Cover Type

Objective

Habitat

Cut

2	5 52033025-Cut	32.4 4110 - Sugar Maple	Poletimber	84	111-	Harvest	Crown Thinning	411 - Northern	Even-Aged	No
		Association	Well		140		_	Hardwood	_	

Treatment

Type

Treatment

Method

BA

Range

Prescription Mark stand to cut with a residual BA ~80 overall. Individual Areas may range from 60 to 100 BA.

Size

Density

Stand

Age

Specs:

а

n

d

Next Step Treatments:

Acceptable Regen:

Other Purpose of harvest is to establish crop trees, not regen. If sale doesn't sell as a commercial harvest, could be set up as a small firewood

Comment: sale

Site Condition

Proposed Start Date: 10/1 /2021

52033025-2.5 4110 - Sugar Maple Sawtimber 85 81-110 Natural Regen 4110 - Sugar No 40 Monitoring Uneven-Monitor Association Well (Intermediate) Maple Aged Association

Prescription Specs:

Next Step Treatments:

Acceptable A mix of northern hardwood species within the established gaps that meets minimum stocking requirements. Note that regen should be Regen:

mostly sugar maple, red maple, and/or basswood to be considered successful.

Percent to Treat = 100% **Other**

Comment: Site Condition

Proposed Start Date: 10/1 /2019

52033026-Cut 134.3 4110 - Sugar Maple Sawtimber 111-Harvest Single Tree 411 - Northern Uneven-No Association 140 Selection Hardwood Aged

Prescription Mark stand to cut with a target BA of ~80 overall. Individual areas may range from 0 to 100 BA. Specs:

Establish regen gaps at a minimum of 1 per 10 acres at least 100' feet in diameter.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of sugar maple and basswood that meets minimum stocking criteria. Aspen, red maple, black cherry, beech, and ironwood are

Regen: allowable in smaller amounts as long as they do not compose a majority of the regen.

Utilize trail protection specs. Lower rate of regen gaps than normal due to the low amount of mature timber present in the stand. Portions of Other

Comment: the stand were excluded from the treatment due to low BA due to Ash and Beech mortality.

Site Condition

Compartment: 33

Aspen

Year of Entry: 2022

n	Treatment	Acres	Stand	Size	Stand	BA	Treatment	Treatment	Cover Type	Age	Habitat
d	Name		CoverType	Density	Age	Range	Type	Method	Objective	Structure	Cut
29	52033029- Spray	6.6	4116 - Mixed N. Hardwood - Aspen	Sapling Medium		Immatu re	Pesticide	Hand Application	4116 - Mixed N. Hardwood -	Even-Aged	No

<u>Prescription</u> Apply store bought pre mixed herbicide to control invasive honey suckle that has started to spread in this stand.

Specs:

t

Next Step Monitoring, Herbicide Use

Treatments:

Acceptable The same mix of current species as specified in the stand data sheet is acceptable.

Regen:

Other Due to small localized area of invasive species presence, control of the invasive species can be done without a PAP under the supervision of

<u>Comment:</u> an employee with a Pesticide Applicators Liscense.

Site Condition

Proposed Start Date: 9 /15/2020

31 52033031-Cut 102.7 4110 - Sugar Maple Sawtimber 77 111- Harvest Crown Thinning 411 - Northern Even-Aged No Association Well 140

Prescription Mark stand to cut with a target residual BA of ~80 overall. Individual areas may range from 60 to 100 BA.

Specs:

Next Step

Treatments:

Acceptable Regen:

Other Consider cutting roughly 1/2 of large over mature and open grown trees on a per acre basis, leaving the better developed ones as a seed

Comment: source. Utilize trail protection specs.

Site Condition

Proposed Start Date: 10/1 /2021

32 52033032- 3.1 42110 - Planted Sapling 7 Immatu Monitoring Artificial 4123 - Red Oak Even-Aged No Monitorx Red Pine Well re Regen(1yr)

<u>Prescription</u> survey while in pine planting under oak specific rules.

Specs:

Next Step Pesticide, (Inactive)Aerial; ; ; Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Red oak planting

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 4 /20/2016

34 52033034-Cut 38.7 4110 - Sugar Maple Poletimber 68 111- Harvest Crown Thinning 411 - Northern Even-Aged No Association Well 140 Hardwood

Prescription Mark stand to cut with a target residual BA of ~80 overall. Individual areas may range from 60 to 100 BA.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Protect hemlock during logging operations. Consider marking trees to drop and leave as nurse logs around yellow birch and hemlock when

Comment: marking. Utilize trail protection specs.

Site Condition

Next Step Planting, Initial Plant

Treatments:

Acceptable Red Pine planted in strips to create blocks for a new hardwood nursery.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 33 S Year of Entry: 2022 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment** Cover Type Age Habitat n Method Name CoverType Density Age Range Type Objective Structure Cut d 52 52033052-2.0 3102 - Grass Nonstocked Unspec NonForestMgt **Brush Cutting** 4211 - Planted Even-Aged No Red Pine NF 2020 ified Prescription Use a brush hog to clear area denoted by lathe and pink flagging in order to prep site for nursery establishment. Specs: Planting, Initial Plant Next Step Treatments: Acceptable Pine will eventually be planted in rows to establish blocks for nursery Regen: **Other** Comment: Site Condition Proposed Start Date: 7 /1 /2020 87.8 4110 - Sugar Maple Poletimber 63 51-80 4211 - Planted 52033056-Cut Harvest Clearcut with Even-Aged No Association Retention Red Pine Prescription Final harvest stand, be sure to include chipping spec. Specs: Next Step SitePrep, Roller Chopping; Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

Monitoring, Artificial Regen(3yr) <u>Treatments:</u>

Acceptable A well stocked stand of planted red pine. In non planted areas any mix of maple, basswood, black cherry, aspen, and birch is acceptable.

Regen:

Other Retention has already been delineated in MIFI. Do not plant west of the pipeline adjacent to Webster Road.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Total Treatment 829.4 **Acreage Proposed:**

Report 4 – Site Conditions

Gaylord Mgt. Unit

Compartment: 33 Year of Entry: 2022 **Zach Crew: Examiner**



Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres		Domin	ant Site	e Cond	ditions	3		
Acres	Available	With Condition	Not Available		4A	5C	1C	2F	2J	3J	5E
18	18	0	0	Bare/Sparsely Vegetated							
34	34	0	0	Herbaceous Openland							
2	0	0	2	Lowland Mixed Forest					2		
1810	1748	30	32	Northern Hardwood	0	30	3	18		1	9
38	38	0	0	Red Pine							
1	0	1	0	Tamarack	1						
5	5	0	0	Urban							
1,908	1,843	31	33	Total Forested Acres	1	30	3	18	2	1	9
	97%	2%	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
1	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
2	Available	4A: No Markets Available for these Forest Products	1	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
	omments: mall inclusion of lo	wland cedar/spruce that is too	o small to	map			
4	Unavailable	2F: Too steep	10	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

Report 4 – Site Conditions

Gaylord Mgt. Unit

Zach Crew : Examiner

Compartment: 33 Year of Entry: 2022



5	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2J: Blocked by Railroad	2	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified
	Comments: Stand part of the S	South Branch of the Boyne River	Cold W	√ater Trout Stream Buffer.			
8	Unavailable	2F: Too steep	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	1C: Other dept or div proc/practices	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: NELP Hardwood N	/larking Test Plot					
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Stand turned back adjacent stand 95	into state during timber harvest in comp 45.	last YC	DE. Ash has fallen out lower	BA enough that it would	make more sense to harve	est the stand with

11/20/2020 11:38:18 AM - Page 2 of 2 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: 33
Year of Entry 2022



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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish s conditions for coldwater fishes may occur in Michigan lakes groundwater inflows, or are located in colder (northern) area Director's action and designated as trout resources by Fisher	pecies to persist from year to year. Suitable if they are relatively deep, have substantial s of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen of stocked trout populations and those of other coldwater fish s year to year. Coldwater streams in Michigan typically provide contributions of groundwater to their stream flows. Such stre designated as trout resources by Fisheries Order 210.	pecies (e.g., slimy sculpin) to persist from ethese conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosyster influences the aquatic ecosystem and vice-versa. Because of streams and open water wetlands, riparian areas harbor a his communities are ecologically and socially significant in their as aesthetics, habitat, bank stability, timber production, and	of the unique conditions adjacent to lakes, igh diversity of plants and wildlife. Riparian effects on water quality and quantity, as well

DEPARTMEN	OF NATURAL PROPERTY OF NAT	
/	MICHIGAN .	

Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
1	310 - Herbac	eous Open	land	Nonsto	cked	1.1	ţ	Jnspecified			GAS WELL - VALVE SYSTEM AND SHED. State Elmira A1-3
2	4110 - Sugar N	Maple Assoc	ciation	Sawtimb	er Well	150.9	90	51-80	N/A		Stand harvested in 12/18 as part of Daddy O Hardwoods sale (52-018-12-
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	01). Majority of ash and beech harvested. Residual BA ~ 75.
	Sugar Maple	75	Log/Pole	10	90	Sug	gar Maple	Low	>20 feet	Sapling	
	Basswood	24	Log	11		Iro	onwood	Medium	10 - 20 feet	Sapling	
	Beech	1	Log/Pole	11							-
3	790 - Other Bare	/Sparsely V	egetated	Nonsto	cked	1.0	l	Jnspecified			GAS WELL - VALVE SYSTEM WITH SHEDS. State Elmira 3-3
4	4110 - Sugar N	Maple Assoc	ciation	Sawtimb	er Well	30.4	90	111-140	N/A		Rolling Hills. Decent Quality. This portion of the sale not harvested and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	turned back into the state. Sale Daddy O Hardwoods sale (52-018-12-01). Ash has mostly fallen out.
	Sugar Maple	75	Log/Pole	10	90	Sug	gar Maple	Low	>20 feet	Sapling	or). Asimas mostly fallen out.
	Basswood	20	Log	11		Iro	onwood	Medium	10 - 20 feet	Sapling	
	Beech	5	Log/Pole	11		E	Beech	Low	Variable	Sapling	
5	790 - Other Bare	/Sparsely V	egetated	Nonsto	cked	1.1	l	Jnspecified			GAS WELL - St Elmira 6-6
6	310 - Herbac	ceous Open	land	Nonsto	cked	1.0			No		Grassy opening, some knapweed, scattered basswood and cherry.
7	790 - Other Bare	/Sparsely V	egetated	Nonsto	cked	1.0	l	Jnspecified			GAS WELL - St Elmira 7-6
8	4110 - Sugar N	Maple Assoc	ciation	Sawtimb	er Well	60.3	90	81-110	N/A		Decent quality in the west and south portions of the stand. Inoperable slopes occur in the south end in places. Stand begins to lose quality in
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	the vicinity of stand 9. Rolling Topography. Thinned 2003.
	Sugar Maple	72	Log/Pole	10	90	Sug	gar Maple	Medium	Variable	Sapling	3 1 3 1 7
	Basswood	21	Log/Pole	10		Iro	onwood	Low	Variable	Sapling	
	Quaking Aspen	3	Log/Pole	10							
	Yellow Birch	1	Pole/Log	9							
	Black Cherry	3	Pole/Log	9							
9	310 - Herbac	ceous Open	land	Nonsto	cked	2.0	l	Jnspecified			GAS WELL St Elmira 11-6
10	310 - Herbac	eous Open	land	Nonsto	cked	2.5	l	Jnspecified			GAS WELL - St Elmira 13-6
11	790 - Other Bare	/Sparsely V	egetated	Nonsto	cked	1.0	l	Jnspecified			GAS WELL - St Elmira 1-6



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
12	4110 - Sugar N	/laple Assoc	ciation	Sawtimb	er Well	74.1	72	111-140	N/A		Set up last YOE with some patch cuts, sale sold but returned to the state. Decent stocking, predominantly pole timber and small logs,
	Canopy Species	% Cover	Size Class	DBF	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered wolf trees throughout.
	Sugar Maple	60	Pole/Log		72	Suç	gar Maple	Medium	Variable	Sapling	
	American Elm	5	Pole/Log	9		In	onwood	Low	Variable	Sapling	
	Basswood	27	Log/Pole	12							
	Ironwood	5	Pole	8							
	Yellow Birch	1	Log/Pole	10							
	Black Cherry	2	Log/Pole	10							
13	790 - Other Bare	Sparsely Ve	egetated	Nonsto	ocked	1.1	ι	Inspecified			GAS WELL - VALVE SYSTEM. State Elmira 15-6
14	790 - Other Bare	Sparsely Ve	egetated	Nonsto	ocked	1.2	l	Inspecified	No		Old gas site.
15	4110 - Sugar N	/laple Assoc	ciation	Sawtimb	er Well	108.5	90	81-110	N/A		Stand THINNED 2003. Some areas of decent quality in the west half.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Large diameter wolf trees scattered throughout. Pole stand transitioning to a log stand. AVG BA 107.
	Sugar Maple	65	Log/Pole	11	90	Suç	gar Maple	Medium	Variable	Sapling	10 a 10g otalia. 717 0 271 1011
	American Elm	5	Log/Pole	11		In	onwood	Medium	Variable	Sapling	
	Basswood	25	Log	11			Beech	Trace	5 - 10 feet	Sapling	
	Black Cherry	3	Log/Pole	10	<u></u>			'		'	-
	Beech	2	Log/Pole	10							
16	4110 - Sugar N	/laple Assoc	ciation	Sawtimb	er Well	53.0	95	51-80	N/A		Single tree harvest completed fall 2016 (52-017-12-01) Husky Hardwoods.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Hardwoods.
	Sugar Maple	70	Log/Pole	12	95	Suç	gar Maple	Medium	>20 feet	Sapling	
	Basswood	30	Log/Pole	11							
17	310 - Herbac	eous Open	land	Nonsto	ocked	8.9			No		GRASS OPENING - SCATTERED CHERRY AND ELM. NICE - MOSTLY CLEAN OPENING.
18	790 - Other Bare	Sparsely Ve	egetated	Nonsto	ocked	1.0	ι	Inspecified			GAS WELL St Elmira A 2-7
19	790 - Other Bare	Sparsely Ve	egetated	Nonsto	ocked	1.0	l	Jnspecified			GAS WELL - St Elmira B1-5
20	4110 - Sugar N	•		Sapling I		22.5	7	Immature	N/A		Former Planted RP stand harvested in January 2013 as part of the Humdinger RP sale (52-005-12-01), allowed to convert back to hardwood
	Canopy Species		Size Class		l Age						stand. predominantly hard maple, some sparse areas with no regen.
	Black Cherry	4	Sapling	2	7						
	Quaking Aspen	5	Sapling	2							
	Red Pine	1	Sapling	1							
	Sugar Maple	90	Sapling	2	7						

Report 7 - Stands



Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
21	4110 - Sugar N	/laple Assoc	ciation	Sawtimb		55.0	90	111-140	N/A		Thinned 1994. Rolling topography, elm and ash have died out of the ¬ stand. AVG BA ∼ 128.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	Stand. AVO DA 120.
	Sugar Maple	70	Log/Pole	11	90		ar Maple	Low	Variable	Sapling	
	Basswood	25	Log/Pole	12		Iro	nwood	Medium	5 - 10 feet	Sapling	
	Beech	5	Log	12							
22	790 - Other Bare	Sparsely Ve	egetated	Nonsto	cked	1.0		Unspecified			GAS WELL St Elmira B 1-7
23	310 - Herbad	eous Open	land	Nonsto	cked	1.0		Unspecified			GAS WELL - VALVE SYSTEM. CLEAN.
24	4110 - Sugar N	/laple Assoc	ciation	Sawtimb	er Well	137.9	90	81-110	N/A		SCATTERED OVERSTORY WOLF HM AND BASSWOOD WITH DEFECT - FORKS, SWEEP AND HOLES COMMON. SOME DEAD
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Species	s Density	Avg. Height	Size	ELM. FLAT. LOTS OF 1 - 4" DIAM SUPPRESSED HM. SOME BT
	Sugar Maple	60	Log/Pole	10	90	Suga	ar Maple	Medium	Variable	Sapling	ASPEN AND CHERRY. MARKED LOG SALE 1977. LOTS OF OLD
	American Elm	10	Log/Pole	10		Iro	nwood	Low	Variable	Sapling	ROADS. LACK OF CLEAN REGEN HOLES. Basal Area patchy in most areas.
	Basswood	20	Log	11							aleas.
	Ironwood	5	Pole/Log	8							
	Black Cherry	3	Log/Pole	10							
	Quaking Aspen	1	Log	12							
	Yellow Birch	1	Log/Pole	10							
25	4110 - Sugar N	∕laple Assoc	ciation	Poletimb	er Well	32.6	84	111-140	N/A		Decent pole stand, flat.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Species	s Density	Avg. Height	Size	
	Sugar Maple	72	Pole/Log	9	84	Suga	ar Maple	Medium	Variable	Sapling	
	Basswood	25	Pole/Log	9		Iro	nwood	Low	Variable	Sapling	
	Black Cherry	3	Pole/Log	9							
26	4110 - Sugar N	∕laple Assoc	ciation	Sawtimb		155.3	88	111-140	N/A		
	Canopy Species		Size Class		Age		opy Species		Avg. Height	Size	
	Sugar Maple	69	Log/Pole	12	88		ar Maple	Medium	Variable	Sapling	
	Basswood	25	Log/Pole	12		Iro	nwood	Low	Variable	Sapling	
	American Elm	2	Log	12		В	eech	Trace	Variable	Sapling	
	Black Cherry	2	Log/Pole	10		Eld	erberry	Low	5 - 10 feet	Tall Shrub	
	Beech	2	Log/Pole	10							
27	110 - Low I	ntensity Urb	oan	Nonsto	cked	3.8		Unspecified			CENTRAL PROCESSING FACILITY. 3 COMPRESSOR BUILDINGS.
28	790 - Other Bare	Sparsely V	egetated	Nonsto	cked	1.1		Unspecified			GAS WELL - Shed. St Elmira 1-7



Stand	d Level 4 C	over Type		Size Density		Acres	Stand Age E	A Range	Managed S	Site	General Comments
29	4116 - Mixed N. Hardwood - Aspen			Sapling Medium		6.9	7	Immature	N/A		Stand cut in 2013, Aspen clone dominates the southern 1/4. The rest of
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	the stand is patchy black cherry and sugar maple. Upland shrub species present.
	Sugar Maple	20	Sapling	1		Hawt	horn (spp.)	Trace	5 - 10 feet	Tall Shruk	
	Black Cherry	50	Sapling	1	7					•	-
	Bigtooth Aspen	20	Sapling	2							
	Quaking Aspen	10	Sapling	2							
30	310 - Herbac	ceous Open	ıland	Nonsto	cked	1.3		Immature			GAS WELL - VALVE SYSTEM. CLEAN. State Elmira C 2-5
31	4110 - Sugar Maple Association			Sawtimber Well		102.7	77	111-140	N/A		Part of stand thinned in 1990 according to records. Rolling topography.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	70	Log/Pole	10	77	Sug	gar Maple	Medium	Variable	Sapling	
	Basswood	27	Log/Pole	10		Iro	onwood	Low	Variable	Sapling	
	Beech	3	Log/Pole	10		I	Beech	Low	Variable	Sapling	
						Strip	oed Maple	Trace	5 - 10 feet	Sapling	
32	42110 - Pla	ine	Sapling	Well	37.9	7	Immature	N/A		Site prep herbicide spray conducted in 2013, Planted on 5/10/2015 @ 950 RP 2-0 Wyman Bare root stock and Red Pine. FTP C52-356	
	Canopy Species	% Cover	Size Class	DBH	Age						Year 1 survey conducted, according to FTP database notes, on 11/16/16
	Red Pine	90	Sapling	2	7						no need for replanting at this time. Passed year 3 regen survey, FTP
	Sugar Maple	10	Sapling	1							closed.
											Stand harvested in January 2013 as part of Humdinger RP Sale (52-005-12-01). Will be prepped and planted back to RP.
33	4119 - Mixed Northern Hardwo					163.6 85 81-110			N/A		THINNED 2004. FLAT. POOR QUALITY HARDWOOD. AREAS WITH SOME DECENT HM POLES. DEAD AND/OR DYING ELM COMMON.
	Canopy Species	% Cover			Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	WOLF HM, BASSWOOD AND IRONWOOD WITH DEFECT. SOME
	Sugar Maple	55	Log/Pole	10	85	Sug	gar Maple	Medium	Variable	Sapling	SCATTERED REGEN HOLES WITH RUBUS. UNCUT ORANGE
	American Elm	15	Log	12		Iro	onwood	Low	Variable	Sapling	MARKED TREES. LOTS OF SUPPRESSED 2 - 4" DIAM HM SAPS. Avg BA from 21 plots - 107.
	Basswood	15	Log/Pole	12							Avg BA Holli 21 plots - 107.
	Ironwood	10	Pole/Log	9							
	Black Cherry	2	Pole/Log	9							
	Yellow Birch	1	Log/Pole	10							
	Beech	1	Pole/Log	9							

Report 7 - Stands



Stand	Level 4 Co	Level 4 Cover Type			Size Density		Acres Stand Age BA Range			Managed S	ite	General Comments
34	4110 - Sugar Maple Association			Poletimber Well		40.7 68		111-140	N/A		Rolling topography. Scattered oversize maple/basswood/beech. Lowland inclusion and small pond located on the west side of the stand.	
	Canopy Species		Size Class		DBH		Sub-Ca	nopy Species	Density	Avg. Height	Size	Loward moradion and small pond located on the west side of the stand.
	Sugar Maple	55	Pole/Log		9	68	Sug	ar Maple	Medium	Variable	Sapling	
	Basswood	23	Pole/Log		9		He	emlock	Trace	10 - 20 feet	Sapling	
	Ironwood	5	Log/Pole		10		E	Beech	Low	5 - 10 feet	Sapling	
	Black Cherry	5	Pole/Log		8		Irc	onwood	Low	Variable	Sapling	
	American Elm	2	Log/Pole		12							
	Red Maple	5	Pole/Log		9							
	Yellow Birch	1	Log/Pole		10							
	Hemlock	1	Log		12							
	Beech	3	Log/Pole		10							
35	790 - Other Bare/	Sparsely V	egetated	No	nsto	cked	1.0	U	Inspecified			GAS WELL St Elmira 7-7
36	790 - Other Bare/	Sparsely Ve	egetated	No	Nonstocked		1.0 Unspecifie		Inspecified			GAS WELL St Elmira C 2-7
37	110 - Low Ir	0 - Low Intensity Urban Nonstocked					1.3			No		ACTIVE RAILROAD GRADE. STEEP SLOPES.
38	310 - Herbaco	eous Open	land	Nonstocked			1.0 Unspe		Inspecified	specified		GRASS OPENING - Gas Well. State Elmira B3-5.
39	6131 - Hemlock, White Pine, Maple, Birch			Sawtimber Well		1.7	130	1-50	N/A		STEEP SLOPES ALONG 5 FT. WIDE BOYNE RIVER.	
	Canopy Species % Cover Size Class		Size Class	DBH Age		Sub-Canopy Species		Density	Avg. Height	Size		
	Red Maple	25	Log		12			emlock	Low	10 - 20 feet	Sapling	
(Quaking Aspen	25	Log/XLog		16							
Nor	thern White Cedar	10	Pole/Log		10							
	Hemlock	40	Log/Pole		12	130						
40	4110 - Sugar Maple Associ		iation Sawti		Sawtimber Well		134.9	85	81-110	N/A		MOSTLY POOR QUALITY. SCATTERED WOLF HM WITH SWEEP
	Canopy Species	% Cover	Size Class		DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	AND/OR FORKS COMMON. A FEW AREAS HAVE DECENT HM POLES. FLAT. ROCK ELM COMMON. SOME SCATTERED CHERRY
	Sugar Maple	60	Log/Pole		10	85	Sug	ar Maple	Medium	>20 feet	Sapling	AND HEMLOCK. SOME DEAD AND/OR DYING ELM. HEAVY TO 1 -
	American Elm	10	Log/Pole		10		Irc	nwood	Low	10 - 20 feet	Sapling	4" DIAM SUPPRESSED HM. HM SI = 55. Regen gaps ranging in size
	Basswood	25	Log/Pole		11							from .1 acres to 1 acre established and harvested 02/17.
	Ironwood	5	Pole		9							
41	6121 - Tamarack			Poletimber Poor		1.0	1.0 85		N/A		LOW WET DEPRESSION - BOWL. TAMARACK SPARSE. MOST	
	Canopy Species	% Cover	Size Class	DBH Age		Sub-Ca	Sub-Canopy Species		Avg. Height	Size	TREES ON NORTH END. UNIFORM SCATTERED TAMARACK SAPS. TAMARACK SI = 40.	
	Tamarack	100	Pole/Sap/Lo		6	85	Та		Low	5 - 10 feet	Sapling	

Gaylord Mgt. Unit

Report 7 - Stands



Stand	Level 4 Cover Type			Size De	nsity	Acres	Stand Age BA Range		ange Managed Site		General Comments	
42	4119 - Mixed Northern Hardwoods			Poletimber Well		l 86.7	86.7 64		N/A		POOR QUALITY. SCATTERED WOLF OVERSTORY WITH FORK AND SWEEP COMMON. ROLLING HILLS TO STEEP SLOPES. AREAS	
	Canopy Species % Cover Size Clas		Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	HEAVY TO 1 - 4" DIAM HM SAPS. HM SI = 55. Several pockets in the	
	Sugar Maple	50	Pole/Log	9	64	Sug	gar Maple	Medium	Variable		northern portion of the stand filling in with a mix of maple, ironwood, and	
	American Elm	14	Pole/Log	8		Iro	onwood	Low	Variable	Sapling	cherry. The south "arm/foot" of the stand is dominated by these larger	
	Basswood	20	Log/Pole	12		Н	emlock	Trace	10 - 20 feet	Sapling	wolfy trees with a large amount of hard maple saplings creeping into the canopy.	
	Ironwood	10	Pole/Sapling	g 6		Blad	Black Cherry		Variable	Sapling	carropy.	
	Hemlock	1	Log	14								
	Quaking Aspen	2	Log/Pole	10								
	Black Cherry	3	Pole/Log	9								
43	310 - Herbac	eous Oper	land	Nonsto	ocked	1.0			No		GRASS OPENING - RUBUS, CHERRY, MAPLE AND HAWTHORNE PRESENT.	
44	790 - Other Bare/Sparsely Vegetated Nonstocked				1.1 Unspecified					GAS WELL - VALVE SYSTEM. State Elmira A4-5		
45	790 - Other Bare/Sparsely Vegetated Nonstocked				1.1 Unspecified					GAS WELL - VALVE SYSTEM. KNAPWEED. State Elmira D3-5		
46	790 - Other Bare/Sparsely Vegetated Nonstocked					1.1	1.1 Unspecified				GAS WELL - VALVE SYSTEM AND SHED. State Elmira 9-7.	
47	790 - Other Bare/	Sparsely V	egetated	Nonst	ocked	1.0 l		nspecified			GAS WELL - VALVE SYSTEM. KNAPWEED. State Elmira C4-5	
48	4110 - Sugar N	gar Maple Association			Sawtimber Well		107.0 75 1		N/A		Thinned 1995. Scattered live elm and beech. Decent quality hardwood, long ridge running North/South splits stand even in two in the south.	
	Canopy Species	% Cover	Size Class		I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	some slopes to steep for operations. Hardwood marking test plot located	
	Sugar Maple	75	Log/Pole	10	75		gar Maple	Trace	5 - 10 feet	Sapling	in stand. Delineated out using a site condition.	
	Basswood	18	Log/Pole	10			Beech	Low	< 5 feet	Sapling		
	Black Cherry	1	Log/Pole	10			onwood	Low	5 - 10 feet	Sapling		
	Beech	2	Log/Pole	10		Strip	oed Maple	Trace	5 - 10 feet	Sapling		
	Yellow Birch	1	Log/Pole	10								
	Hemlock	3	Log	12								
49	4110 - Sugar N	laple Asso	ciation	Poletimb		89.4	67	81-110	N/A		SCATTERED LARGE TREES WITH DEFECT COMMON. DECENT QUALITY PULP AND SMALL LOG CROP TREES. MOSTLY FLAT	
	Canopy Species % Cover Size Class		Size Class	DBH	I Age	Sub-Ca	Sub-Canopy Species		Avg. Height	Size	WITH SOME ROLLING HILLS. LOTS OF SUPPRESSED 1 - 5" DIAM	
	Sugar Maple	69	Pole/Log	9	67	Sug	gar Maple	Medium	Variable	Sapling	HM SAPS. PART OF STAND THINNED 1990. HM SI = 65. BA ranges	
	American Elm	5	Pole/Log	9		Iro	onwood	Low	Variable	Sapling	from 20 in regenerating openings to 180 st the highest. Some maple 16+	
	Basswood	20	Log	14	90	Servicebe	erry (Juneberry)	Trace	>20 feet	Sapling	inches but vast majority in the 6-10 inch class. Ages are for 14 inch+ (90) and 10 in or lower (67). SE corner of stand where a lot of these	
	Black Cherry	2	Pole/Log	9		<u></u>					lower stocking areas with a high number of ironwood and maple saps are	
	Yellow Birch	2	Pole/Log	9							located.	
	Hemlock	1	Log	14								
	Red Maple	1	Log/Pole	10								



Stand	Level 4 C	Size Density		Acres Stand Age BA Range			Managed S	Site	General Comments			
50	4110 - Sugar M	ciation	Poletimber Well		23.5	68	111-140	N/A		Portion of orginal stand 25 that wasn't treated previously. Decent pole		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	timber throughout, some larger wolf trees scattered.	
	Sugar Maple 70 Pole		Pole/Log	g 9 68		Ironwood		Low	Variable	Sapling		
	Basswood	15	Pole/Log	9				,				
	Ironwood	7	Pole	7								
	Black Cherry	3	Pole/Log	9								
	American Elm	5	Pole/Log	8								
51	790 - Other Bare/Sparsely Vegetated Nonstocked		1.2	ι	Jnspecified			GAS WELL - VALVE SYSTEM WITH SHED. CLEAN. State Elmira D3-7				
52	3102 - Grass Nonstocked		14.3 Unspecified		No		CLEAN OPENING. Farmland to the East and SW on private. Stand is being considered for the new hardwood nursery.					
53	4110 - Sugar Maple Association			Sawtimber Well		77.5	77.5 90 81-110		N/A		Thinned in 2003. Single tree harvest completed in fall 2016 (52-017-12-01) Husky Hardwoods. Stand 53 broken out of stand 8 post harvest.	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Adequate amount of sugar maple and basswood regen found during	
	Sugar Maple	72	Log/Pole	10	90	Sug	ar Maple	Medium	Variable	Sapling	natural regen check.	
	Basswood	25	Log/Pole	10		Irc	nwood	Low	Variable	Sapling		
	Beech	1	Pole/Log	9		Eld	derberry	Trace	5 - 10 feet	Tall Shrub		
	American Elm	1	Pole/Log	9		Strip	ed Maple	Trace	5 - 10 feet	Sapling		
	Quaking Aspen	1	Log	12								
56				Poletimber Well		97.2	97.2 63 5		N/A		Scattered large diameter wolf trees. Most of the stand is filling in with maple, black cherry, and ironwood, very low quality. Some pockets of	
	Canopy Species		Size Class		Age	Sub-Cai	nopy Species		Avg. Height	Size	white pine just north of stand 27. Not sure why this stand is of noticeably	
	Sugar Maple	55	Pole/Log	8	63	Sug	ar Maple	Medium	Variable	Sapling	lower quality than the stands surrounding it.	
	American Elm	5	Pole/Log	8		Irc	nwood	Low	Variable	Sapling		
	Basswood	18	Pole/Log	8		Servicebe	rry (Juneberry) Trace	Variable	Sapling		
	Ironwood	10	Pole	7		Blac	k Cherry	Low	5 - 10 feet	Sapling		
	Black Cherry	7	Pole/Log	9								
	Yellow Birch	1	Log/Pole	10								
	White Pine	4	Pole	8								