

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52052
Entry Year 2019
Acreage: 1,490
County Antrim

Management Area: Jordan Valley

Revision Date: 2017-06-02

Stand Examiner: John St. Pierre

Legal Description:

Antrim County: T31N R07W, Sections 1, 11, 12, 35, 36 Charlevoix County: T32N R07W. Sections 35 & 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:

Soils are mostly poorly drained consisting of Pickford silty clay loam, Rudyard silt loam, Tawas Muck, and other loams. There are also a few areas of well-drained Emmet soils on scattered upland sites located in the southern block of this compartment.

Topography is primarily level throughout the vast majority of Compartment 052. However, areas located in the "southern block" of the compartment do feature rolling hills. Some of these hills offer sudden elevation fluctuations with slopes ranging between 30-50%. These locations can quickly lead from an upland deciduous covertypes into conifer dominated lowlands (and vice-versa).

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

Compartment 052 is almost exclusively surrounded by privately owned parcels. In some cases, private has the only viable access into remote areas of the compartment. Common usage activities in Compartment 052 include but are not limited to the following; boating and fishing access, river recreation, various forms of hunting, off trail meandering, and snowmobiling (Trail #4).

Unique Natural Features:

The Jordan River, which is a designated wild and scenic river, travels through part of Compartment 052. It is also classified under the Natural Rivers Act. The Jordan River, Bartholomew Creek, Bennett Creek, Todd Creek, and area(s) within 400ft of either side of these waterways are captured under the Natural Rivers Act. They are also High Conservation Value Areas (HCVA).

River bottom and lowland forest and non-forested complexes present themselves within Compartment 052. Some locations are populated by species not commonly found in the region; including Silver Maple (Acer saccharinum), Bur Oak (Quercus macrocarpa), and musclewood (Carpinus caroliniana). Also, a significant portion of the compartment is being utilized for thermal cover protection by a variety of wildlife species.

Archeological, Historical, and Cultural Features:

Of note are the now abandoned railroad grades that travel along either side of the Jordan River. The complete history behind these grades is unclear to this examiner, but were probably utilized during Michigan's infamous "logging era". A significant portion of the grade east of the Jordan River is now Snowmobile Trail #4.

Special Management Designations or Considerations:

Special management designations and considerations do apply in this compartment. Specifically, they involve the water features captured under the Natural Rivers Act. Contact the DNR's natural rivers program specialist for further details. Compartment 052 unfortunately offers an opportunity to try and slow the aggressive spread of invasive shrubbery. Specifically; common buckthorn (Rhamnus cathartica) and several species of honeysuckle. Treatments involving several management techniques have been proposed. The goal is to slow the spread of these invasive plants and begin to restore more natural grass and shrub communities.

Watershed and Fisheries Considerations:

This compartment is in both the Jordan River and Intermediate River (Elk Lake) watershed. Many sections of the Intermediate River, Bartholomew Creek, Todd Creek, Bennett Creek, Seamon Creek, Jordan River, multiple small tributaries, and their adjacent lowlands are located within the proposed treatment areas. All of these streams are

designated trout streams with naturally reproducing populations of brook trout and brown trout. Though none of the treatments proposed appear as though they will impact streams directly (buffers appear to be sufficient), the appropriate BMP's and Natural Rivers buffers should be followed.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

The vast majority of the compartment is within the Jordan Valley management zone. State minerals have been classified as non-leasable in this zone. The compartment is within the Antrim Shale gas play, and state minerals are actively being drained within the compartment by offset wells located on adjacent private property. There is no significant sand and gravel production in the area, but there does appear to be some potential within the compartment on the uplands.

Vehicle Access:

Reliable vehicular access into most areas of Compartment 052 is nearly non-existent. Extensive lowland complexes and wet conditions are the primary reasons for poor access. The second is this compartments tendency to be "land-locked" by privately owned parcels. Aside from Snowmobile Trail #4 and the old railroad grade west of the Jordan River, access is an "on foot" adventure for those willing to try.

Survey Needs:

Proposed management activities may necessitate the need for survey work within Compartment 052. It should be noted that the vast majority of Compartment 052 is bordered by privately owned parcels. Previously established survey corners (by private and state) were located during inventory examination yet "exact ownership" discrepancies were discovered and still remain in areas of this compartment.

Recreational Facilities and Opportunities:

Direct access to the Jordan River is available within Compartment 052. The Alba Rd boating access site (off of Mt. Bliss Rd) has a few rustic amenities. It's also a location for the public to fish and put in small watercraft (canoes, kayaks, etc.). Although not located in Compartment 052, another Jordan River access site is available off of Webster Bridge Rd (in compartment 051). Snowmobile Trail #4 travels through the compartment as depicted on the map. Headquarters for the East Jordan Snowmobile Club is located just east of the Alba Rd boating access site, off of Mt. Bliss Rd.

Fire Protection:

Fire protection is provided by local VFD's and State owned resources originating out Bellaire, Gaylord, and possibly Indian River.

Additional Compartment Information:

Forest health threats and pests are a continued reality across the landscape. Compartment 052 has, is, and will continue to play host to a variety of threats. Emerald ash borer (EAB) has affected nearly all of the ash component that was present in the compartment. Almost all ash observed was standing dead or is now down and dead. Beech bark disease (BBD) and associated beech scale was observed yet there is a very small component of the tree species present. Evidence of elm species formally being a strong component in this compartment is present. Now very few remain (Dutch elm disease) but are re-establishing themselves in areas.

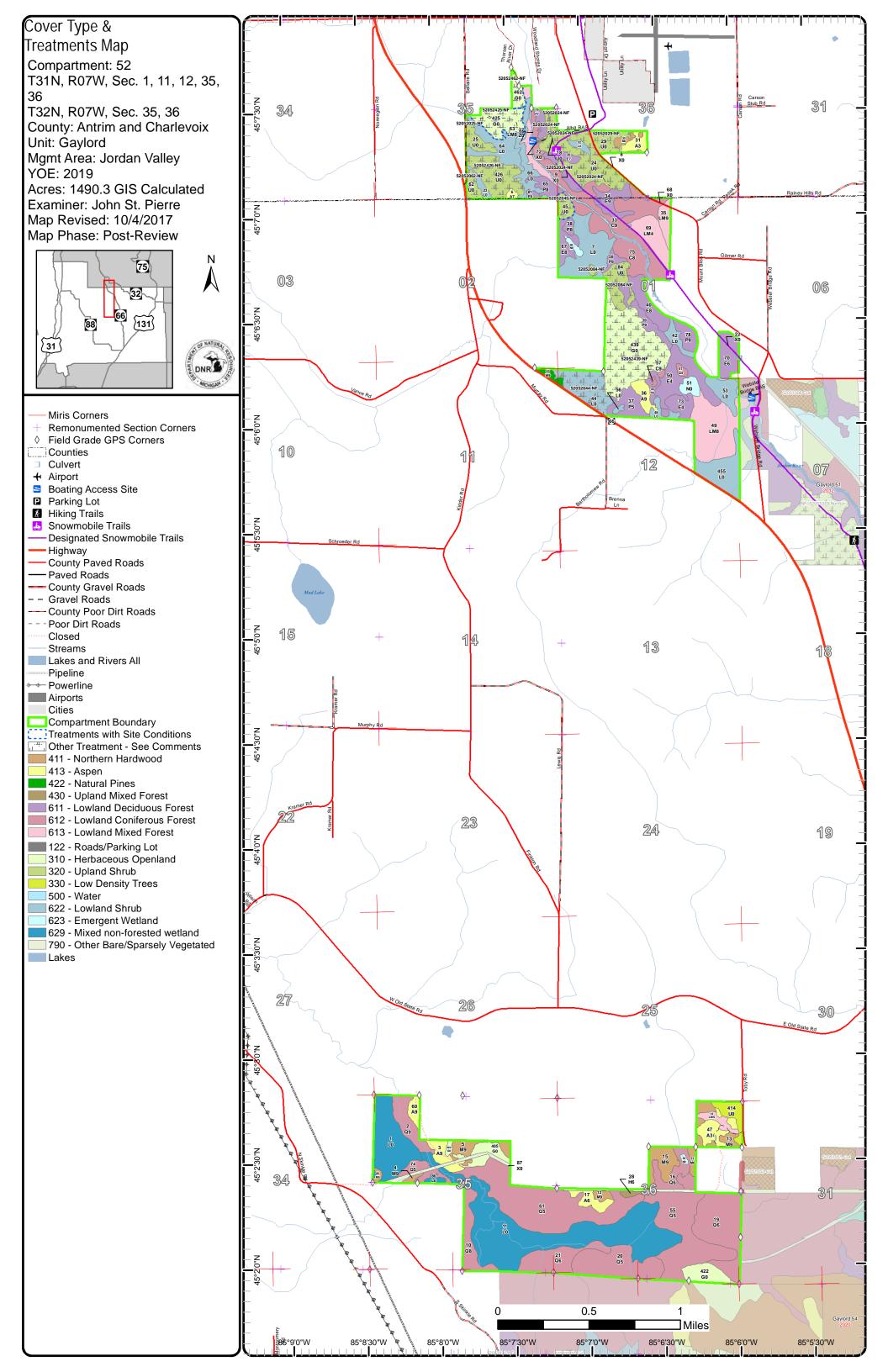
Remaining plant and tree species unaffected by the aforementioned threats face continued pressure from various agents. Such agents include but are not limited to the following; high deer population and heavy browsing pressure, beaver activity, hydrology fluctuations as a result of human and non-human events, and aggressively invasive shrubs (mainly common buckthorn & honeysuckle). All of these influences have, and will continue to shape and affect the natural processes occurring in and around Compartment 052.

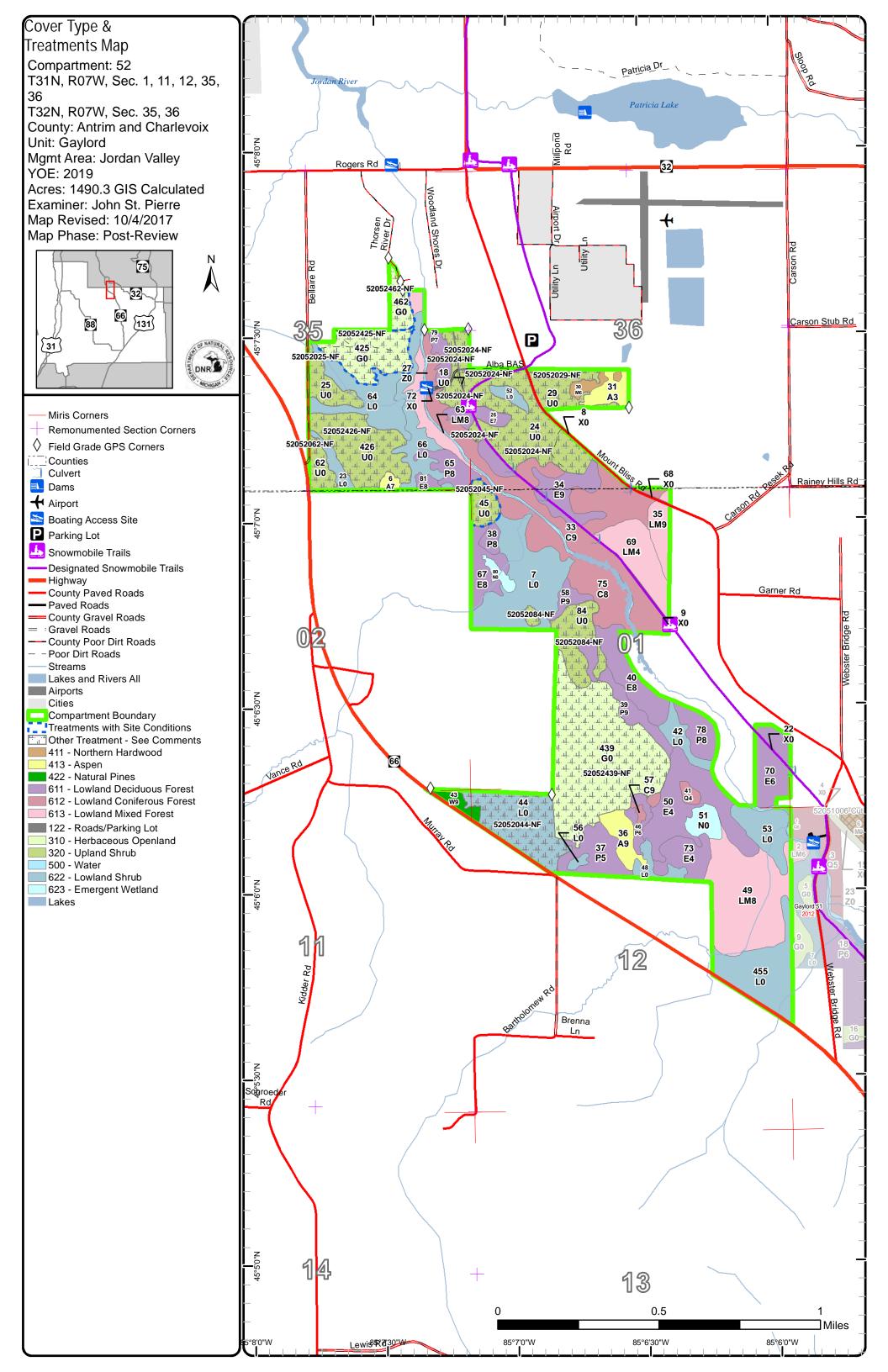
The following reports from the Inventory are attached:

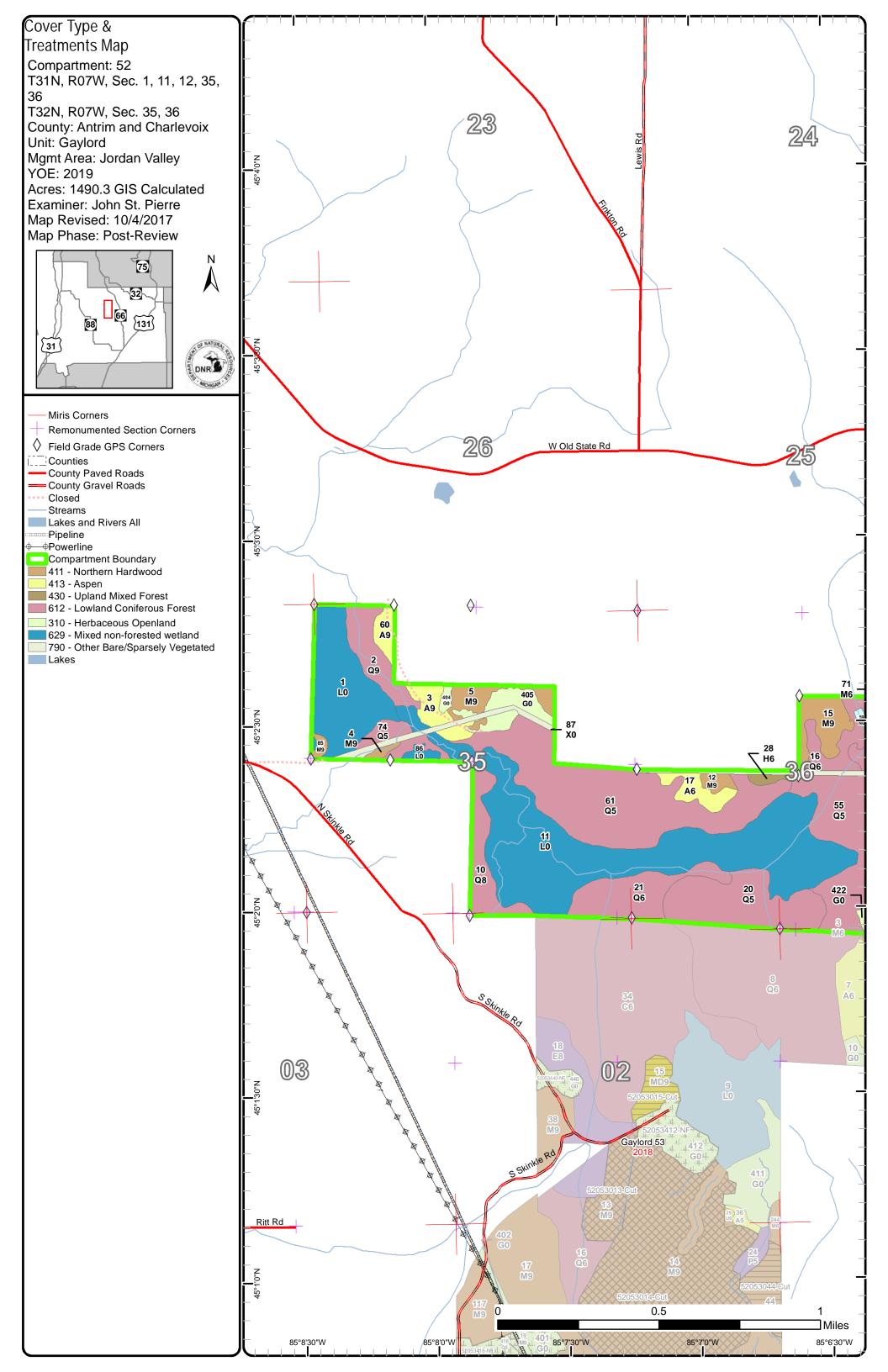
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

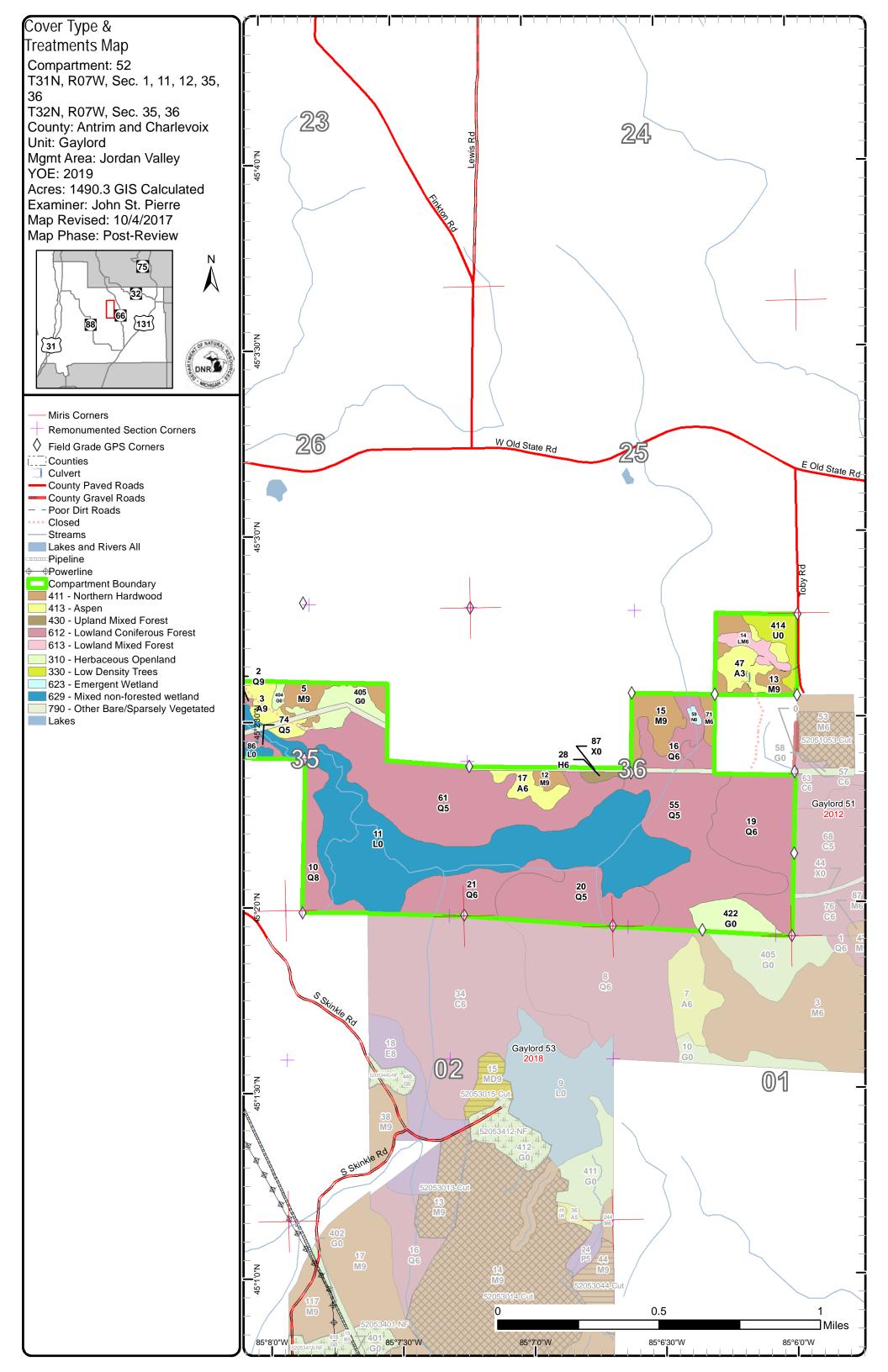
The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers

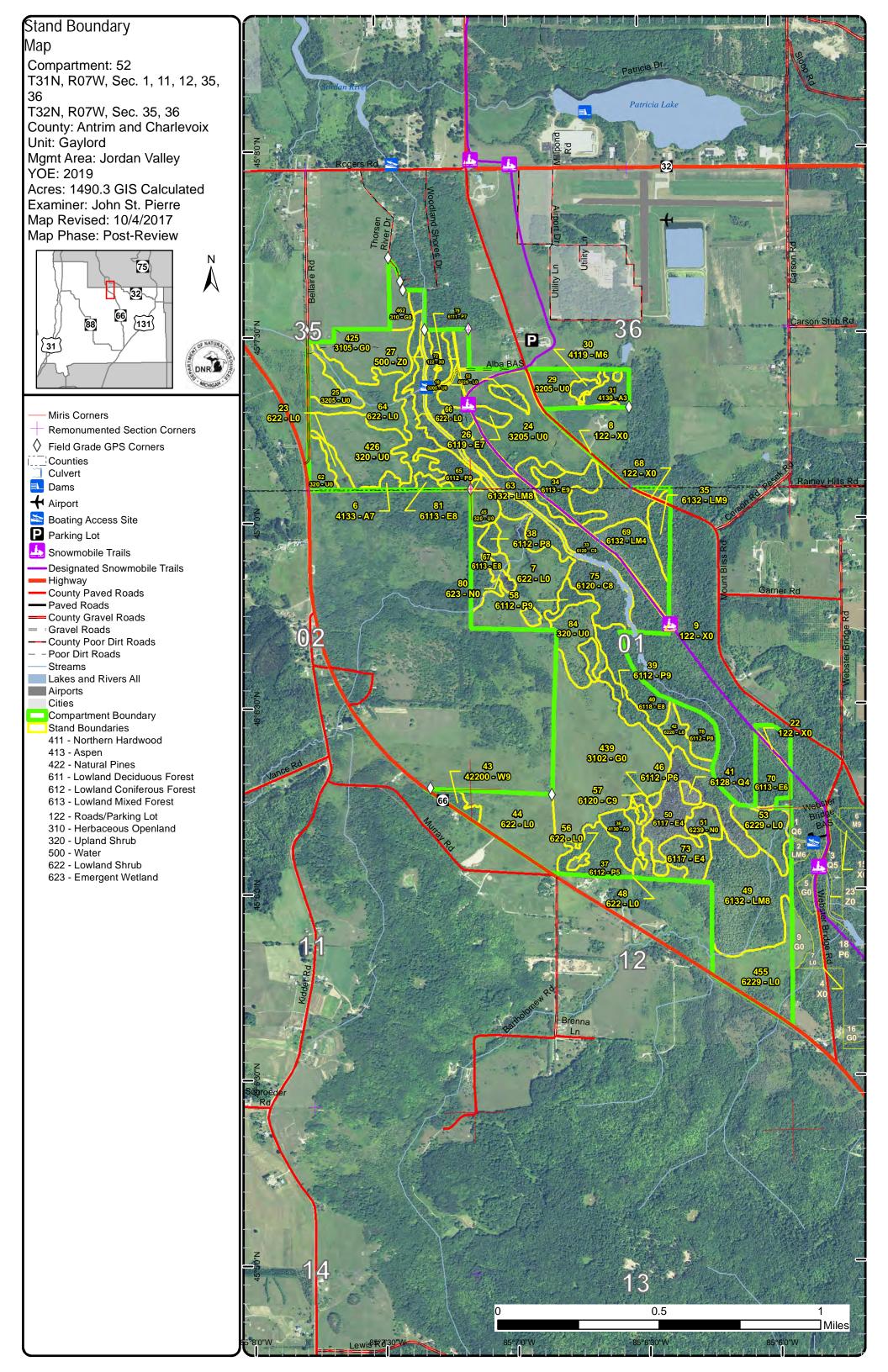
Proposed treatments
Site condition boundaries
Details on the road access system

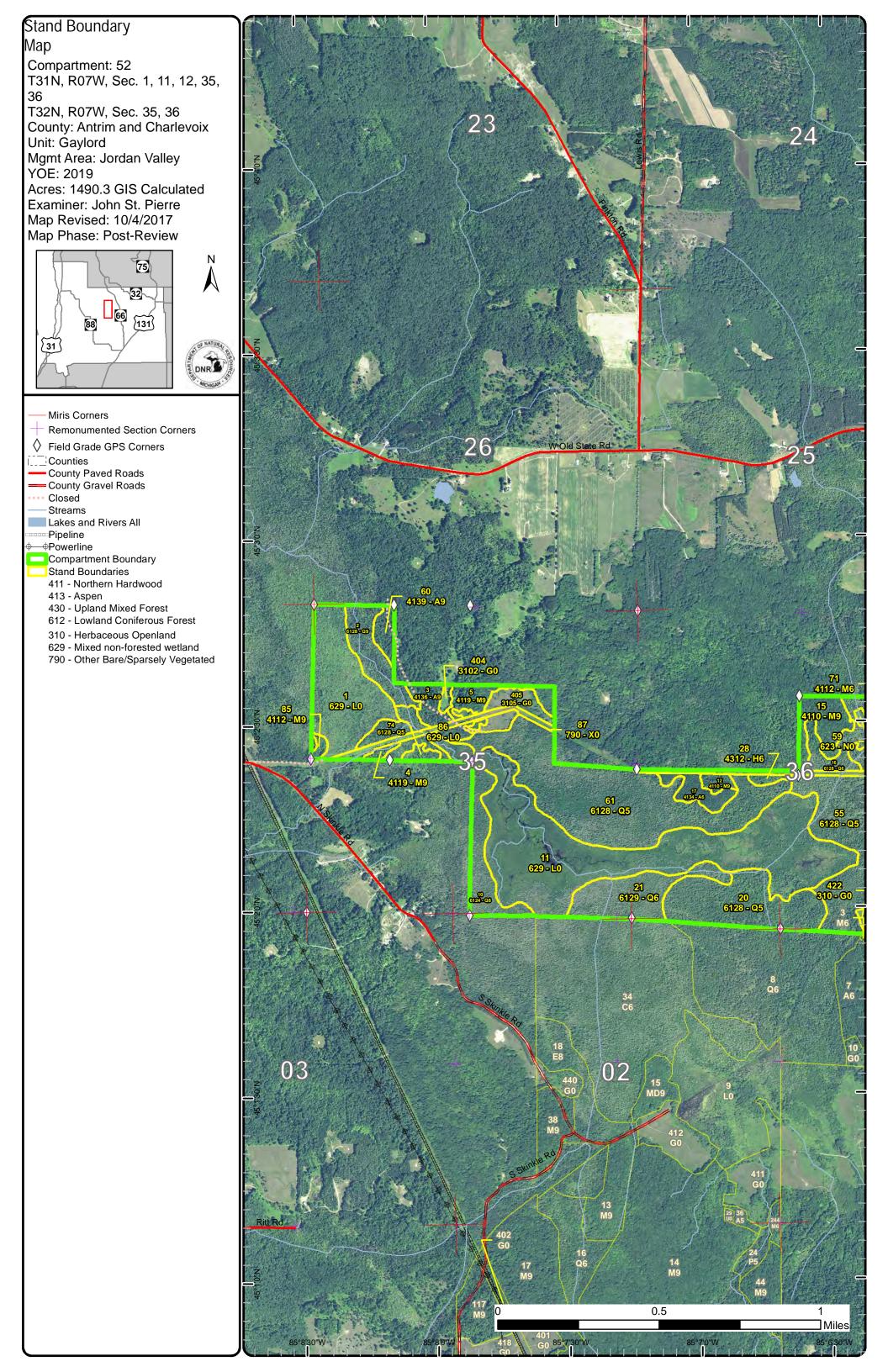


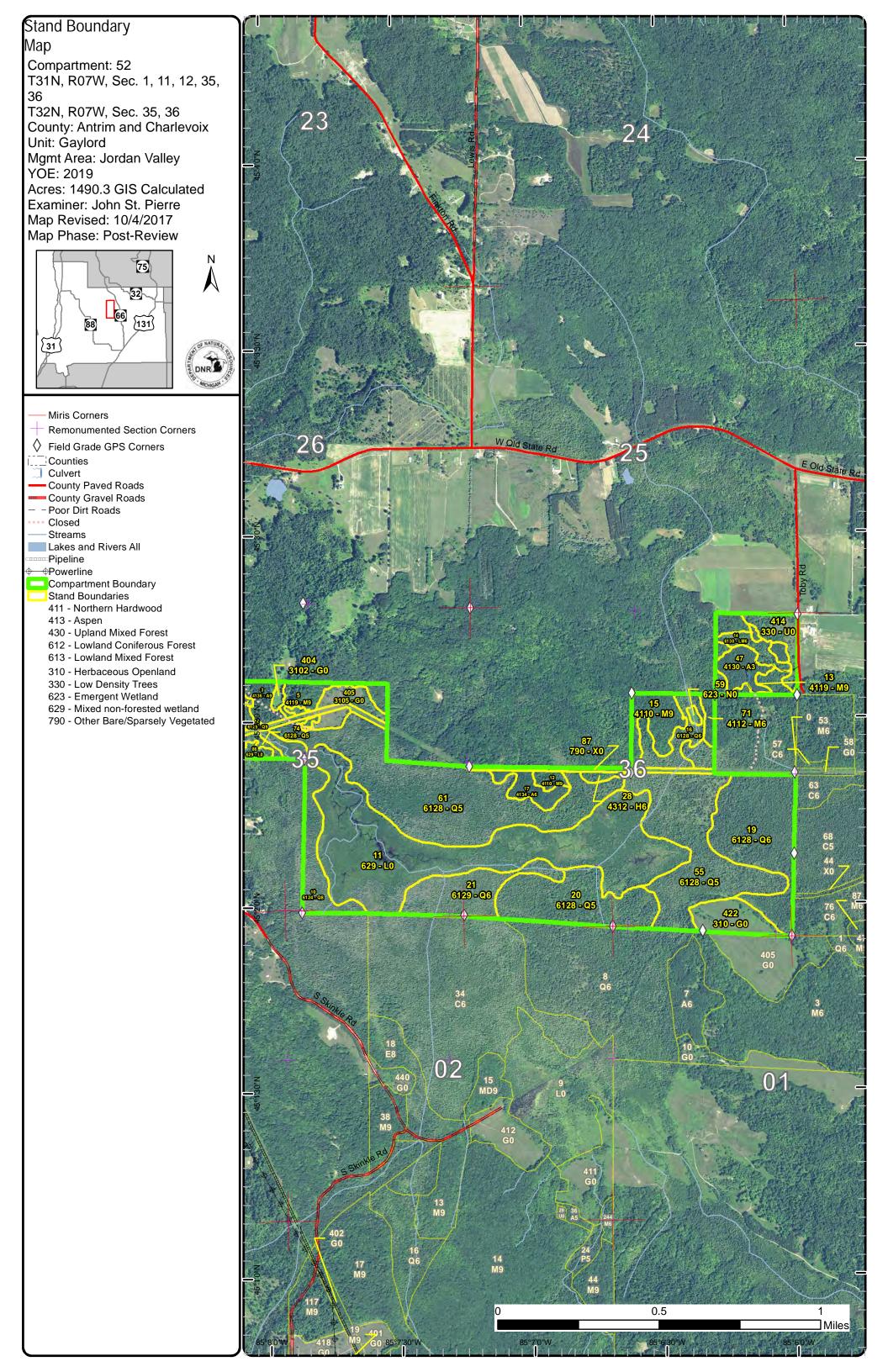


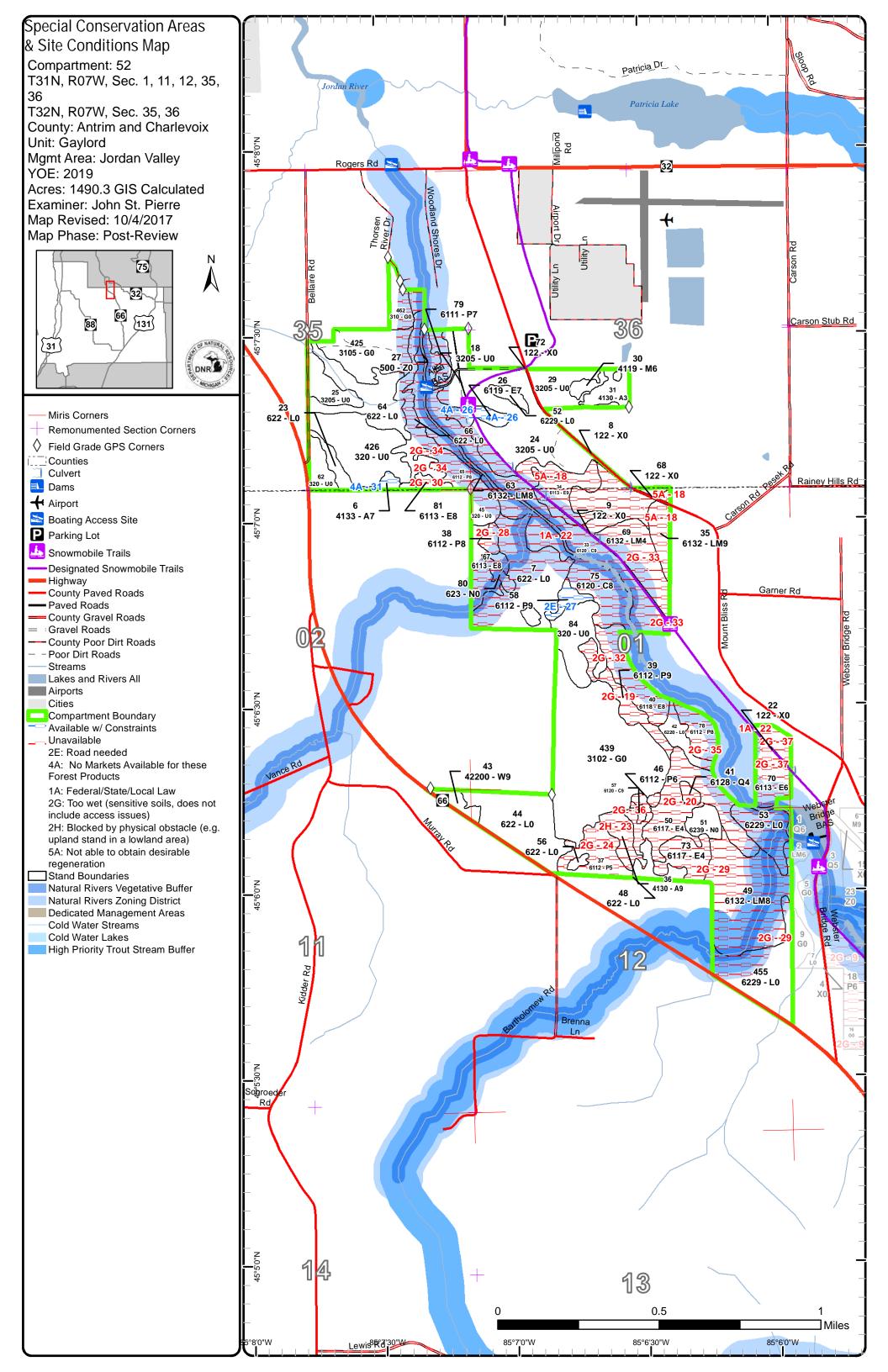


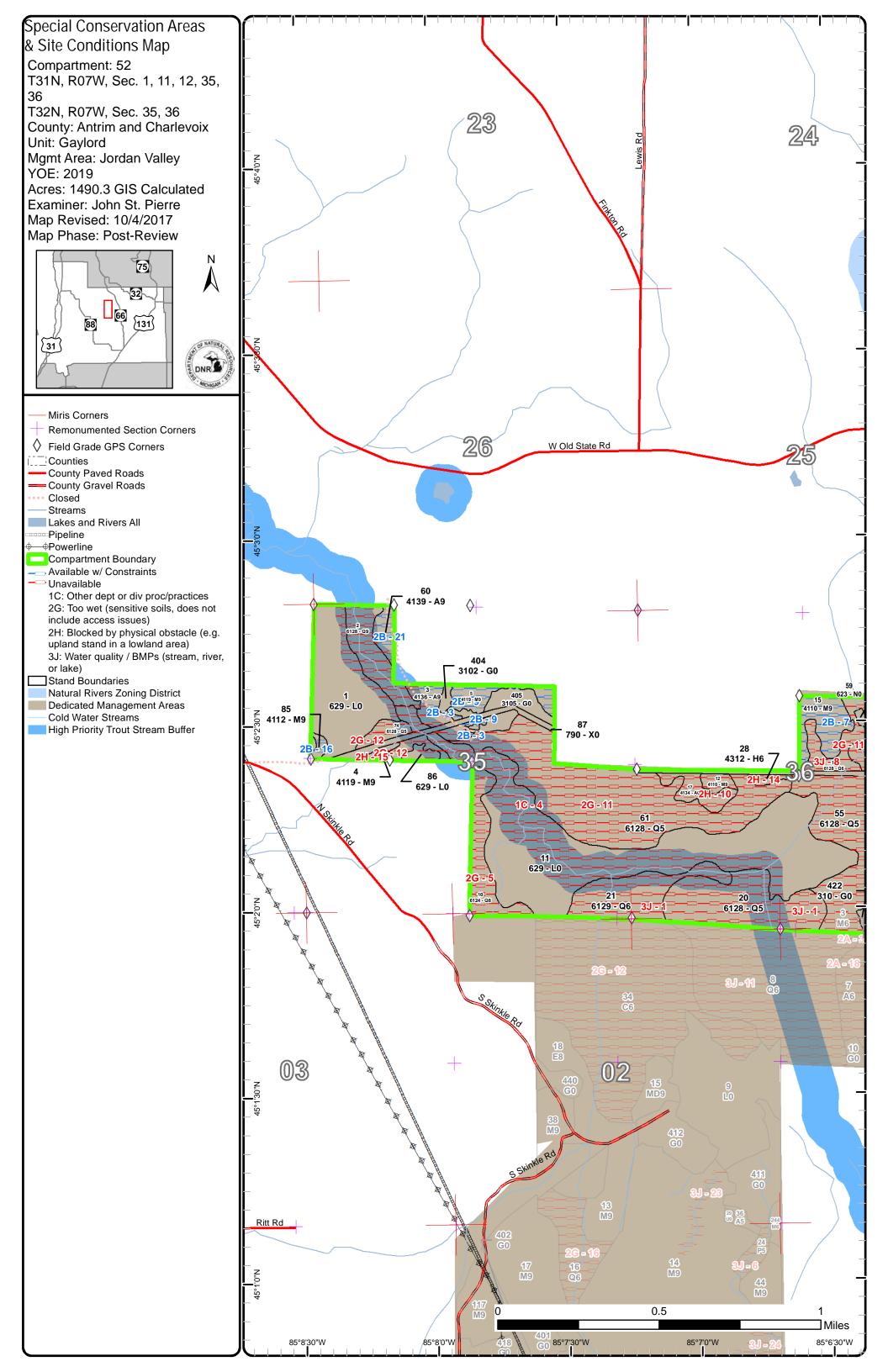


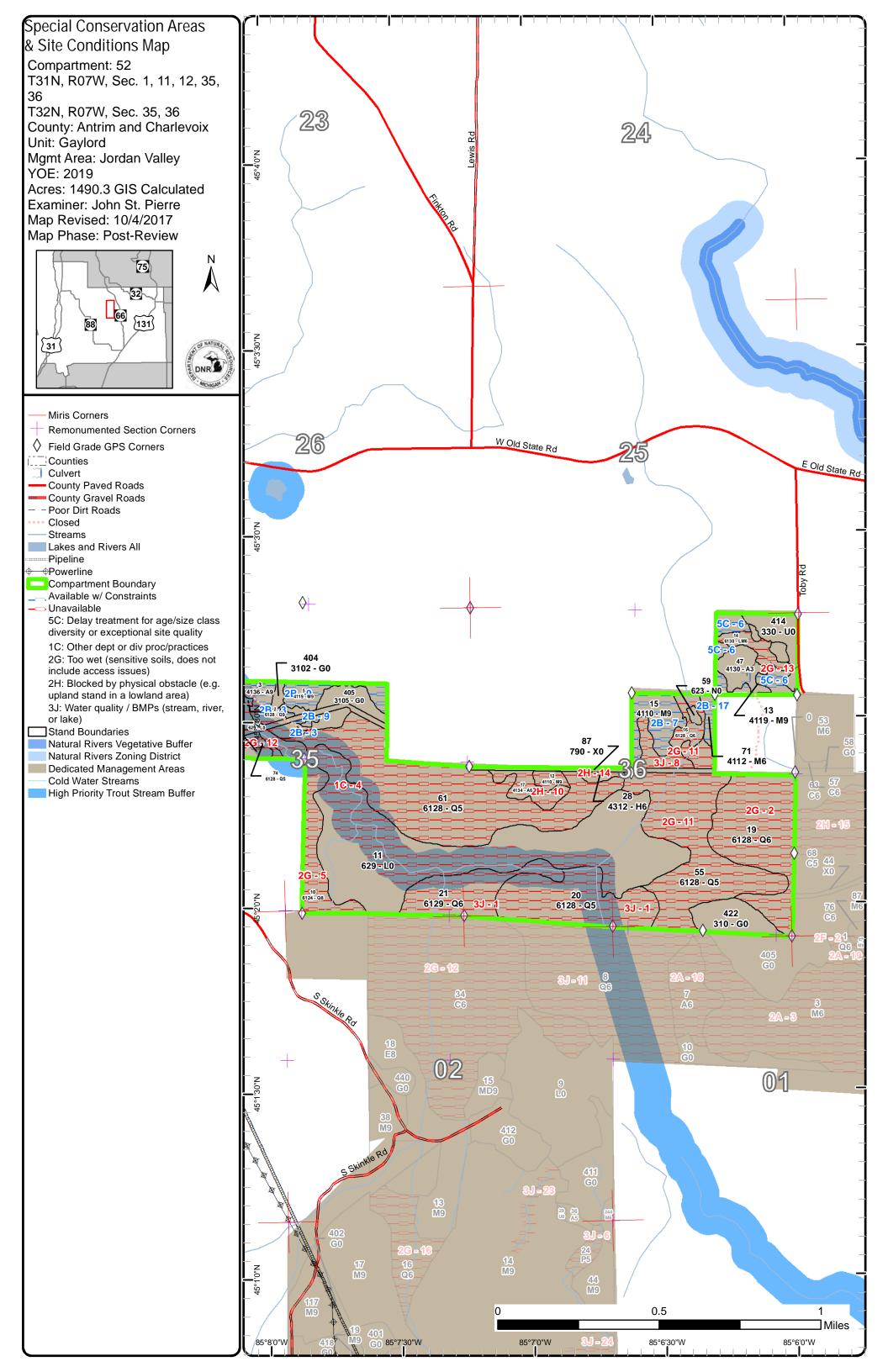












Gaylord Mgt. Unit

Compartment 52 Year of Entry 2019



John St. Pierre : Examiner

Age Class

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Aspen	0	0	19	0	0	9	10	10	0	0	6	0	0	0	0	0	0	0	54
Bare/Sparsely Vegetated	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Cedar	0	0	0	0	0	0	0	0	0	0	0	2	58	0	0	0	0	27	86
Hemlock	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Herbaceous Openland	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	137
Low-Density Trees	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	8	33	0	17	0	0	0	0	0	0	0	0	57
Lowland Conifers	0	0	0	0	0	0	0	9	198	2	0	100	20	17	14	0	0	0	360
Lowland Deciduous	0	0	0	0	0	0	2	0	27	30	0	17	10	0	6	0	0	16	108
Lowland Mixed Forest	0	0	0	0	0	0	0	6	19	0	8	47	0	0	0	0	0	10	90
Lowland Shrub	362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	362
Marsh	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Northern Hardwood	0	0	0	0	0	0	0	0	3	0	15	33	0	0	0	0	0	0	51
Upland Shrub	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
Total	680	0	19	0	0	9	20	58	251	49	29	201	88	17	20	0	0	53	1492



Report 2 – Treatment Summary

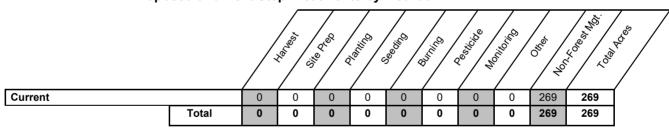
Gaylord Mgt. Unit Year of Entry: 2019

Acres of Harvest

Compartment 52
Total Compartment Acres: 1,490

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

Proposed and Next Step Treatments by Method



Regen:

10/01/2018 **Proposed Start Date:**

52052044-NF 29.7 622 - Lowland Shrub Nonstocked Unspec NonForestMgt Other - Specify 622 - Lowland Draft Field ified Shrub Boundary

Habitat Cut: No Site Condition:

Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native Specs:

species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish.

Next Step Treatments:

<u>Acceptable</u>

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 52 s Year of Entry: 2019 t а **Treatment** Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 52052045-NF 6.5 320 - Upland Shrub Nonstocked Unspec NonForestMgt Other - Specify 310 -Draft Field 45 ified Herbaceous Boundary Openland **Habitat Cut: No** Site Condition: Federal/State/Local Law Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native Specs: species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Next Step Treatments: Acceptable Regen: Other Comment: Proposed Start Date: 10/01/2018 52052062-NF 6.6 320 - Upland Shrub Nonstocked 310 -Draft Field Unspec NonForestMgt Other - Specify Herbaceous ified Boundary Openland **Habitat Cut: No Site Condition:** Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Specs: Next Step **Treatments:** <u>Acceptable</u> Regen: Other Comment: **Proposed Start Date:** 10/01/2018 52052084-NF 17.7 320 - Upland Shrub Nonstocked Unspec NonForestMgt Other - Specify 310 -Draft Field Herbaceous Boundary Openland **Habitat Cut: No** Site Condition: Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native Specs: species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Next Step Treatments: <u>Acceptable</u> Regen: Other Comment: **Proposed Start Date:** 10/01/2018 52052425-NF 22.4 3105 - Mixed Nonstocked Unspec NonForestMgt Other - Specify 310 -Draft Field Upland Herbaceous Herbaceous Boundary Openland **Habitat Cut: No** Site Condition: Federal/State/Local Law Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Specs: Next Step Treatments: <u>Acceptable</u> Regen: Other Comment:

10/01/2018

Proposed Start Date:

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 52 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Objective Name CoverType Density Age Range Type Method Structure **Status** d 52052426-NF 28.5 320 - Upland Shrub Nonstocked Unspec NonForestMgt Other - Specify 310 -Draft Field 426 ified Herbaceous Boundary Openland **Habitat Cut: No Site Condition:** Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Specs: Next Step Treatments: <u>Acceptable</u> Regen: Other Comment: **Proposed Start Date:** 10/01/2018 3102 - Grass Unspec NonForestMgt 310 -Draft Field 52052439-NF 79.5 Nonstocked Other - Specify ified Herbaceous Boundary Openland **Habitat Cut: No Site Condition:** Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native Specs: species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Next Step Treatments: Acceptable Regen: Other Comment: 10/01/2018 **Proposed Start Date:** 462 52052462-NF 7.0 310 - Herbaceous Nonstocked Unspec NonForestMgt 310 -Draft Field Other - Specify Openland ified Herbaceous Boundary Openland **Habitat Cut: No** Site Condition: Federal/State/Local Law Prescription Remove invasive common buckthorn and any other invasive through mechanical and/or chemical means or prescribe fire. Restore native Specs: species and grasses, and prescribe burn to maintain. Possibly work with NGO's to accomplish. Next Step Treatments: <u>Acceptable</u>

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed: 269.2

Compartment: 52

Gaylord Mgt. Unit

Year of Entry: 2019 John St. Pierre: Examiner

Availa	ability for	Managemen	ıt											
Total	Acres	Acres Avail	Acres	D	omina	nt Site	Con	ditions	3					
Acres	Available	With Condition	Not Available		2B	2E	4A	5C	1A	1C	2G	2H	3J	5A
54	19	12	22	Aspen	10		2	0		6		16		
14	13	0	2	Bare/Sparsely Vegetated						2		0	0	
86	0	0	86	Cedar					73		5			9
2	0	0	2	Hemlock								2		
137	130	0	7	Herbaceous Openland					7		0			
11	11	0	0	Low-Density Trees										
57	0	4	53	Lowland Aspen/Balsam Poplar		4			17		36			
361	2	0	359	Lowland Conifers	0					60	241	0	57	
107	3	4	100	Lowland Deciduous			4		39		53			8
90	0	0	90	Lowland Mixed Forest					50		32			8
362	229	0	133	Lowland Shrub					56	78	0			
9	7	0	3	Marsh					3					
51	3	42	5	Northern Hardwood	31			11				5	0	
131	125	0	6	Upland Shrub					6		0			
7	4	0	3	Urban					3					
8	0	0	8	Water					8					
4	4	0	0	White Pine										
1,490	549	62	879	Total Forested Acres	41	4	6	11	261	145	367	23	57	25
	37%	4%	59%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	43	2G: Too wet (sensitive soils, does not include access issues)	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2E: Road needed	Unspecified
	Comments:						

300ft buffer applied to the Intermediate River dissects a portion of Stand 20 & 21 (turn on Ref.Lines). All "Other Site Conditions" provided above apply as well.

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2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	54	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2E: Road needed	Unspecified	Unspecified
	Comments: Saturated wet soils	and no logical/good access op	tion(s).				
3	Available	2B: Unknown if access through adjacent landowner(s) is possible	5	2I: Survey needed	Unspecified	Unspecified	Unspecified
	Comments: Unable to locate co	orners, although might be prese	nt.				
4	Unavailable	1C: Other dept or div proc/practices	146	3J: Water quality / BMPs (stream, river, or lake)	2G: Too wet (sensitive soils, does not include access issues)	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified
		: Stream" is the dominant site co bove apply throughout dependir					other site
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	18	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
	Comments: May also qualify fo	r quasi potential old growth. Ent	ire star	nd would need to be explore	ed but very old/large/tall sp	oruce, tamarack, and fir prese	nt.
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
		is composed of five separate p e soils. Consider treating some				e either steeper slopes, flowir	ng water/seeps, or

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Available	2B: Unknown if access through adjacent landowner(s) is possible	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Primary limitation to	o accessing this stand are surro	ounding	physical obstacles. Access	s from north through PVT	might be possible but haven'	t verified yet.
Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	2G: Too wet (sensitive soils, does not include access issues)	2F: Too steep	Unspecified	Unspecified
Comments: All of the above pre	esent, plus limited volume & me	rchanta	ıbility.			
Available	2B: Unknown if access through adjacent landowner(s) is possible	11	2I: Survey needed	Unspecified	Unspecified	Unspecified
Comments: Unable to locate co	orners, although might be prese	nt.				
Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	12	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed	Unspecified	Unspecified
Comments: Some steep slopes	s present in areas as well.					
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	162	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3J: Water quality / BMPs (stream, river, or lake)	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed
Comments: Limited merchantal	bility on top of all of what's listed	d above	٠.			
	Comments: Primary limitation to Unavailable Comments: All of the above pre Available Comments: Unable to locate co Unavailable Comments: Some steep slopes Unavailable Comments:	through adjacent landowner(s) is possible Comments: Primary limitation to accessing this stand are surrous unavailable 3J: Water quality / BMPs (stream, river, or lake) Comments: All of the above present, plus limited volume & me Available 2B: Unknown if access through adjacent landowner(s) is possible Comments: Unable to locate corners, although might be prese Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) Comments: Some steep slopes present in areas as well. Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments:	through adjacent landowner(s) is possible Comments: Primary limitation to accessing this stand are surrounding Unavailable 3J: Water quality / BMPs 14 (stream, river, or lake) Comments: All of the above present, plus limited volume & merchanta through adjacent landowner(s) is possible Comments: Unable to locate corners, although might be present. Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) Comments: Some steep slopes present in areas as well. Unavailable 2G: Too wet (sensitive soils, does not include access issues) Comments:	through adjacent landowner(s) is possible Comments: Primary limitation to accessing this stand are surrounding physical obstacles. Access Unavailable 3J: Water quality / BMPs (stream, river, or lake) 14 2G: Too wet (sensitive soils, does not include access issues) Comments: All of the above present, plus limited volume & merchantability. Available 2B: Unknown if access through adjacent landowner(s) is possible Comments: Unable to locate corners, although might be present. Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) Comments: Some steep slopes present in areas as well. Unavailable 2G: Too wet (sensitive soils, does not include access issues) 162 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Comments: Primary limitation to accessing this stand are surrounding physical obstacles. Access from north through PVT Unavailable 3J: Water quality / BMPs (stream, river, or lake) 2F: Too steep soils, does not include access issues) Comments: All of the above present, plus limited volume & merchantability. Available 2B: Unknown if access through adjacent landowner(s) is possible Comments: Unable to locate corners, although might be present. Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) Comments: Some steep slopes present in areas as well. Unavailable 2G: Too wet (sensitive soils, does not include access issues) 12 2B: Unknown if access through adjacent landowner(s) is possible 2E: Road needed through adjacent landowner(s) is possible 3J: Water quality / BMPs (stream, river, or lake) BMPs (stream, river, or lake) Comments:	Comments: Primary limitation to accessing this stand are surrounding physical obstacles. Access from north through PVT might be possible but haven't unavailable 3J: Water quality / BMPs (stream, river, or lake) 14 2G: Too wet (sensitive soils, does not include access issues) Comments: All of the above present, plus limited volume & merchantability. Available 2B: Unknown if access through adjacent landowner(s) is possible 11 2I: Survey needed Unspecified Un

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	omments: et sensitive soils,	low merchantability, Seamon (Creek is				
13			JICCK K	s the northern boundary.			
	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	omments: ater course corri	dor with a defined stream bed. l	Being f	ed by seeps as well as wate	er being funneled from hills	slopes to north and south.	
14	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	5B: Maintain for regeneration purposes	Unspecified	Unspecified	Unspecified
	omments: mall stand, prima	rily dominated by hemlock. Stee	eper slo	ppe present as well.			
15	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	2E: Road needed	Unspecified	Unspecified	Unspecified
	omments: nreliable access,	powerline clearing is lowland. S	Small a	creage as well.			
16	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	Unspecified	Unspecified	Unspecified	Unspecified
	omments: ery small upland i	sland of northern hardwood. Su	ırround	ed by lowland on 3 sides.			

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17	Available	2B: Unknown if access through adjacent landowner(s) is possible	4	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
	Comments: Difficult access, sm	all operable area, steep slopes	preser	nt, and smaller DBH size cla	sses present.		
18	Unavailable	5A: Not able to obtain desirable regeneration	25	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
		vered by 5A was proposed for h any regeneration. Didn't want to					
19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This stand was pre-	viously prescribed for a non-cor	nmerci	al harvest that never occurre	ed. Very difficult to access	and very wet with sensitiv	re soils.
20	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	26	4A: No Markets Available for these Forest Products	2E: Road needed	Unspecified	Unspecified
	Comments: Developing into an viable access.	extensive beaver flooding with	high m	ortality/low to no merchantal	oility. Areas that are still a	ive found atop wet/sensitiv	e soils. Poor to no
21	Available	2B: Unknown if access through adjacent landowner(s) is possible	4	2I: Survey needed	Unspecified	Unspecified	Unspecified

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John St. Pierre : Examiner

22	Unavailable	1A: Federal/State/Local Law	261	Unspecified	Unspecified	Unspecified	Unspecified
		and HCVA capturing the Jorda I Rivers Specialist for further de		Bartholomew Creek, Benr	nett Creek, and Todd Creek	. Extends 400ft on either	side of these features.
23	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	2E: Road needed	4A: No Markets Available for these Forest Products	Unspecified	Unspecified
		main limiting factor (wet clay so vasive common buckthorn four				oid 3-times (Erroneous As	spen). Terminated in
24	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
		g portions of this stand with Std ss and pose invasive spread co			f stand is to wet with limited	d merchantability. Stand 4	4's wet clay soils don't
26	Available	4A: No Markets Available for these Forest Products	4	Unspecified	Unspecified	Unspecified	Unspecified
		rge component of standing dea n in sub-can. Saturated sensitiv				et not worth chasing at this	s time. Invasive
27	Available	2E: Road needed	4	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments:						

Gaylord Mgt. Unit

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28	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
29	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	28	4A: No Markets Available for these Forest Products	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified
	omments: rimarily to wet. Ar	reas of high mortality, low merch	ıantabili	ty, and viable access isn'	t present. Did observe old red	I line in Std.73.	
30	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
_	omments: aturated sensitive	e soils and no viable access into					
31	Available	4A: No Markets Available for these Forest Products	2	Unspecified	Unspecified	Unspecified	Unspecified
_	omments: cattered clones, I	imited merchantability, small ac	reage. A	Access into is difficult at b	est.		
32	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	2E: Road needed	Unspecified	Unspecified	Unspecified
С	omments:						
33	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	4A: No Markets Available for these Forest Products	Unspecified	Unspecified	Unspecified
	omments:	e soils and widespread ash mort					

Gaylord Mgt. Unit John St. Pierre : Examiner

Compartment: 52 Year of Entry: 2019

34	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	2E: Road needed	Unspecified	Unspecified	Unspecified
	Comments: Saturated sensitive	soils present. Small acreage a	and no v	riable access into as of now.			
35	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2E: Road needed	Unspecified	Unspecified
	Comments: Difficult to access d	ue to flooding caused by beav	er activ	ty. Saturated sensitive soils	present.		
36	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Saturated sensitive	soils with areas of high mortal	ity and	ow merchantability. Beaver a	activity causing additional t	flooding in areas.	
37	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed	Unspecified	Unspecified
	Comments:						
		ntermittent stream present. He ound. Grade narrow and I don i				access but PVT on eithe	r side and no where

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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: 52
Year of Entry 2019



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservation Area	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond 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 communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific mana rules, as governed by Part 5, Department of Natural Resources, 324.504). Section 38 of the Administrative Procedures Act (MCL the promulgation of rules. This is an active program, with one pro DNR.	of the NREPA (MCL 324.502(2) and 24.238) provides for public requests for
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved 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.	S Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts

s t	Gaylord	Mgt. Unit		Report 7	– Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	17.3	127	111-140	Lowland conifer (NWC/Hem) mixed decid corridor stand that follows the Intermediate River. Variable between Log and Pole dominated. Can be straight log dominated in areas, then pole, and a mix of both. Log seemed to be more dominant yet not at a high stocking level. Saw both sides of southern half. Did not see the northern half.
3	4136 - Aspen, Mixed Conifer	Sawtimber Well	10.0	64	111-140	Originally had Std's 3&60 separate, then merged, then separated again. Std.60 BTA is much larger than what's commonly found in this stand. Some XLog BTA in very north (a continuation of Std.60). Cored a sound BTA found in xlog area and got ~90yrs (difficult to count rings). Aspen DBH's decrease as you travel south (before p-line) and you begin to pick up more species mixing. South of p-line lower has more QA/BF. NHD and lowland species common components within. OPIC - FMD: Remote aspen stand with no access to conduct a commercial harvest.
4	4119 - Mixed Northern Hardwoods	Sawtimber Well	1.7	106	111-140	Large red maple log tends to dominate, but are scattered about and/or in clumps. Strong pole component. Ground appeared mostly dry, yet pooled water present and most of stand is surrounded by lowland. Strong yellow birch and musclewood component in sub-can.
5	4119 - Mixed Northern Hardwoods	Sawtimber Well	10.8	101	111-140	Located on rolling terrain with steeper draws in areas. Log tends to dominate yet areas heavier to pole common (mainly SM). Scattered large standing dead Wht.Ash. Blk. Cherry and some living elm present. Overall quality is marginal to "ok". One draw had a flowing, likely intermittent, stream. A seep was observed nearby too. Flows S/SE through ~center of G0 Std.405 (lowland shrub water course visible on imagery). Variable stocking levels throughout causing sporadic BA swings.
						OPIC - FMD: HILLY TERRAIN WITH SEMI-OPEN AREAS THROUGHOUT HARDWOOD.
6	4133 - Aspen, Mixed Pine	Sawtimber Poor	2.2	59	51-80	Aspen clones with scattered white pine logs. Trace apple. Buckthorn, wild raising, and more honeysuckle associated with lowland (northeast). Old barbed wire on south perimeter (PVT boundary). T-posts from survey present as well.
10	6124 - Lowland Spruce- Fir	Sawtimber Medium	20.1	112	81-110	Just made it into the northern portion. Some very large/tall "stuff" where I was. Measured 18.5", 17.5", and 17.9" Tamaracks. A 20.3" White Spruce. And cored a 13.2" and 7.5" Balsam Fir. Log more dominant where I was yet not at a high stocking level. Open wet areas of low shrub, some I couldn't I.D. Strong pole Fir component where I was. Imagery suggests stocking levels decrease and low shrub probably increase in southern areas of the stand.
12	4110 - Sugar Maple Association	Sawtimber Well	3.2	92	111-140	Small yet quite different from the stand it was originally part of (Std.17). Basswood (log) mainly dominates with sugar maple being quite common. Scattered large wht.spruce and some larger BF present. Line of hemlock at bottom of east boundary. Atop rolling hills, some areas steep.

s t	Gaylord	Mgt. Unit		Report 7	– Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	4119 - Mixed Northern Hardwoods	Sawtimber Well	11.5	91	141-170	NW POLY: Beginning along northern boundary, DBH's larger on top of rolling hill closer to PVT field. Traveling south, hill moves somewhat quickly downslope toward a creek/seep corridor. DBH's decrease too, moving into mostly stump-sprout poles. One ~0.2ac xlog BTA clump, scat dead stding Wht.Ash, and a few hemlock present. 3SW/WestLine POLYS: DBH's generally larger. 2-Polys on west line were wetter, seeps/flowing water, with some associated "low" species (hemlock, cedar, YB). All on or part of rolling hills in area.SE POLY: Areas of this poly on the steeper upslope within this forty. DBH distribution similar to NW Poly. Captures some scat conifer (hem, WP, fir) and a handful of QA. Overall quality is poorest here.TAKE HOME: This stand is what resulted after Std.47 was harvested in ~2001. What remains are NHD dominated hills/slopes that are seasonally wet/seepy in areas. Overall quality is ok/average.
						terrain. Limited factored due to wetland trail road access, and some seeps in stand.
14	6130 - Fir, Aspen, Maple	Poletimber Well	6.1	66	111-140	Water course fed by seeps and drainage from hills/slopes to north and south of this stand. GPS'ed one seep (see OFS), but is being fed by more. Defined creek course begins on east end and flows west. Water runs underground in some areas (could hear, not see it). Can. closure is 75-100% where forested, but drainage course itself is generally non-forested with areas to cattail. 2-track leading to PVT 40 to south also doubled as skid route (I think) when Std.47 was cut. It skirts drainage for a bit and is soft/wet, a bit rutted, and has one culvert while in Std.47. Small upland inclusions consist of low stocked WP, Tamarack, semi-opening along south boundary and areas heavier to NHD along northern boundary.
15	4110 - Sugar Maple Association	Sawtimber Well	14.9	106	111-140	Log sizes account for 30% or more of canopy yet poles abundant & dominant in areas. Sloping terrain (interior) with steep slopes (30-50% +-) along entire perimeter. Internment stream bed/seeps at bottom on sloping pinch point that leads into finger along western boundary. Poor (or no) access from all directions. If accomplished, would have to be from North through a lot of PVT (p-line is swamp, stream/steep slopes through Std.16). Despite being somewhat old, the stand is doing quite well on its own. OPIC - FMD: HARDWOOD ON STEEP HILLS. DIFFICULT ACCESS DUE TO INTERMEDIATE RIVER, ITS ASSOCIATED WETLANDS, AND PRIVATE.
16	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	14.3	138	81-110	Flowing stream travels through and a water catch for surrounding steep slopes/topo. Variable canopy closure (areas of heavy ash mortality) with lower end of 75-100% most common. Included hemlock dominated upland slopes into this stand. Cedar primarily dominates yet quite a diverse mix depending on location in stand. OPIC - FMD: Lowland hardwood with swamp conifer component. This stand has lots of standing water.
17	4134 - Aspen, Spruce/Fir	Poletimber Well	8.6	46	111-140	Primarily an Up w/Low A6 stand with a strong fir (some spruce) component. Terrain is a series of rolling hills w/some steep draws that extend into low at bottom. BTA more common when "up", QA more common when "low". Fir dominates towards "low".

S t	Gaylord	l Mgt. Unit		Report 7	- Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	53.6	78	171-200	More travel conditions when inventoried (thaw, snow/mud, postholing). Saw northern third though. Fairly dense, pole sized, with areas heavier to NWC and others heavier to BFir. Spruce (wht&blk) mixed in throughout along with some deciduous. Saw one flowing stream and fairly sure more are present (flowing toward Intermediate Riv.). Scattered tip-ups & blow downs present yet didn't see "large events" like in Std.55. OPIC - FMD: Swamp conifer stand with scattered white pine in overstory.
20	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	43.4	79	Unspecified	OPIC - FMD: Swamp conifer with overtopping Balm of Gilead.
21	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	28.1	79	Unspecified	
26	6119 - Mixed Lowland Deciduous Forest	Sawtimber Poor	5.7	133	111-140	Two-aged with L/XL species in overstory and a pole/sap reinitiation layer VERY heavy to Blk.Ash that is now mostly dead. This leaves L/XL species dominant yet not accounting for much can. closure (higher end of 25-50%). Still calling "forested" yet lower stocking when imagining without standing dead ash present. FULL Buckthorn in understory. Silver maple present, although difficult to clearly discern exact component (I.D. features out of reach).
						OPIC - FMD: M9 stand with a low volume & value of old relic sugar maple logs. Also, an E6 component. Wet soils and poor access make this stand undesirable to manage commercially. Nominated for a SCA as part of the Natural River Corridor.
28	4312 - Hemlock, Mixed Deciduous	Poletimber Well	2.1	104	171-200	Located atop the series of rolling hills that extend across p-line in areas. Primarily dominated by pole hemlock, with NWC and red maple as common associates. Broad mixing of both conifer and deciduous throughout. Draws (some steep) extend down into lower/wet areas. A bit heavier to NHD in eastern most "blob".
30	4119 - Mixed Northern Hardwoods	Poletimber Well	3.2	73	81-110	Primarily pole dominated with inclusion "clumps" of log/xlog size BW. More clumps found along northern boundary. BlkAsh and Am.Elm pole/saps still alive in areas. High/full BThorn. On transitional ground that seemed a bit more "Up", yet low areas throughout. NE small poly is a log/xlog dominated Silver/Red maple clump residing in standing water (on 4/10/17). This stand is basically the result of what wasn't cut when Std.31 was harvested.
						OPIC - FMD: Basswood, scrub black cherry, elm, quaking aspen, & ironwood. Some elm mortality. Lots of hawthorne. Low timber volume & value. No commercial cut recommended on wet soils.

on wet soils.

s t	Gaylor	d Mgt. Unit		Report 7	– Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	4130 - Aspen	Sapling Well	7.0	15	Immature	What a nightmare. A great example of how Buckthorn/invasives respond to disturbance. Stem density for Buckthorn is > or = to QA saps. QA crowns are now generally above Buckthorns 15-20ft crown height. Thorn is still/and will continue to occupy growing space. Difficult to go anywhere in this stand because of Bthorn density. I'd expect a 50-75% can.closure as this stand develops over time. Cut in 2002. Quite wet when present. Scattered residual no cut conifer species present. Some pole/log residual QA observed too.
						OPIC - FMD: Aspen was final harvested in 2002 by Wilfred Emond. Quaking aspen regenerated well with mixed viburnum & wild raisin shrubbery. Wet soils. Any conifer such as cedar & balsam fir was left uncut. Note: Small M9 inclusion less than a 1/2 acre left uncut
33	6120 - Lowland Cedar	Sawtimber Well	57.9	118	141-170	Primarily N.W. Cedar dominated when west of snowmobile trail. The "globs" east of snow trail has a higher prevalence of lowland deciduous mixing in w/conifer (cedar, spruce, fir). Buckthorn common throughout in understory but shade hasn't made it overly dense. Blk. ash saps common in east "globs" and stding dead ash (L/P/XL) common throughout. Flowing stream cuts through, originates from culvert under Mt. Bliss Rd and empties into J.River.
						OPIC - FMD: Stand is located along the Jordan River which nominates it for a HCVA.
34	6113 - Lowland Maple	Sawtimber Well	17.1	102	111-140	North poly and western portion of south poly were heavier to L/XL red/silver maple. Avg DBH decreases quite drastically in center of south poly and becomes more sap/pole dominated (trees/&shrubs). A prominent clump of cedar in ~center of south poly. Eastern area closer to Mt. Bliss Rd picks back up with L/XL species of Red/Silv.Maple, BW, SM, and scat NWC. Standing dead Blk.Ash (mainly pole) common throughout. Silver maple present, although difficult to clearly discern exact component (I.D. features out of reach).
						OPIC - FMD: Lowland hardwoods on wet soils with poor access along a designated snowmobile trail. Nominated for a SCA as part of the Natural River Corridor.
35	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	8.1	95	111-140	Variable canopy closer due to blk.ash mortality. Low end of 75-100% more common. Fairly wet when observed. Does have the appearance of being dry at some point (basswood presence too). Most/quite a few species present were log/larger log size and still quite young (given ages in surrding stands). Makes me believe species present have had somewhat better growing conditions (i.e. drier). Poly north of Mt. Bliss Rd included into, yet this area was very wet/not quite the same composition as south poly.
						OPIC - FMD: Stand is located along the Jordan River which nominates it for a HCVA.
36	4130 - Aspen	Sawtimber Well	7.6	56	81-110	Seasonally wet areas; potentially sensitive soils, especially in the south and along the edges. One scotch pine (sap). Much less conifer, more shrubs in southern half - much wetter. Trace grape, elm, willow, black ash in these areas. Sensitive fern also in south along with a couple dense pockets of musclewood. OPIC - FMD: Aspen stand that has reached maturity. Aspen logs are defective, & final harvest prescribed prior to future volume loss. Best access from M-66 across open, brushy field. Sale prepared & advertised 3 times. No bidders, sale closed in March, 2014.

s t	Gaylord	d Mgt. Unit		Report 7	- Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	6112 - Lowland Aspen	Poletimber Medium	14.0	62	51-80	Low basal area, 40-70; ~75% canopy closure, areas with more or less. Ash and elm mortality throughout stand. Southern edge, west half, is more upland. Far southwest is a 1/2 ac+ inclusion of upland bur oak, log/pole/sap.
38	6112 - Lowland Aspen	Sawtimber Medium	2.8	53	51-80	Beaver activity. Dense black ash regeneration in areas. A lot of dead standing pole black ash. One balsam fir sapling. Small bit of upland in an otherwise flooded (likely seasonally) stand. OPIC - FMD: Quaking aspen stand adjacent to E5 with standing water. Logging could be disastrous with BMP concerns even in the winter. Aspen logs dying out.
39	6112 - Lowland Aspen	Sawtimber Well	10.5	69	51-80	Railroad grade (built up) has a nice inclusion of upland species. Trace paper birch on south edge. Trace white pine, BAM, beech, green ash, white cedar in canopy. Some horsetail. Black ash, white ash, green ash, American elm all present. Small lowland hardwood inclusion in center, wide area.OPIC - FMD: Small aspen clone along railroad grade that is not snowmobiled, rather grown over with trees. Prescribed for final harvest with limiting factors due to adjacent wetlands. Consult with wildlife regarding a non-commercial cut.
40	6118 - Lowland Deciduous with Cedar	Sawtimber Medium	15.8	72	51-80	Trace amounts of silver maple, red maple, ironwood, American elm, bur oak, and paper birch in canopy. Significant ash mortality. Lowland located along the Jordan River. Stand nominated for a HCVA.
41	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Poor	2.0	82	Unspecified	Area surrounding this stand was flooded. Unable to visit in person but could see while on RR Grade to north (in Std.50). Appeared that most deciduous was standing dead. Could still see living cedar although it not in abundance. Flooding/beaver activity will probably kill the few remaining cedar before to long.
						OPIC - FMD: Small island of swamp conifer Q6, provides good deer cover.
43	42200 - Natural White Pine	Sawtimber Well	4.3	73	81-110	Quite a bit of pole white pine present. One yellow birch, 3". Buckthorn is much more prevalent in north half, especially around stream. Less canopy closure, somewhat smaller diameters in north half also. Some lowland characteristics in northeast; more hawthorn too. Trace red maple, sugar maple poles. One basswood. One sickly looking juniper.
46	6112 - Lowland Aspen	Poletimber Well	4.3	69	81-110	Stand could possibly go log, 10" QA. Around 75% canopy closure. Trace cedar along cedar perimeter. East portion around cedar island is log and fairly open - and very, very wet. Some log black ash. Recent beaver damage. One willow (log); one ironwood; trace paper birch.
47	4130 - Aspen	Sapling Well	12.4	17	Immature	Some perimeter/interior locations are either wet/low or abut low ground. 3-4" DBH common, with some areas ~just beginning to transition to pole size. OPIC - FMD: Young aspen developing. Vigorous, healthy stand. Minor component of balsam fir & white cedar left uncut.

s t	Gaylord	l Mgt. Unit		Report 7	– Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	6132 - Mixed Lowland Forest with Cedar	Sawtimber Medium	47.3	107	81-110	Wet Came in from west, initially walkable yet soft. As you move east, closer to Bartholomew Creek (100/400ft buffer, see ref.lines), there is standing water that only increases in depth (bring waders). Water levels influenced by creek and beaver activity. Denser clumps of living log size lowland species (cedar, mixed conif/decid) present along perimeter of stand. Interior locations (that I could get to) were heavier to standing dead decid mixed w/conif. Plenty of stding dead ash, yet high water has caused mortality across all species in interior area(s). Variable size classes and can.closures, log & 50-75% some what more prevalent. Fair amount of living elm observed (Am.&Rock).
						Black Ash, rock elm, and some scattered balsam fir 6-8" dbh.
50	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Poor	29.5	82	1-50	TSP on 3/28/17: Expanded beaver flooding. Stand could very easily be classified as non-forested lowland. Dead cedar, ash, elm. Edge inventory call based on observations from the north, south, and west edges. Northern edge along stand 439 is dense ninebark with white spruce, cedar, birch, fir, dogwood, juniper, buckthorn, and cattails.
						JSP on 4/5/17: Managed to walk in from south using RR Grade. Flooded on either side of grade. Water level higher west of grade. HEAVY mortality, primarily ash but not exclusive to. Beavers have dropped aspen up to 14" DBH. Beaver dam built across grade (see OFS). Water foul/ducks loving this area when I was present. Scattered log/xlog RM, small inclusions of not dead/higher can.closures scattered about, Trc Bur Oak. RR Grade is an invasive nightmare (Bthorn, Hsuckle).
55	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	72.9	75	51-80	A lot of mortality with vast areas of tip-ups, blowdown, natural death, and EAB death. High water table causing mortality, but EAB sped up a significant portion. Downed species include all those listed above, not just ash. Some saps beginning to utilize vacated space, to soon to call the stand 2-aged. Most QA and B.Poplar nearing end of cycle. Difficult conditions, did not see all of the stand (thaw, mud, blowdowns, post holing).
57	6120 - Lowland Cedar	Sawtimber Well	1.9	101	171-200	Two cedar islands. White spruce. Perimeter, especially along GO to north, has some various regeneration, mostly spruce, fir, and qa saps. Trace balsam fir and white spruce in east island, but consistent presence of QA. West island has more spruce in the canopy, trace aspen and balsam fir. As beaver flooding expands, more cedar (in east island) is dying out.
58	6112 - Lowland Aspen	Sawtimber Well	4.0	69	81-110	Dead/dying ash. Trace bur oak (sapling, 10-20') in north. Willow, withe-rod (V. nudum var. cassinoides) on perimeter on nonforested opening. Trace elm. Larger diameters in east-central. Trace white cedar on edge into cedar swamp.
60	4139 - Aspen, Mixed Deciduous	Sawtimber Well	5.7	91	81-110	Relic (thank Mrs. Lentz) aspen stand (mostly BTA) with a strong mix of primarily RM (some SM). Aspen is much larger than what's found in Std.03. QA mixing in along wetter western boundary. Aspen is falling out, standing dead, or nearing the end if still alive. Plenty of xlog BTA but most of those are stding dead, large log <18" are the guys ~still alive. RM is generally smaller log sized but does vary + or 300ft Intermediate River buffer bounces through this stand (turn on ref.lines). OPIC - FMD: Remote aspen stand with no access to conduct a commercial harvest.

s t	Gaylord	l Mgt. Unit		Report 7	′ – Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	99.6	100	81-110	Similar to Std.55, yet didn't observe quite the same amount of areas with "vast" blow-downs/tip-ups. A significant amount of Blk. Ash mortality in canopy/sub-can. High water table causing the usual mortality of species too. Differing size classes dominate (pole most common) depending upon where you go. That said, wasn't able to venture to far into (thaw/post-holing). Some upland near p-line. Chop line along State/PVT interface running south of p-line (what?). Did not find a corner though (no detector & heavy snow/water in chop line). OPIC - FMD: Swamp conifer predominant with mixed aspen, red
						maple, hemlock. Hold, heavy deer winter yard.
63	6132 - Mixed Lowland Forest with Cedar	Sawtimber Medium	9.9	117	81-110	Winter deer yard with heavy browsing pressure. Sporadic beaver activity. Canopy closure is around 75%. Soft transition between this and the adjacent L0 stand. North half is a mix of cedar clumps and aspen clones with BAM and basswood mixing in, also some ash and elm. South half is largely dominated by cedar with areas (especially further away from river) heavy to basswood with some aspen clones. Trace amounts of balsam fir, hemlock, red maple, and larch in canopy. More alder, honeysuckle, and ninebark in the north. JSP: Inventoried north of drainage ditchTSP: South of ditchOPIC - FMD: Stand is located along the Jordan River which nominates it for a HCVA.
65	6112 - Lowland Aspen	Sawtimber Medium	7.9	86	1-50	Trace balsam fir, bur oak, black cherry, american elm, and white ash in canopy. White cedar present in P/L/S. Transitional strip of aspen adjacent to conifers and Jordan River. Nominated for a HCVA. Only access is across water saturated fields & a railroad grade.
67	6113 - Lowland Maple	Sawtimber Medium	9.8	116	51-80	Trace black cherry, basswood along railroad grade, along with a mix of upland types (iw, sm, bc, musclewood, hawthorn, balsam fir). Standing water, BMP concerns. Nominated for HCVA since stand is located along Bartholemew Creek which is a tributary of the Jordan River.
69	6132 - Mixed Lowland Forest with Cedar	Poletimber Poor	18.6	76	Unspecified	Very wet with tip-ups/blowdown. Standing dead and downed ash everywhere. Wasn't able to venture very far into, didn't see east 1/2. Looks like a cedar swamp that was clearcut in past (stumps and next to old R.R. grade). Then came back strong to Blk. Ash. Now overstory ash has died/falling out causing flush of saps (a lot of ash but other species mixing too). Suppressed species that remained after ash death account for the mainly pole dominated canopy (~25-50%). Southwest portion, <5ac, west of SnowTrail is heavier to log sized RM, BW, and Cedar.OPIC - FMD: Lowland hardwood with wet soils. A strip of this stand borders Jordan River which qualifies as an HCVA.

s t	Gaylord	I Mgt. Unit		Report 7	– Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	6113 - Lowland Maple	Poletimber Well	16.0	75	111-140	Very wet, natural rivers buffer present (see Ref.Lines). The next forester won't agree, but here's my take on this stand. Calling 2-aged (MIFi won't let me accurately depict separate category of XL/log Maple in this stand, bummer). RM & Silv.Maple stump sprouts abound in P/L/S and/or P/S/L. A prominent and separate size class of RM&Silver XL/Log present, yet not overly abundant. Pole maple cored aged at 72&75yrs. 17.5" RM cored aged 117yrs. Appears a HEAVY thin/clearcut w/residual trees occurred 70-75yrs ago. The larger and separate XL/Log size class occurs south of RR Grade and prevalence increases closer to J.River (difficult to operate in, left more trees?). That's my theory. Elsewhere, scattered pockets of NWC in south poly. North poly is somewhat of an inclusion featuring more NWC yet still retains maple component. Diameters decrease 1-3 chains on either side of RR Grade/SnowTrail (remain mostly pole though). Water has no where to go there. Flowing stream cuts through western area of south poly. Was flowing N/NW away from J.River and then onto PVT.
71	4112 - Maple, Beech, Cherry Association	Poletimber Well	3.6	106	111-140	Atop a prominent hill/ridge. Areas heavier to log sizes (north end/south end) but poles are more prevalent. Could still see faint blue line on State side of PVT/State interface (east boundary). Prominent band of Hemlock in south.OPIC - FMD: HILLY TERRAIN. DIFFICULT ACCESS.
73	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Poor	11.1	75	1-50	OPIC - FMD: WATER SATURATED SOILS YEAR ROUND. Red pine around parts of stand. DED, EAB. Lot of ash mortality. Trace basswood, pole. Stand will most likely convert to lowland shrub/low density trees without prolonged droughty conditions to establish deciduous/coniferous regeneration.
74	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	9.3	61	1-50	~Living portion of what was formally part of Stand 1. Still a lot of dead Black Ash (stding&down dead). Canopy closure is on the low side of 50-75% (+ - in areas). Northern boundary follows what I believe to be Seamon Creek. Cedar more common along creek. Musclewood prevalent and finally a stand with minimal Buckthorn. A wall of Black Ash seed/saps south of power line that have been browsed to an even 4.5ft. It was revolting and astonishing at the same time.
75	6120 - Lowland Cedar	Sawtimber Medium	26.5	147	81-110	Winter deer yard with heavy browsing pressure. Sporadic beaver activity, especially along L0 stand 36. "Supercanopy" QA with scattered dense white cedar, otherwise, cedar is consistent but less dense and mixed with lowland hardwood, aspen, and balsam fir. Cedar is most consistent along stream and north third of stand. Cored a 24" cedar that was 112 at 6", then rotten. Areas more distant from the stream become more dominated by aspen, lowland hardwood, and fir.Pockets of dead black ash with sap/pole ash, elm, RM, cedar. Trace scattered paper birch, hemlock. Notable OFS points.OPIC - FMD: Stand is located along the Jordan River which nominates it for a HCVA.
78	6112 - Lowland Aspen	Sawtimber Medium	9.0	84	1-50	Lot of dead standing ash. Poles coming up. Trace cedar. Small lowland opening in center of stand. Pockets of more densely stocked aspen in south with higher BAs. Hydrology affected by beaver - not a fun place to be. Stand nominated for a HCVA.

s t	Gaylord	Mgt. Unit		Report 7	Forested	Stands Compartment: 52 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	6111 - Lowland Balsam Poplar	Sawtimber Poor	4.5	55	51-80	Could call non-forested through different eyes. If the various clumps were "squished" together, it appears 25% (or more) canopy closure is achieved. Full/High buckhorn present, some nearly pole size. Might be more Up/Low, made Low/Up call based upon canopy species and proximity to J.River.
81	6113 - Lowland Maple	Sawtimber Medium	2.0	56	1-50	DED, EAB affected elm and ash, respectively. Nominated for a HCVA. Only access is across water saturated fields & a railroad grade.
85	4112 - Maple, Beech, Cherry Association	Sawtimber Well	1.8	102	141-170	Small upland northern hardwood stand dominated by red maple. Hemlock along west&north perimeter. Surrounded by lowland. My brain wouldn't allow me to call this an inclusion with any of the surrounding stands. GPS record of a corner present, saw trees w/nails, didn't stumble upon it however. OPIC - FMD: Small upland inclusion with red maple logs in southwest corner.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	629 - Mixed non-forested wetland	47.1	No	Did not see all of this stand. Saw southern and eastern portions. Vast area of primarily dead standing/some downed Black Ash. The dead is variable between P/S and S/P ash. Scattered fir/some NWC still living. Musclewood common. Flush of seed/sap sized Blk.Ash trying to give it another go (should we tell them?). Pooled/standing water in areas I visited. Northern areas might still be forested.
7	622 - Lowland Shrub	36.7	No	Old railroad grade divides stand, SE-NW. North half is wet throughout the year. South half (south of the grade) appears to be seasonally wet. Ash, oak, maple, and quaking aspen in small clump along south (pvt) perimeter. Private has a neat clump of rock elm, bur oak, siver maple, pussy willow, red osier dogwood, and musclewood just over the boundary. QA present in P/L/S; Scotch pine is S/P; BA is P/S; cedar is P/S.
8	122 - Road/Parking Lot	1.8	No	Mt. Bliss Rd.
9	122 - Road/Parking Lot	3.0	No	Old R.R. Grade and Snowmobile Trail #4. Numerous culverts present (see OFS layer if necessary).
11	629 - Mixed non-forested wetland	148.4	No	Expansive marshy flooding as a result of the Intermediate River. Lots of dead timber due to high water table. Small black spruce 1"dbh scattered, cattails, tag alder.
18	3205 - Mixed Upland Shrub	0.3	No	Old R.R. Grade (not part of Snowmobile Trail #4). Wooden ties still visible in areas.
22	122 - Road/Parking Lot	0.5	No	Old R.R. Grade and Snowmobile Trail #4.
23	622 - Lowland Shrub	4.1	No	Standing water in south, drainage flowing through stand. Viburnum is Withe-rod (V. nudum), medium density.
24	3205 - Mixed Upland Shrub	49.7	No	Heavily dominated by Common Buckthorn and Honeysuckle. Some grassier openings and lower stocked Bthorn areas present. Generally unpleasant to walk through and most Buckthorn was 10-20+ft tall. Some scattered/clumps of the tree species listed above. NWCedar regen (saps) fairly thick in S.E. edge close to Mt.Bliss Rd. Old R.R. Grade and active Snowmobile Trail present. Area(s) near snowmobile trail/closer to J.River appeared lower/wetter. OPIC - FMD: Upland brush with wildlife shrubbery. Lots of hawthorn. This stand is nearby the Jordan River access site and lamprey weir.
25	3205 - Mixed Upland Shrub	9.1	No	Upland shrub/grass opening with scattered trees (conifer&decid). Perimeter of stand offers more lowland shrub species and softer ground.
27	500 - Water	8.3	No	OPIC - FMD: Jordan River which is a designated Wild & Scenic River. All the stands that are located within 400' of the Jordan River or its tributaries are considered a HCVA.
29	3205 - Mixed Upland Shrub	12.5	No	Dominated by Buckthorn. Most large (DBH) and tall and has the appearance of a young apple orchard from a distance. Areas where Bthorn is very dense/unpleasant, other areas where you can walk through/under. Sct. juniper, some E.red cedar. Mostly "Up" but fingers that extend into Stds.30/31 were "Low", acting as water courses. OPIC - FMD: Open field planted with fruiting wildlife shrubbery. Lots of 6-7' hawthorne (It's not hawthorne, JSP)



Stand	Cover Type	Acres	Managed Site	General Comments:
42	6220 - Alder/willow	6.5	No	Some white willow, log >20'. Western more upland ground is dominated by ninebark. Beaver flooding; dam present. Dead standing cedar. Water table likely fluctuates seasonally.
44	622 - Lowland Shrub	29.7	No	Occasional small bird nest. Stand is occupied by invasive common buckthom (Rhamnus cathartica). While there is wildlife value in the covertype and fruit, an effort could be made to restore this to native species. Nannyberry present in trace amounts. Clump of viburnum with bur oak saplings on southeast edge. QA encroaching (trace, sap, variable) on SE perimeter.
45	320 - Upland Shrub	6.5	No	Stand is influenced by seasonal flooding. South end is more open and lowland, with dogwood, willow, and buckthorn scattered. North half is more heavily vegetated by lowland/intermediately-tolerant shrubs.
48	622 - Lowland Shrub	5.1	No	Heavily browsed dogwood, occasionally 5-10', but mostly <5'. Sensitive fern present. Lowland brush with cattails. Wetland drainage with no merchantable trees, except a handful on the perimeter. Note: At the south end of this stand there is a 1/4 ac. upland brush type that is not mapped out separately.
51	6239 - Mixed Emergent Wetland	5.8	No	Borderline forested/non-forest. Prominent strip of P/L Q.Aspen runs right through center. East of strip is probably dry at some point in the year. West of strip has standing water and observed a beaver house. Saw four Blue Herons perched in single tree west of this stand (perhaps in Std.50/57?). However, did not observe a possible rookery in that direction. OPIC - FMD: Upland brush opening with some young black spruce, q.aspen, & white birch developing.
				blich developing.
52	6229 - Mixed lowland shrub	3.0	No	Wet/lowland shrubs with low density stump-sprout XL/L Red/Silv.Maple and SM. Buckthorn and honeysuckle quite prolific. Shrub more dominant than low density trees.
53	6229 - Mixed lowland shrub	13.0	No	Bartholomew Creek travels through this lowland shrub before empty into J.River. Beaver slides across RR Grade. Grade full of BThorn and HSuckle. Scattered conifer and deciduous.
56	622 - Lowland Shrub	1.3	No	Stand is occupied by dead ash (canopy) with moderately stocked shrub understory. Small stream flows in from southwest but dissipates, spreading into more of a flooding, throughout this stand. Low to medium stocking of musclewood. Trace elderberry.
59	623 - Emergent Wetland	1.1	No	A cool little opening. Small stream snakes its way through.
62	320 - Upland Shrub	6.6	No	Trace scotch pine, white cedar on southeast edge of lowland.



Stand	Cover Type	Acres	Managed Site	General Comments:
64	622 - Lowland Shrub	21.0	No	Lowland shrub complex built up around water courses that feed into the Jordan River. Many species (notably red osier dogwood) were HEAVILY browsed. Prominent clump (~1.5ac) of P/L quaking aspen present in center of stand. Ditch drains into River corridor and floodplain. Area south of ditch is lacking in willow, cedar, elm, and aspen, but heavy to buckthorn, dogwood, and wild raisin. JSP: Inventoried north of drainage ditch
				OPIC - FMD: Brush with a few scattered apple trees. A strip of this stand borders the Jordan River & qualifies as a HCVA. April, 2007: In pre-review, Wildlife Biologist recommended opening maintenance by burning or mechanical methods.
66	622 - Lowland Shrub	16.4	No	Notably more honeysuckle, ninebark, tag alder, and black ash in the north half of the stand. South half has some elderberry, hawthorn, grape, and wild raisin. Scattered pole/log trees transitioning into forested stand to the east. Species include quaking aspen (L/P/X), Black Cherry (pole), cedar (L/P), black ash (P/L), elm (P/L), silver maple (L/P/X), and basswood (L/P). Stand is currently inundated, but could dry up in the summer months. JSP: Inventoried north of drainage ditchTSP: South of ditch
68	122 - Road/Parking Lot	0.6	No	Mt. Bliss Rd.
72	122 - Road/Parking Lot	1.0	No	Alba Rd leading to the Jordan River access site.
80	623 - Emergent Wetland	2.6	No	Unsure how to classify this stand. Ash and elm mortality have left this stand all but devoid of any woody vegetation. Beaver activity and flooding will inhibit the establishment of future trees and shrubs. Flowing water and rather hummocky grass.
84	320 - Upland Shrub	17.8	No	Trace alternate leaved dogwood, trace red maple (XL), trace scotch pine (sap); trace autumn olive. Far east narrow leg has dense buckthorn, trace quaking aspen saps. South tip if far east narrow leg has clumpy honeysuckle. Rest of stand is dominated by cherry brush, save a pocket of dense musclewood in the north.Old railroad grade runs through stand, SE-NW.
86	629 - Mixed non-forested wetland	2.7	No	Wish we had a Lowland Low Density Tree for Non-Forested. This stand is lowland. Heavy ash mortality, natural open/wet locations, scattered conifer (hemlock, fir, some spruce). High to Full Black Ash seeds/saps, HEAVILY BROWSED.
87	790 - Other Bare/Sparsely Vegetate	14.1	No	OPIC - FMD: STAND CONSISTS OF POWERLINE TRAVERSING SEC 36 , T31N, R7W. Most of this powerline is wetland with standing water that does not provide access to the adjacent state owned timber.
404	3102 - Grass	1.7	No	Scattered deciduous and conifer present. Elaborate/permanent cedar blind just east of stand (found in Std.5). Well/gas pad just onto private. PVT to north is accessing this portion of State with their ORV/vehicles.
				OPIC - FMD: Small, narrow opening in low valley with hilly hardwood on east boundary. Leave open.



Stand	Cover Type	Acres	Managed Site	General Comments:
405	3105 - Mixed Upland Herbaceous	11.6	No	Three permanent blinds present (2 were very nicely appointed, hmm) along perimeter north of p-line. A fourth tucked into Std.5 but the shot is into Std.404. See OFS points. Intermittent drainage flows from PVT, south into this stand then across p-line. Drainage "shrubbery" can be seen on imagery.
				OPIC - FMD: Open, hilly grass area. Knapweed & some pin cherry brush.
414	330 - Low-Density Trees	10.8	No	A little bit of everything, all generally in multiply scattered clumps. Including but not limited to: Apple P/L, Balsam Pop S/P, BassW Log, BTA L/P, Blk/Pin Cherry S/P, Crabapple P/S, E.Red Cedar Sap, Hawthorne Sap, Honeysuckle shrub, Lilac, QA P/S, Tamarack S/P, Wht.Spruce Sap, and Wild Plum P/S. Southern perimeter sneaks into lower/wet areas and seeps. Met Virgil Lavanway, a producer still felling by hand. Nice guy.OPIC - FMD: Open field on rolling terrain adjacent to Virgil Lavanway's house & land. A few scattered white pine in southeast corner. Aspen encrouching on edges.
422	310 - Herbaceous Openland	14.4	No	OPIC - FMD: Expansive, open grassy area on a plateau that is adjacent to Green River Ranch.
425	3105 - Mixed Upland Herbaceous	22.4	No	Primarily upland grass but heavier to shrub (of lowland variety) in eastern 1/4 and along perimeter with Std.64. Ninebark, redOdogwood, some honeysuckle, and tag common along perimeter. OPIC - FMD: Open field with some upland brush developing. April, 2007: In pre-review, Wildlife Biologist recommended opening maintenance by burning or mechanical methods.
426	320 - Upland Shrub	28.5	No	Barbed wire fence, variable in direction and continuity, present throughout stand. Areas in east and south with very dense buckthorn; lower pockets around cedar. Concentration of white pine, scotch pine, apple in south-southeast. April, 2007: In pre-review, Wildlife Biologist recommended opening maintenance by burning or mechanical methods.
439	3102 - Grass	79.5	No	Seasonally [very] wet; some hummocks (old stumps?) in southeast. Trace amounts of pole scotch pine, white spruce (sap), QA (sap), elm (sap/pole). Trace white spruce and cedar on perimeter.
455	6229 - Mixed lowland shrub	27.1	No	A bit of everything here. Primarily lowland grass/some shrub (willow and such). Some higher ground closer to M66 with Scotch Pine/White Pine. Water courses throughout from Bartholomew Creek and drainage culverts that travel underneath M66.
				OPIC - FMD: STAND IS WET. 2007: Some planted Austrian Pine along M-66 & scattered pine in field.
462	310 - Herbaceous Openland	7.0	No	Sapling size species (all@low density) along east perimeter include QA, ninebark, buckthorn, Wht.Spruce, and juniper. Field appeared feral/not being used for ag. purposes. OPIC - FMD: Open, grassy area. Access strip 33' wide leads east to the Jordan River. New acquisition in 1995.