

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52025 Entry Year 2017 Acreage: 2,441

County Otsego

Management Area: AuSable Outwash

Revision Date: 2015-08-14

Stand Examiner: Lucas Merrick

Legal Description:

T30N, R02W, Sections 25, 26, 27, 34, 35, and 36

Identified Planning Goals:

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

Soil and topography:

The compartment is flat with limited changes in topography. Dominant soil types are Lindquist, Graycalm, Rubicon, and Graycalm-Grayling sands. These soils are somewhat excessively drained.

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

Private property is checker boarded with large parcels of public property. Dispersed recreation is evident throughout the area. The private ownership is a mixture of seasonal cottages, permanent residence, hunt clubs, and agriculture. Michaywe subdivision is two miles to the west.

Unique Natural Features:

Potential for dry prairie plants in grassy openings. Hill's thistle, rough fescue, Alleghany plum and pale agoseris. Goblin moonwort to know to occur in surrounding area. Potential for dusted skipper, Doll's merolonche, blazing star borer moth, grizzled skipper and red legged spittlebug in grassy openings. Potential for Kirtland's warbler in young jack pine. Potential for prairie warbler in young jack pine and upland brush.

Archeological, Historical, and Cultural Features:

Archeological concerns exist in the compartment.

Special Management Designations or Considerations:

Bass Lake Pine Barron an Ecological Reference Area is located in Section 35.

Watershed and Fisheries Considerations:

None

Wildlife Habitat Considerations:

Treatments in this compartment will maintain age class diversity in aspen and oak while creating early successional habitat benefiting deer, grouse, wild turkey and woodcock. Oak clumps and/or large crowned oak will be left where appropriate for hard mast.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of end moraines of medium-textured till and glacial outwash sand and gravel and postglacial alluvium. Glacial drift thickness varies between 800 and 1,000 feet. The Mississippian Coldwater Shale subcrops below the glacial drift. The Coldwater does not have an economic use. Gravel pits are located in sections 15 and 21 to the north and east and potential is possible. Most of the compartment appears to be developed for Antrim Shale gas production and is located withiin the Niagaran reef trend. There may be additional reef potential. The majority of State minerals in the compartment are currently under lease.

Vehicle Access:

Access is adequate. County roads, two-tracks and pipelines allow for easy vehicle travel.

Survey Needs:

It is anticipated that property lines in section 26 will need to be established by a surveyor.

Recreational Facilities and Opportunities:

Snowmobile trails #4 and #404 and the North Branch ORV Route are present in the compartment.

Fire Protection:

Topography is well suited for standard fire fighting operations. County roads, pipeline roads and two-tracks provide excellent access throughout the compartment. Poison gas is present in the compartment. Under the right conditions the fuel types could be prone to a large scale fire event.

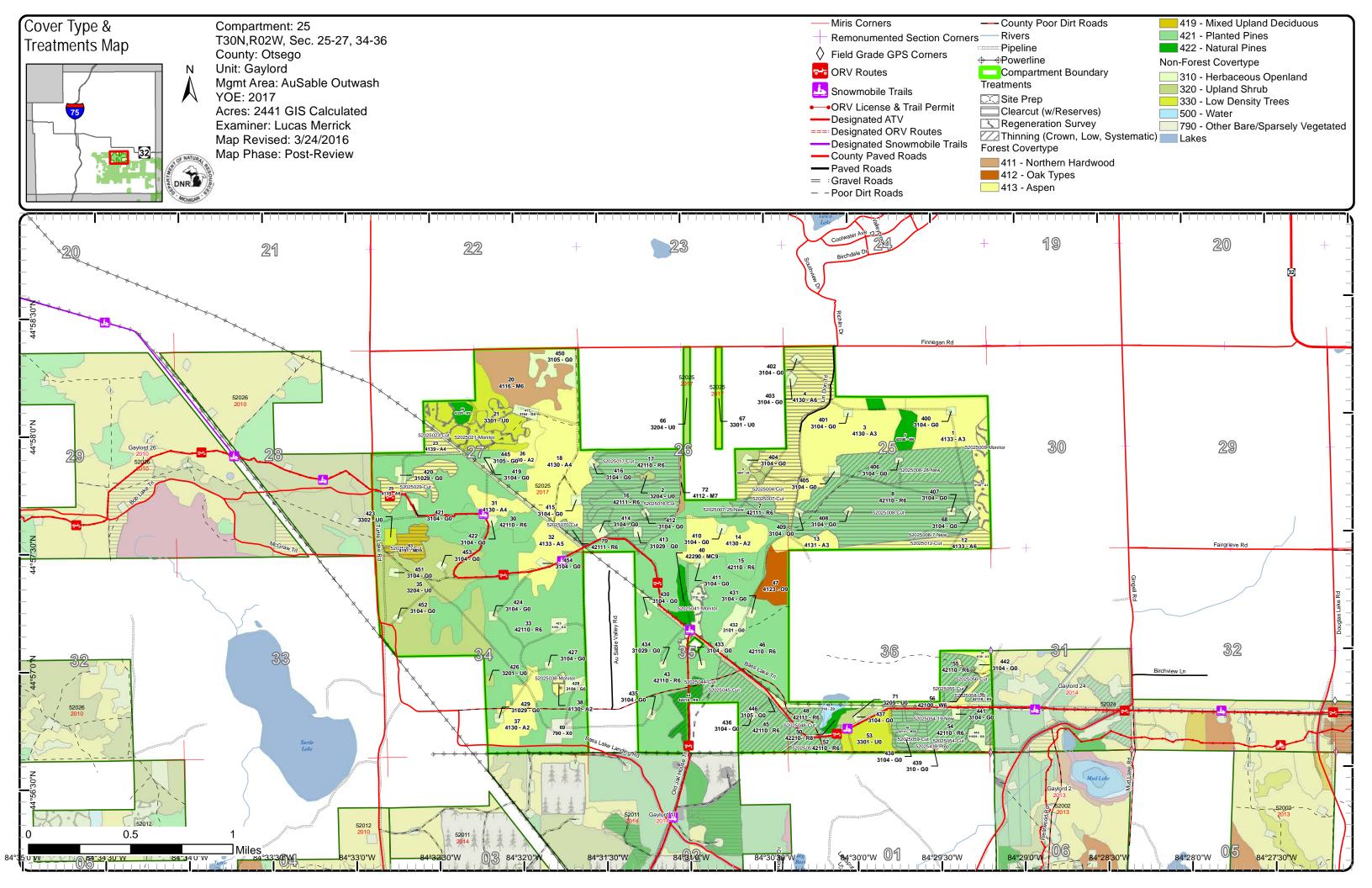
Additional Compartment Information:

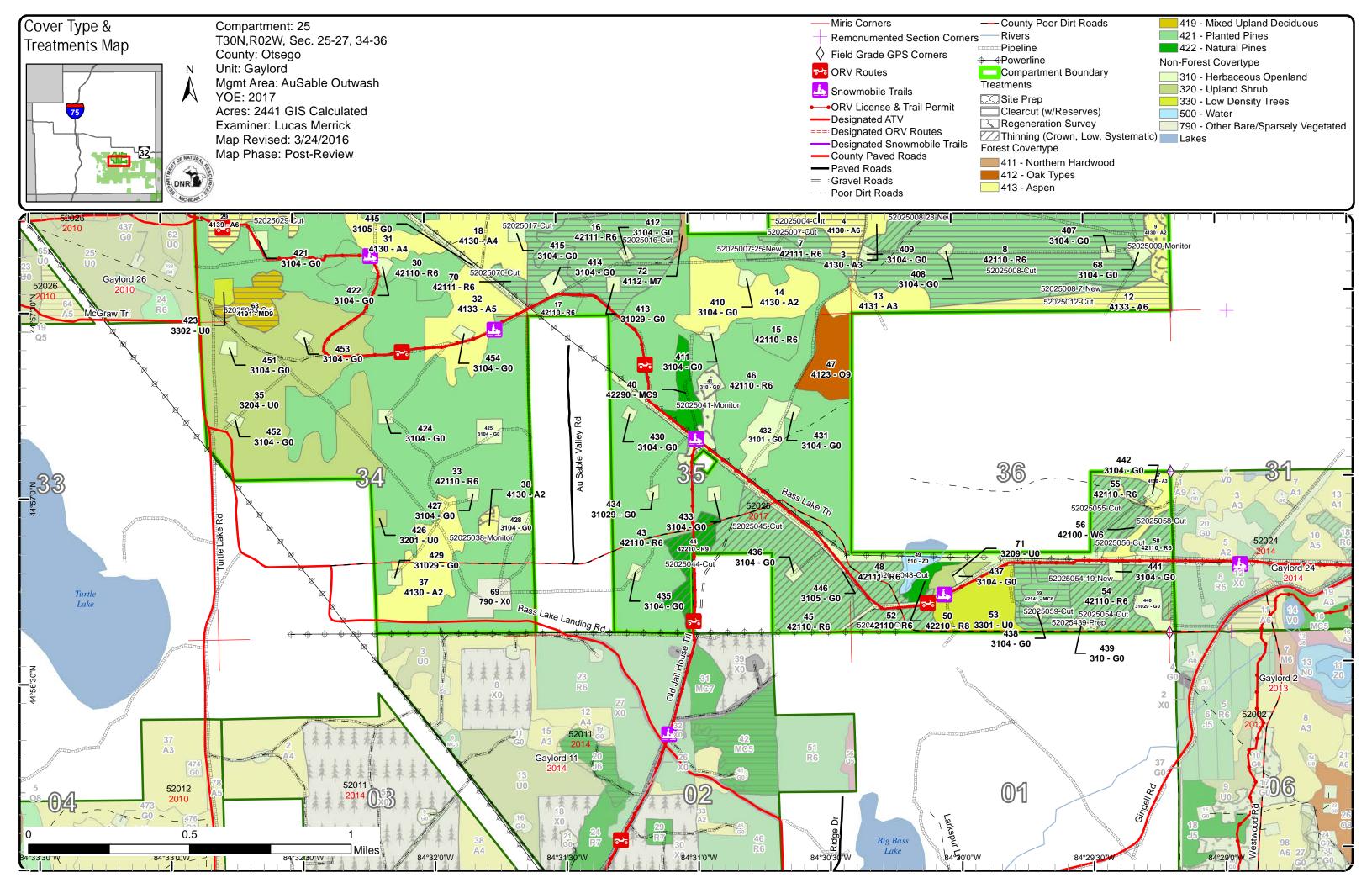
The following reports from the Inventory are attached:

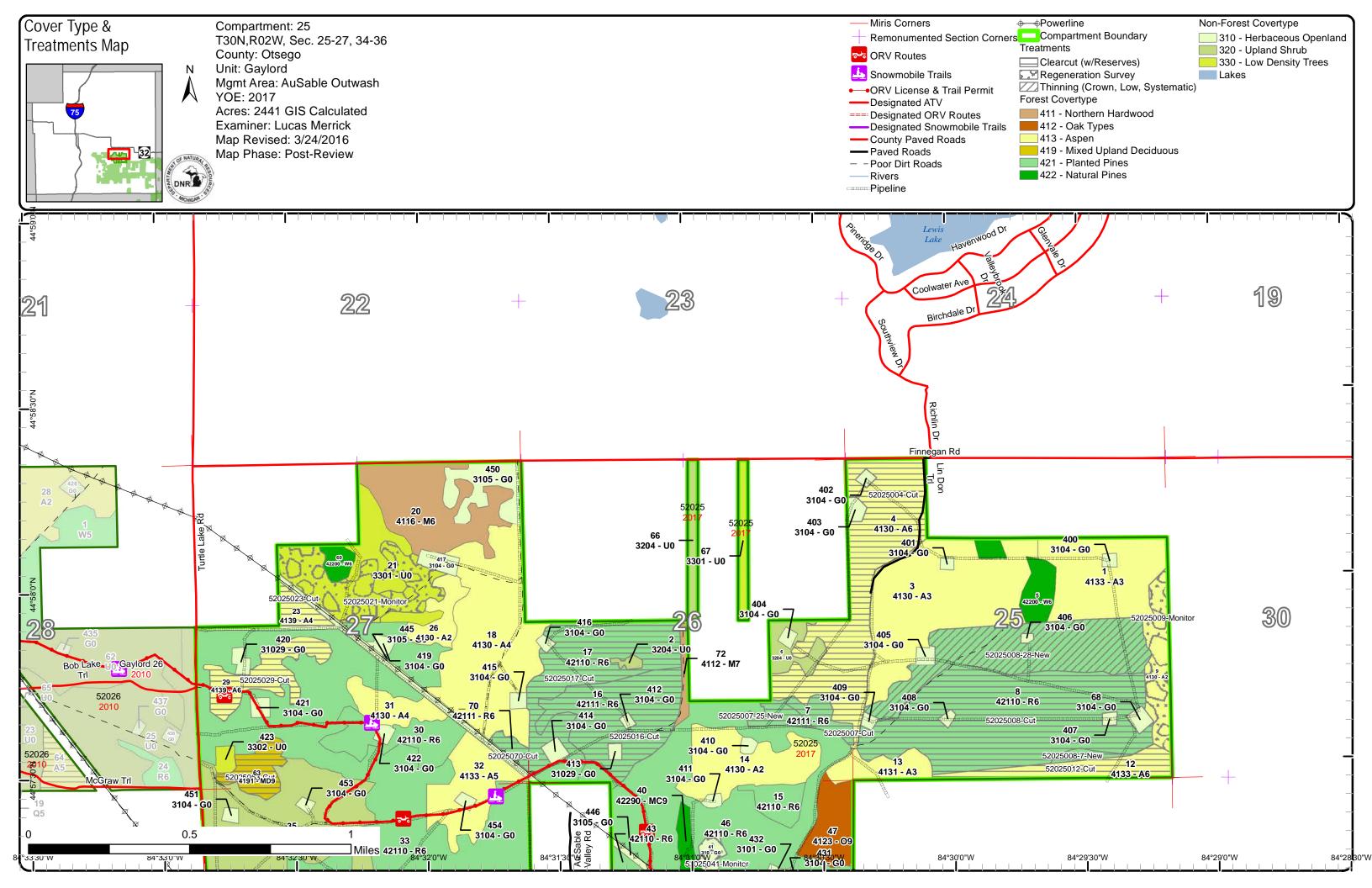
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

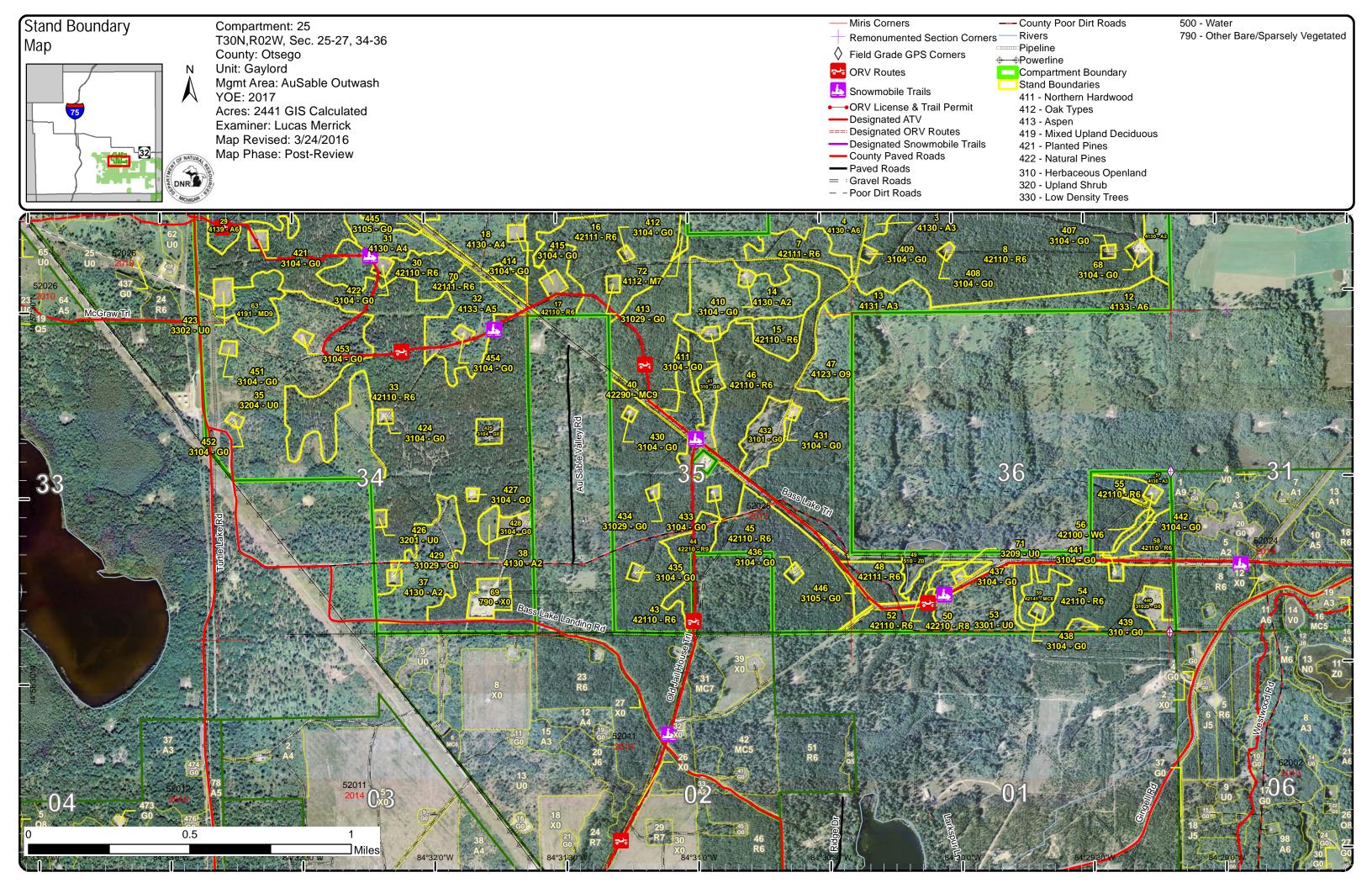
The following information is displayed, where pertinent, on the attached compartment maps:

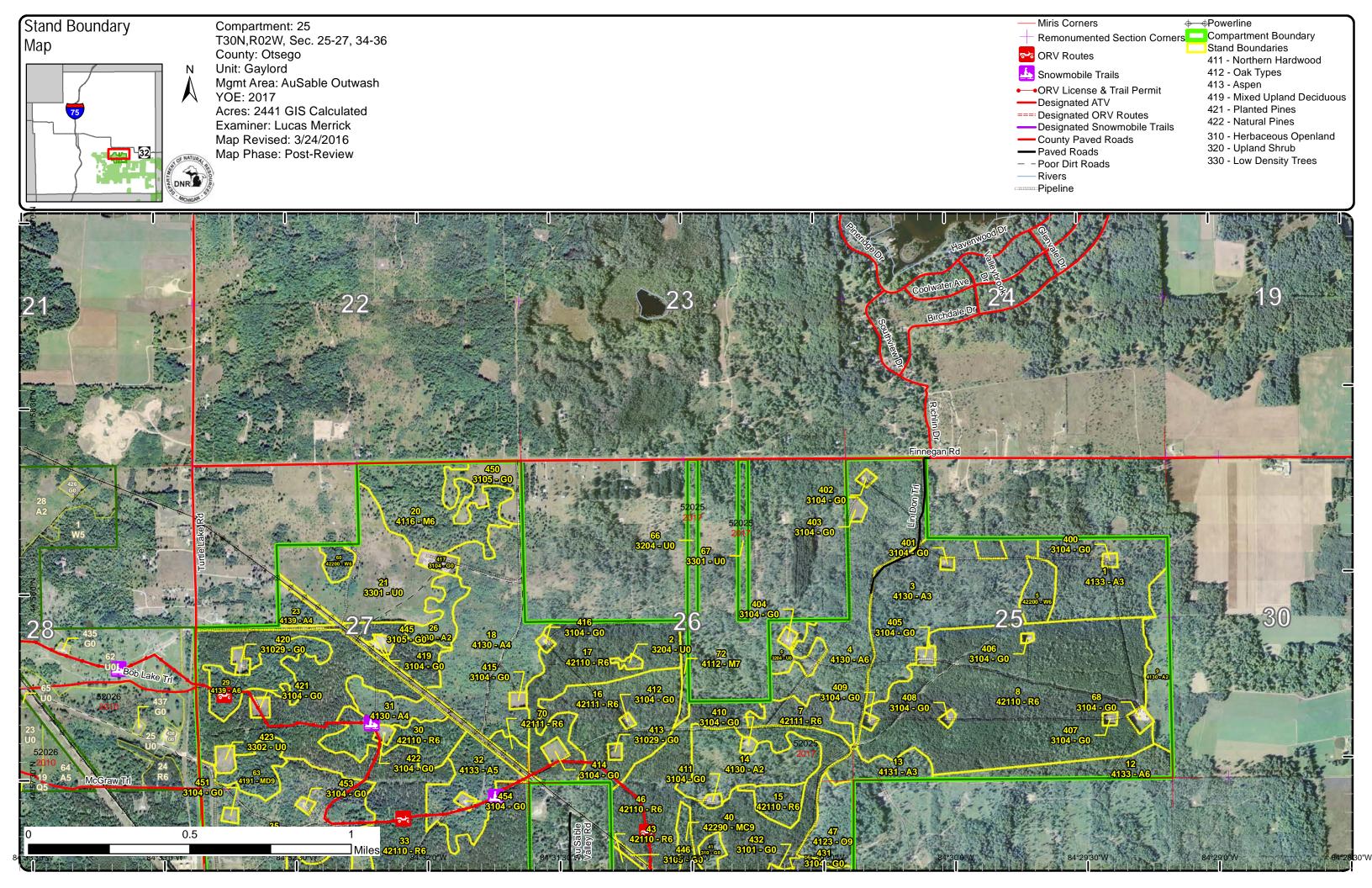
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

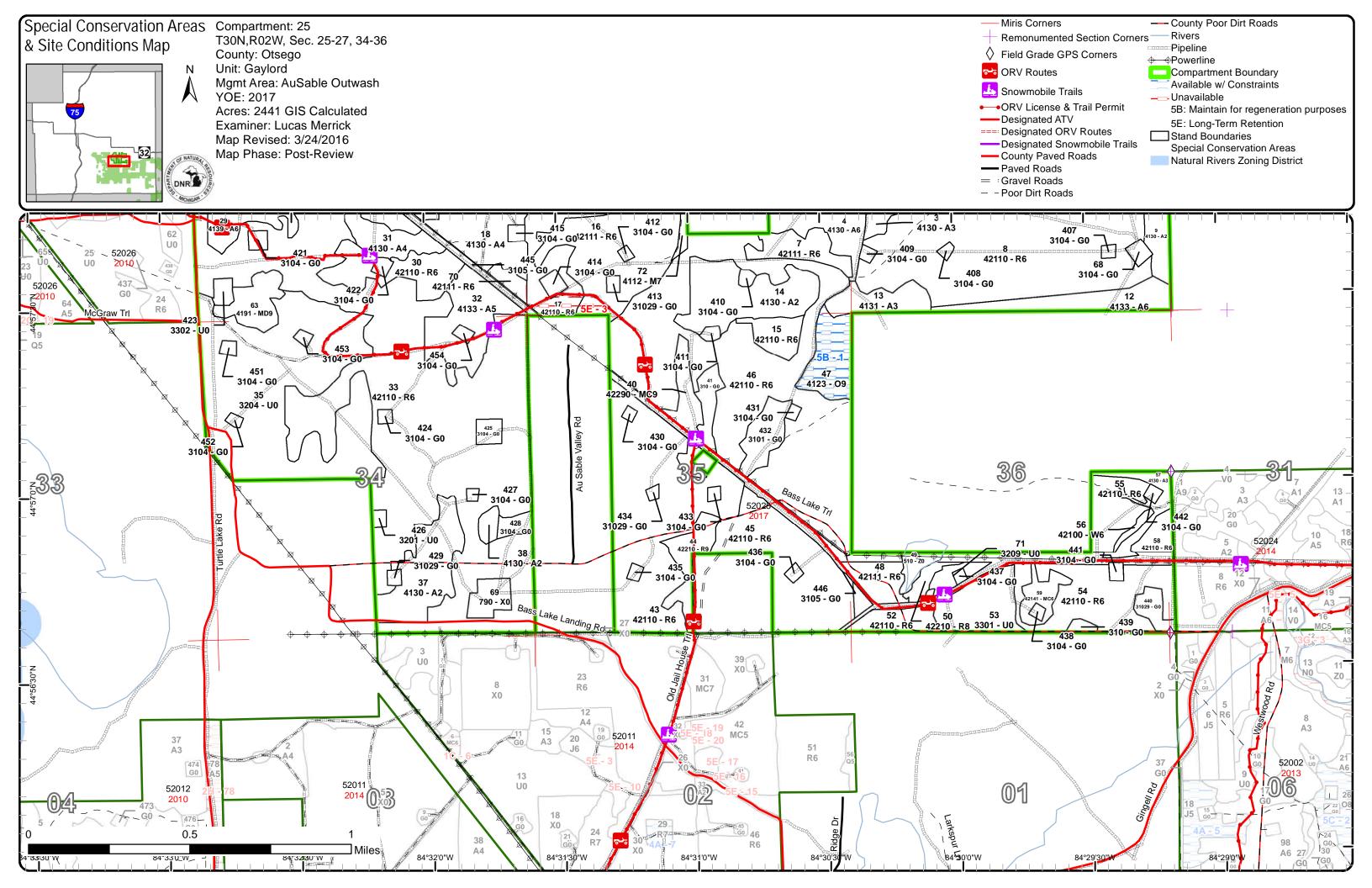


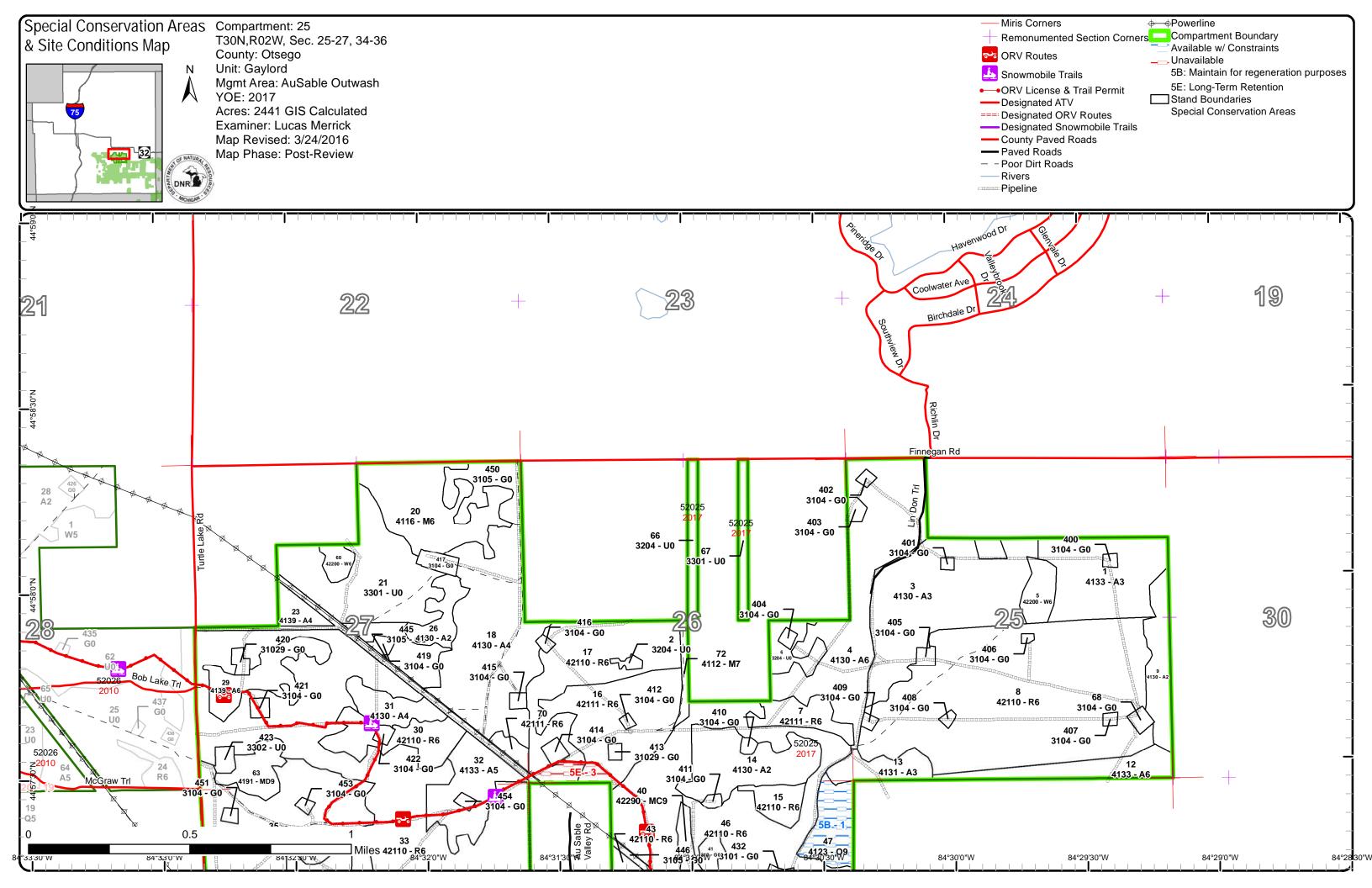












Gaylord Mgt. Unit

Lucas Merrick: Examiner

Compartment 25 Year of Entry 2017



Age Class

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Aspen	0	27	65	198	142	95	56	0	0	0	0	0	0	0	0	0	0	0	583
Bare/Sparsely Vegetated	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Herbaceous Openland	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
Low-Density Trees	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
Mixed Upland Deciduous	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	15
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Northern Hardwood	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	58
Oak	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	21
Planted Mixed Pines	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	9
Red Pine	0	0	0	0	0	0	1231	0	0	15	0	4	0	0	0	0	0	0	1250
Upland Shrub	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
White Pine	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	23
Total	471	27	65	198	142	95	1377	15	0	26	0	25	0	0	0	0	0	0	2441



Report 2 – Treatment Summary

Gaylord Mgt. Unit

Year of Entry: Acres of Harvest

Commercial Harvest - 701 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

	-											
							DOMONO X	Outrie Solo	Key Co.	88/18		, do s
Aspen		151	0	0	0	0	0	0	0	0	151	
Mixed Upland Deciduous	Mixed Upland Deciduous		0	0	0	0	0	0	0	0	15	
Planted Mixed Pines Red Pine		9	0	0	0	0	0	0	0	0	9	
		293	0	0	0	0	231	0	0	0	524	
White Pine		0	0	0	0	0	2	0	0	0	2	
	Total	468	0	0	0	0	233	0	0	0	701	

Compartment 25

Total Compartment Acres: 2,441

Proposed and Next Step Treatments by Method

Proposed and Next Step Treatments by Method												
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Current		701	1	0	0	0	0	84	0	0	786	
Next Step		0	292	292	0	144	144	321	148	0	1340	
	Total	701	293	292	0	144	144	405	148	0	2127	

Gaylord Mgt. Unit Report 4 -- Treatments Compartment: 25 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Structure Objective Name CoverType Density Age Range Type Status d 52025004-Cut 94.7 4130 - Aspen Poletimber 47 81-110 Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Well Retention Boundary **Habitat Cut: No Site Condition:** Prescription Harvest all trees 2" and up except for oak. Do not cut oak with 12" dbh or greater. Specs: Next Step **Treatments:** Acceptable Aspen, with red maple, oak, birch and mixed conifer. Regen: Other 3-10% retention. Old next step comments: Comment: 10/01/2016 **Proposed Start Date:** 52025007-25-6.8 42111 - Planted Poletimber 56 111-Harvest Clearcut with 4139 - Aspen, Even-Aged Draft Field Red Pine, Mixed Well 140 Retention Mixed Boundary New Deciduous Deciduous **Habitat Cut: No Site Condition:** Prescription Harvest all trees 2" and up. Specs: Next Step **Treatments:** Acceptable Aspen, red maple, oak, and mixed pine at minimum stocking. Regen: **Other** Minimum retention. Old next step comments: Comment: 10/01/2016 **Proposed Start Date:** 42111 - Planted 56 111-4211 - Planted 52025007-Cut Poletimber Harvest Clearcut Draft Field Even-Aged Red Pine, Mixed Well 140 Red Pine Boundary Deciduous **Habitat Cut: No Site Condition:** <u>Prescription</u> Final harvest. Do not leave retention due to small size and to help with site prep efforts. Specs: Next Step Pesticide, Aerial; Burn, Slash; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr) Treatments: Acceptable planted red pine Regen: Other Set up with stand 8. Old next step comments: Comment:

Proposed Start Date: 10/01/2016

52025008-28-72.4 42110 - Planted Poletimber 171-Harvest Systematic 4211 - Planted Even-Aged Draft Field Red Pine Well 200 Thinning Red Pine Boundary New

Habitat Cut: No Site Condition:

Prescription Remove every third row of red pine. Do not cut oak. Remove white pine and other misc species found within designated harvest rows.

Specs:

Next Step

Treatments:

Acceptable

Regen:

There is one large legacy sized spruce spruce tree found in stand that should be protected from harvest operations. Old next step comments: Other

Comment:

Proposed Start Date: 10/01/2016

Habitat Cut: No

Treatments:

Acceptable aspen, red maple, oak, and mixed pine at minimum level.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/01/2014

52025012-Cut 23.7 4133 - Aspen, Poletimber 56 81-110 Harvest Clearcut with Draft Field 413 - Aspen Even-Aged Mixed Pine Well Retention Boundary

Habitat Cut: No Site Condition: Prescription Final harvest all trees 2" and up. Protect understory shrubs from damage (specifically hemlock).

Specs:

Next Step Treatments:

Acceptable Aspen at minimal stocking with mixed conifer, red maple, and oak present.

Regen:

Other Minimal retention for sake of aspen regeneration. Old next step comments:

Comment:

Proposed Start Date: 10/01/2016

Specs:

Next Step

Treatments:

Acceptable Aspen and a mixture of red maple, oak, and mixed pine.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/01/2014

52025023-Cut 8.0 4139 - Aspen, Poletimber 51 1-50 Harvest Clearcut 4139 - Aspen, Even-Aged Draft Field Mixed Deciduous Poor Mixed Boundary

Deciduous

Site Condition: Habitat Cut: No

Prescription Harvest all trees 2" and up except for oak. Do not cut oak.

Specs:

Next Step Treatments:

Acceptable Aspen, maple, oak and mixed conifer. Poor stocking is acceptable as long as aspen is present in some amount within stand.

Regen:

Other Harvest with stand 29. Old next step comments:

Comment

Proposed Start Date: 10/01/2016 **Other** Old next step comments:

Comment:

Regen:

Proposed Start Date: 10/01/2014

41 52025041-11.8 310 - Herbaceous Nonstocked Artificial Draft Field Unspec Monitoring 42221 - Natural Even-Aged Openland ified Jack Pine. Boundary Monitor Regen(3yr) Mixed

Deciduous

Habitat Cut: No Site Condition:

Prescription Monitor regen. Planted 5/11/2012. Will be up for a year 3 check.

Specs:

Next Step Treatments:

Acceptable A fully stocked jack pine stand with pockets of maple, aspen, mixed conifer, and oak.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 05/11/2015

52025044-Cut 15.0 42210 - Natural 88 141-42290 - Natural Draft Field Sawtimber Harvest Crown Thinning Two-Aged 170 Mixed Pine Boundary

Red Pine Well

Habitat Cut: No Site Condition:

Prescription Manage for large diameter mixed pine. Target poor form and suppressed trees. Residual BA 90-110

Specs:

Next Step **Treatments:**

<u>Acceptable</u> Regen:

Majority of plantation trees are suppressed in understory. Protect snowmobile trail from operations. Old next step comments:

Comment

Other

10/01/2016 **Proposed Start Date:**

DNR DNR MICHIGAN

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
45	52025045-Cut	60.3	42110 - Planted Red Pine	Poletimber Well	56	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Target BA is 110-130. Target suppressed and poor form.

Specs:

Next Step Treatments:

Acceptable Regen:

Other Mark white pine and maple to cut as well. If maple are not interfering with pine growth or in the way of operations leave in an attempt to limit

<u>Comment:</u> maple regeneration. Protect recreational trails. Old next step comments:

Proposed Start Date: 10/01/2016

52025048-Cut 42111 - Planted Systematic 4211 - Planted 11.6 Poletimber 56 171-Harvest Even-Aged Draft Field Red Pine, Mixed Well 200 Thinning Red Pine Boundary Deciduous

Habitat Cut: No Site Condition:

<u>Prescription</u> Remove every third row where evident. Mark to cut in areas if needed. Protect oak from harvest. Remove red maple and aspen in designated

Specs: rows only.

Next Step Treatments:

Acceptable Regen:

Other Protect snowmobile trail from operations. Old next step comments:

Comment:

Proposed Start Date: 10/01/2016

42110 - Planted Poletimber 56 171-Systematic 4211 - Planted 52 52025052-Cut 13.9 Harvest Draft Field Even-Aged Red Pine Well 200 Thinning Red Pine Boundary

Habitat Cut: No Site Condition:

Prescription Remove every third row of red pine.

Specs:

Next Step Treatments:

Acceptable

Regen:

Other Protect oak component from harvest. Protect snowmobile trail from operations. Old next step comments:

Comment:

Proposed Start Date: 10/01/2016

52025054-19-42110 - Planted Poletimber 4211 - Planted Draft Field 16.1 56 141-Harvest Clearcut Even-Aged Red Pine Well 170 Red Pine Boundary New

Habitat Cut: No Site Condition:

Prescription Final harvest. Cut all tress 2" and up. Do not leave retention to help facilitate planting efforts.

Specs:

Next Step Other, Other; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable Planted red pine

Regen: Other

Leave oak in stand. Old next step comments:

Comment:

Proposed Start Date: 10/01/2016

Habitat Cut: No

7.1

Treatments:

<u>Acceptable</u> Regen:

Other Cut with adjacent stands. May be able to mark out rows. This 2 acres has not been thinned. Protect snowmobile trail from operations. Old next

step comments: Comment:

52025058-Cut

Proposed Start Date: 10/01/2016

Harvest

Crown Thinning

4211 - Planted

Red Pine

141-

56

Poletimber Red Pine Well 170

Habitat Cut: No **Site Condition:**

42110 - Planted

Prescription Thin to an average of (110 - 130BA). Target poor form and suppressed trees.

Specs:

Next Step **Treatments:**

<u>Acceptable</u> Regen:

Other Some walk through area (SE). Protect snowmobile trail from operations. Old next step comments:

Comment:

Proposed Start Date: 10/01/2016 Draft Field

Boundary

Even-Aged

Gaylord Mgt. Unit Report 4 -- Treatments Compartment: 25 s Year of Entry: 2017 t а **Treatment** Size Stand BA **Treatment Treatment Cover Type** Acres Stand Age **Approval** n Method Objective Name CoverType Density Age Range Type Structure Status d 42141 - Planted 4211 - Planted 52025059-Cut 9.0 Poletimber 56 141-Harvest Clearcut Even-Aged Draft Field 59 Mixed Pine, Mixed Well 170 Red Pine Boundary Deciduous **Habitat Cut: No Site Condition:** Prescription Cut all trees 2" and up. Do not leave retention to help facilitate planting efforts. Specs: Next Step Other, Other; SitePrep, Trenching; Planting, Initial Plant Treatments: Acceptable planted red pine. Regen: Other Leave oak. Protect snowmobile trail from operations. Old next step comments: Comment: **Proposed Start Date:** 10/01/2016 Draft Field 52025063-Cut 14.7 4191 - Mixed 68 81-110 Clearcut with 4191 - Mixed Sawtimber Harvest Even-Aged **Upland Deciduous** Well Retention Upland Boundary with Conifer Deciduous with Conifer **Habitat Cut: No Site Condition:** Prescription Cut all trees 2" and up. Leave minimum retention. Mark some conifer to leave. Specs: Next Step **Treatments:** Red maple, aspen, oak, birch and pine. If regen fails to meet standard, manage area with adjacent opening.. <u>Acceptable</u> Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/01/2016 42111 - Planted 56 111-4211 - Planted Even-Aged Draft Field 52025070-Cut 4.4 Poletimber Harvest Clearcut Red Pine, Mixed Well 140 Red Pine Boundary Deciduous **Habitat Cut: No Site Condition:** Prescription Final harvest all trees 2" and up. Protect recreational trails. Specs: Next Step Other, Other; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable planted red pine

Regen:

Other No retention do to small size. Old next step comments:

Comment

Proposed Start Date: 10/01/2016

439 52025439-1.1 310 - Herbaceous Nonstocked Unspec SitePrep Trenching 4211 - Planted Even-Aged Draft Field Openland Red Pine ified Boundary Prep

Habitat Cut: No Site Condition:

Prescription Plant with adjacent stands

Specs:

Next Step Treatments:

<u>Acceptable</u> Planted red pine

Regen: Other

Old next step comments:

Comment:

Proposed Start Date: 10/01/2016

Total Treatment Acreage Proposed:

786.3

Report 5 – Site Conditions

Compartment: 25

Gaylord Mgt. Unit

Lucas Merrick : Examiner Year of Entry: 2017

Availability for Management

Total	Acres	Acres Avail	Acres		Domina	nt Site	Conditions
Acres	Available	With Condition	Not Available		5B	5E	
583	583	0	0	Aspen			
9	9	0	0	Bare/Sparsely Vegetated			
174	174	0	0	Herbaceous Openland			
106	106	0	0	Low-Density Trees			
15	15	0	0	Mixed Upland Deciduous			
11	11	0	0	Natural Mixed Pines			
58	58	0	0	Northern Hardwood			
21	0	21	0	Oak	21		
9	9	0	0	Planted Mixed Pines			
1250	1242	0	8	Red Pine		8	
177	177	0	0	Upland Shrub			
5	5	0	0	Water			
23	23	0	0	White Pine			
2,441	2,412	21	8	Total Forested Acres	21	8	
	99%	1%	0%	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	Available	5B: Maintain for regeneration purposes	21	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
	Comments: Stand has been und	ler planted to white pine. Allo	w unders	story to develop.			
3	Unavailable	5E: Long-Term Retention	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Identified retention f	or stand 17.					

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 6 - 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: 25
Year of Entry 2017



Report 7 – 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.

Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The processes are processed from the processes and processes and values. The processes are processed from the processes are processed f	Conservat Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form	ERA	•	identified as Element Occurrences (EOs) by the M context of their natural community classification sy (Excellent) or B (Good) and a Global (G) or State threatened (2), or rare (3) serve as an initial base the State. The system is comprised of individual o managed for restoration and maintenance of nature	fichigan Natural Features Inventory (MNFI) within the vstem. Element Occurrences with viability ranks of A (S) element (rarity) ranking of endangered (1), of ERAs. They may be located upon any ownership in r associations of natural community types that are ral ecological processes and values. The public may

S	Gaylord	l Mgt. Unit		Report 8	– Forested	Stands Compartment: 25 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4133 - Aspen, Mixed Pine	Sapling Well	53.6	18	Immature	Sparse in the northern portions. Stand as a whole is around 75% canopy closure. Thick pockets with open areas. Good shrub understory.
3	4130 - Aspen	Sapling Well	93.7	26	Immature	REGEN 25ft HIGH. OAK, WP, & RP NOT CUT. Extensive elk activity. Stand transitioning into a merchantable stand. Majority of oak in west. Open pockets with shrubs in east. Canopy cover is right around 75%
4	4130 - Aspen	Poletimber Well	94.7	47	81-110	Variable stand. Patchy in quality and maturity. Pockets of quaking aspen and pockets of big tooth aspen. Red maple consistent throughout. Some areas with BTA logs. A fair amount of oak regen over 8" tall.
5	42200 - Natural White Pine	Poletimber Well	14.5	51	111-140	A couple big seed source trees. Plenty of 4-8" trees mixed in with saw logs. Pockets of aspen. Red pine, maple, birch and hemlock also present.
7	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	15.2	56	111-140	Poorer quality red pine do to hardwood competition. Pockets of porcupine damage. There are a few area of good quality red pine(eastern portions are better in quality). Understory is well stocked in majority of stand.
8	42110 - Planted Red Pine	Poletimber Well	211.5	54	171-200	Majority of white pine found in eastern portions, red maple in the west. Some porcupine damage. Understory is variable, open in spots, thick in others.
9	4130 - Aspen	Sapling Medium	23.2	7	Immature	Extensive elk activity. Heavy browse on red maple stump sprouts. Canopy closure around the 50% mark. Pocket of larger diameter white pine in northern portions. Stand is a matrix of fully stocked aspen pockets and open areas.
12	4133 - Aspen, Mixed Pine	Poletimber Well	23.7	56	81-110	Elk activity. Variable stand with a 2 acre pocket of small diameter aspen 3-4". Nice pockets of hawthorn, witch hazel, and cherry brush. Quality of aspen seems to better in eastern portions.
13	4131 - Aspen, Oak	Sapling Well	15.4	28	Immature	Browse evident. Fairly open understory. Aspen is patchy. Some aspen decline evident in QA.
14	4130 - Aspen	Sapling Medium	40.5	28	Immature	Elk activity in stand. A mixture of aspen pockets and upland shrub with scattered saw log oak and pine. Some paper birch present in stand.
15	42110 - Planted Red Pine	Poletimber Well	10.9	56	81-110	Stand has large saw log unplanted red pine throughout making up approx. 38% of canopy. The plantation was under planted and or planted around these trees and makes up about 50% of canopy. The plantation average diameter is around 6-7 inches with pockets of suppressed trees. 85 is the age of natural pine.
16	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	60.1	56	141-170	Pockets of nice plantation. Clumpy red maple competing with majority of planted pine.

S	Gaylord	l Mgt. Unit		Report 8	– Forested	Stands Compartment: 25 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	42110 - Planted Red Pine	Poletimber Well	67.1	56	141-170	Stand does not have the red maple component that 16 does. Variable stand, DBH ranges from 5 -12", pockets of poor form, open areas, variable BA (80-210).
18	4130 - Aspen	Poletimber Poor	94.1	37	1-50	Sparse. Pockets with better stocking in south.
20	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	53.0	56	81-110	Clumpy maple, below average quality. Big tooth aspen clones look good. Pockets of grass and shrub types. A few open areas with dips may be acting as frost pockets making tree regeneration difficult.
23	4139 - Aspen, Mixed Deciduous	Poletimber Poor	8.0	51	1-50	Poorly stocked, average quality.
26	4130 - Aspen	Sapling Medium	13.1	26	Immature	Below average quality aspen. Canopy coverage around 50%
29	4139 - Aspen, Mixed Deciduous	Poletimber Well	24.7	56	81-110	Balsam fir and "bam" also present. Aspen below average quality. Excellent looking oak in understory and canopy. Around 75% canopy closure. Excellent shrub component.
30	42110 - Planted Red Pine	Poletimber Well	25.6	56	81-110	STAND THINNED 10/2010. Nice pockets of 140+BA in a couple areas. A couple pockets of little to no over story with aspen and red maple regeneration.
31	4130 - Aspen	Poletimber Poor	15.3	37	1-50	Canopy coverage close to 50%. Understory is fairly open. Hypox present. Below average quality aspen.
32	4133 - Aspen, Mixed Pine	Poletimber Medium	33.0	37	51-80	Island of mature timber in north west- aspen and red pine over topped by pine. Open pockets of U-type
33	42110 - Planted Red Pine	Poletimber Well	380.9	58	111-140	Stand thinned in 2010. Minor amounts of wind damage. Variable stand. A few pockets of white pine. Oak and hardwood understory doing well along northern portions.
37	4130 - Aspen	Sapling Medium	35.6	28	Immature	Patchy stand. Birch, white pine, and red pine also present. 25-30' tall aspen. Some oak regeneration also doing well.
38	4130 - Aspen	Sapling Medium	3.7	6	Immature	Browse damage evident. Regenerating aspen. Regen ranged fro 900 stems an acre to 4100 stems an acre, avg was 2300 stems per acre. 6-10' tall. Little aspen in northern portions.
40	42290 - Natural Mixed Pine	Sawtimber Well	10.6	88	81-110	UNDER PLANTED RED PINE UNDER A RED AND WHITE PINE RESIDUAL. MAJORITY OF THE PLANTRATION FAILED, BUT WHAT TREES SUCCEEDED ARE DOING WELL BUT VERY LIMBY. TYPICAL WEEVIL DAMAGED WP (TWISTED AND CROOKED). AREA OF FULLY STOCKED UNDERSTORY.
43	42110 - Planted Red Pine	Poletimber Well	107.7	56	111-140	STAND THINNED 11/16/2009. Scattered large diameter natural red pine. Some minor areas with wind damage. Variable quality, pockets of stunted pine

S	Gaylord		Report 8	Forested	Stands Compartment: 25 Year of Entry: 2017	
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	42210 - Natural Red Pine	Sawtimber Well	15.0	88	141-170	Natural pine that was under planted. Areas where plantation is evident, some pockets are just natural saw log red and white pine. Excellent patches of hawthorn in southern portions.
45	42110 - Planted Red Pine	Poletimber Well	60.3	56	141-170	Thinned 2004 SALE # 009-98-01. Some porcupine damage. Lower stocking and quality in NW. Some large diameter white pine throughout.
46	42110 - Planted Red Pine	Poletimber Well	188.5	56	111-140	Southeast portion thinned in 2004- SALE # 009-98-01. Northwest thinned in 2009. A couple pockets missed and not treated within the stand. Stand over and understory quality varies. Red maple understory heavier in NW. Scattered relic red and white pine.
47	4123 - Red Oak	Sawtimber Well	21.4	103	51-80	Stand thinned in 09, white pine planted 2010. Browse on deciduous regen evident. Western edge of stand slope down a hill and starts to turn into a u-type.
48	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	11.6	56	171-200	Red pine BA 160avg. Several large diameter red and white oak. Portions of plantation not in competition with deciduous species looks good.
50	42210 - Natural Red Pine	Sawtimber Medium	4.5	103	111-140	Jack pine in decline. Oak and white pine working their way into canopy. Bracken and sweet fern. Dispersed camping?
52	42110 - Planted Red Pine	Poletimber Well	13.9	56	171-200	Open pockets. Aspen, oak and jack pine present. Difficult topo in small triangle piece.
54	42110 - Planted Red Pine	Poletimber Well	46.3	56	141-170	Row thinned in 97. Heavy understory in western portions, east is fairly open.
55	42110 - Planted Red Pine	Poletimber Well	19.7	56	141-170	Thinned in 1997. Plenty of sawlogs. Almost called stand a log/pole with 10" diameter. Unerstory varies - fully stocked aspen in some pockets. A couple oaks in canopy in north.
56	42100 - Planted White Pine	Poletimber Well	2.1	56	171-200	Some oak has made it past browse line.
57	4130 - Aspen	Sapling Well	11.1	18	Immature	Aspen looks good. Good looking understory as well. Some oak regen above the browse line. Sparse pockets in middle of finger but stocking picks up again in southern portions.
58	42110 - Planted Red Pine	Poletimber Well	7.1	56	141-170	Thinned in 1997. Sparse area in SE w/ relic pine and a fully stocked understory. Elk activity.
59	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Well	9.0	56	141-170	Planted white pine with mixed deciduous. Planting not evident in many areas.
60	42200 - Natural White Pine	Poletimber Well	5.9	58	81-110	Weevil, a couple dead tops. Parent tree in center of stand. White pine slowly expanding. Larger diameter trees have the poorest form.

s t	Gaylord	l Mgt. Unit		Report 8	- Forested	Stands Compartment: 25 Year of Entry: 2017	& SOURCE
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	"
63	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	14.9	68	81-110	Portion of failed plantation in stand. A few oak saps. A nice shrub understory.	
70	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	4.4	56	111-140	A couple large juneberry clumps. Much of plantation hard to see but a few spots still have evident rows.	
72	4112 - Maple, Beech, Cherry Association	Sawtimber Poor	5.0	58	1-50	Open grown clumps of red maple mixed with upland brush.	



Stand	Cover Type	Acres	Managed Site	General Comments:
2	3204 - Mast Producing Shrub	1.8	No	Pocket of u-type. Area should be protected if pine stand is entered for treatment.
6	3204 - Mast Producing Shrub	11.5	No	U-type filling in with trees. Quaking aspen is poor quality. Oak sapling are in good condition.
21	3301 - Low Density Deciduous Tree	67.2	No	Stand Year Origin 2009. Stand did not regenerate well as a whole. A nice couple pockets of aspen 10' tall but majority of stand is now upland brush with scattered deciduous trees. A few pockets of small diameter aspen were not harvested. This stand has now been combined with surrounding u-type for mapping purposes.
35	3204 - Mast Producing Shrub	147.2	No	All tree species are represented in sap, pole, and log. Excellent shrub component throughout the u-type. Many old relic pine stumps. Sweet fern and blueberry throughout. A stick nest found in stand. Eastern finger north of pipeline had a wildfire run through it in April 2010 (10 acres). A couple acres of lowland in south between the red pine plantation.
41	310 - Herbaceous Openland	11.8		Planted 5/11/2012. Most of red pine not tall enough to be recorded as canopy species. Can see the tops of a couple sticking out of the snow. Some pole sized white pine left in northern portions. Only 3-4 acres of stand were roller chopped and planted.
49	510- Water (OI)	5.3	No	Old evidence of beaver activity.
53	3301 - Low Density Deciduous Tree	25.8	No	Southwest portions have the most open ground. Plenty of sweet fern.
66	3204 - Mast Producing Shrub	10.2	No	Recommend disposal.
67	3301 - Low Density Deciduous Tree	9.9	No	Recommend disposal.
68	3104 - Degraded	2.4	No	Facility. Multiple buildings and storage tanks. 8' fence with barbed wire. ENERVEST OPERATING-ASE 3A STATE FACILITY.
69	790 - Other Bare/Sparsely Vegetate	8.7	No	CPF. Multiple buildings and storage tanks. Eastern edge has developed into a utype.
71	3209 - Upland Shrub (OI)	5.0	No	Stand is filling in. Right around 25% canopy coverage. Sweet fern.
400	3104 - Degraded	1.2	No	Well site. ENERVEST OPERATING- STATE CHESTER 4-25
401	3104 - Degraded	1.0	No	Well site. POISON GAS. ENERVEST OPERATING- STATE CHESTER 8-25. Small building on site.
402	3104 - Degraded	1.2	No	Well site. ENERVEST OPERATING-STATE CHESTER 3-25. Pipe and fuel line stored on site.



Stand	Cover Type	Acres	Managed Site	General Comments:
403	3104 - Degraded	2.4	No	Abandoned well site. Restoration needed.
404	3104 - Degraded	1.5	No	Well site. Solar panel- Could not see well head? Looks like it was covered with snow by a loader?
405	3104 - Degraded	2.2	No	Well site. ENERVEST- STATE CHESTER D1-25. Multiple buildings.
406	3104 - Degraded	0.7	No	Well site. ENERVEST OPERATING-STATE CHESTER 7-25
407	3104 - Degraded	1.1	No	Well site. ENERVEST OPERATING-STATE CHESTER 6-25
408	3104 - Degraded	1.0	No	Well site. ENERVEST OPERATING-STATE CHESTER 5-25
409	3104 - Degraded	1.2	No	Well site. ENERVEST OPERATING-STATE CHESTER 9-25
410	3104 - Degraded	1.5	No	Well site. ENERVEST OPERATING-STATE CHESTER 8-26
411	3104 - Degraded	1.5	No	Well site. ENERVEST OPERATING-STATE CHESTER 6-35
412	3104 - Degraded	0.9	No	Well site. ENERVEST OPERATING-STATE CHESTER 7-26
413	31029 - Grass (OI)	1.4	No	Well site - abandoned. Sweet fern and knappweed
414	3104 - Degraded	2.7	No	Abandoned well site. Small brush pile in center of stand. Extensive knapp weed.
415	3104 - Degraded	1.7	No	OPIC - FMD: abandoned. Need restoration. Extensive knappweed coverage.
416	3104 - Degraded	1.2	No	Well site. ENERVEST OPERATING-STATE CHESTER 5-26. Small building on site.
417	3104 - Degraded	4.3	No	A well site along with multiple tanks and out buildings. CORE ENERGY-STATE CHESTER 1-27
419	3104 - Degraded	2.3	No	Well site. Enervest Operating LLC, STATE CHESTER 2-27. Building/shed on site.
420	31029 - Grass (OI)	2.4	No	Well site. ENERVEST OPERATING - STATE CHESTER 6-22.
421	3104 - Degraded	2.3	No	OPIC - FMD: abandoned well site. Site has been this way for over 10 yrs.



Stand	Cover Type	Acres	Managed Site	General Comments:
422	3104 - Degraded	1.8	No	Well site. ENERVEST OPERATING- STATE CHESTER M1-27
423	3302 - Low Density Conifer Trees	3.1	No	Abandoned well. Efforts to reclaim are visible. Planted jack pine and grasses evident. Knapweed and mullen present. Aspen saplings found around perimeter.
424	3104 - Degraded	1.3	No	Well site. ENERVEST OPERATING-NML & O 2-34
425	3104 - Degraded	3.9	No	Well site. ENERVEST OPERATING-STATE CHESTER 10-34. 1 small building. Clumps of cherry, aspen, and juneberry.
426	3201 - Sweet Fern	1.5	No	Abandoned site. Could see sweet fern poking out of snow.
427	3104 - Degraded	0.9	No	Well site. ENERVEST OPERATING-STATE CHESTER 7-34
428	3104 - Degraded	4.3	No	Well site. MERIT ENERGY-STATE CHESTER L 2-34. Storage tanks, small building, and misc debris. Western portion looks like an abandoned pad?
429	31029 - Grass (OI)	1.4	No	Well site. ENERVEST OPERATING-STATE CHESTER8-34
430	3104 - Degraded	0.9	No	Well site. ENERVEST OPERATING LLC-STATE CHESTER 2-35 knapweed
431	3104 - Degraded	1.0	No	Well site. ENERVEST OPERATING-STATE CHESTER 7-35.
432	3101 - Poverty Grass, Cladonia	13.4	No	A pine baron community (MNFI). Open areas covered with sweet fern starting to fill in with trees. Portions of remnant failed plantation.
433	3104 - Degraded	1.1	No	Well pad. ENERVEST OPERATING- STATE CHESTER (ASE#5) #3-35. knapweed
434	31029 - Grass (OI)	1.0	No	Well site. ENERVEST OPERATING-STATE CHESTER 8-35
435	3104 - Degraded	1.2	No	Well site. EVERVEST OPERATING-STATE CHESTER 5-35. Some pine seeding in on site.
436	3104 - Degraded	1.2	No	Well site. ENERVEST OPERATING-STATE CHESTER 4-35. Small building on site
437	3104 - Degraded	0.9	No	Well site. ENERVEST OPERATING- STATE CHESTER 4-36. Small building on site.
438	3104 - Degraded	1.1	No	Well site. ENERVEST OPERATING-STATE CHESTER 9-36. Some pine filling in around perimeter.

Gaylord Mgt. Unit

Report 9 – Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
439	310 - Herbaceous Openland	2.0	No	Small opening, elk activity. RPP remnants, scattered cherry brush.
440	31029 - Grass (OI)	6.6	No	One storage tank, solar panel, and multiple monitoring wells on sight. Pines have been planted on site. Could see the tops of a couple peaking out of the snow. Sweet fern and knapp weed.
441	3104 - Degraded	1.6	No	Well site. STATE CHESTER 3-36. Small building on site.
442	3104 - Degraded	1.3	No	Well site. ENERVEST OPERATING-STATE CHESTER 10-36
445	3105 - Mixed Upland Herbaceous	15.9	No	powerline
446	3105 - Mixed Upland Herbaceous	37.7	No	power line and pipeline
450	3105 - Mixed Upland Herbaceous	19.1	No	An old berm can be found in stand. Miscellaneous upland brush and trees.
451	3104 - Degraded	1.4	No	Abandoned well site. Restoration needed.
452	3104 - Degraded	1.0	No	ENERVEST OPERATING-STATE CHESTER 4-34. Solar panel on site
453	3104 - Degraded	1.2	No	Well site. ENERVEST OPERATING-STATE CHESTER3-34
454	3104 - Degraded	1.4	No	Well site. STATE CHESTER 1-34