

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32204 Entry Year 2019 Acreage: 3,132

County Marquette

Management Area: Huron Mountains

Revision Date: 2017-11-01 Stand Examiner: Rick Hill

Legal Description:

T49N-R26W, sections 13, 24, 25 and 26. T49N-R25W, sections 17, 18, 19, 20, 30, 31, and 32.

Identified Planning Goals:

Within the next ten years the planning goals include balancing low intensity recreation with management of wildlife, fisheries, and forests in the area. This includes but is not limited to creating plans for the ecological reference areas, finalizing a mountain bike trail plans, managing winter deer complexes, as well as numerous other projects.

Soil and topography:

Soils range from course sands along the lake to loamy sands and sandy loams with rock outcrops inland. Organic mucks are present within wetlands. The topography ranges from nearly level to gently undulating to rugged steep rock hills and ranges.

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

This Tract is some what isolated, with the nearest state land being two miles away. This area is also quite close to the city of Marquette and is used heavily by local residents. Adjacent landowners include timber investment organizations, Marquette County, and other private non industrial forest owners. Land use in this area ranges from timber production and gravel pits to recreation, and some off grid homes.

Unique Natural Features:

This tract includes extensive lake superior frontage ranging from sand beaches to granite cliffs. There are numerous scenic vistas in the area including hogback mountain, and sugarloaf mountain. There are three rivers that flow though the compartment and one inland lake contained within the compartment. This compartment has areas of old growth hemlock and hardwood. There are also numerous high quality examples of rare plant communities on the tract.

Archeological, Historical, and Cultural Features:

In the 1920s-30s there was a boy scout camp on Harlow Lake. This tract once hosted field trails and a local club for beagle owners. There are also the remnants of a cabin near Wetmore beach. There is an old railroad grade that cuts north-south thought the compartment this grade used to link Marguette to Big Bay.

Special Management Designations or Considerations:

This whole compartment is part of the Little Presque Isle Recreation Area, it is jointly managed by PRD, FRD, and WLD. the last area management plan was written in 1996 as an addendum to the Escanaba River state forest plan. As this plan is over 20 years old it is most likely time to update the plan. Much of this compartment is located within a winter deer complex. Much of the compartment east of county road 550 is within a non-dedicated natural area, Little Presque Isle island is non-dedicated wilderness area. There are also some substantial areas that are cold water stream buffers scattered thought the compartment. Ecological reference areas in this compartment will have management plans written to maintain and improve there quality. Parking lots, trails and rental cabins are managed by parks and rec division.

Watershed and Fisheries Considerations:

Fisheries Values: Good to Excellent

Fisheries Concerns: The Harlow, Potluck, Nash, and Bismark Creeks flow through this compartment. All creeks in this compartment are designated trout streams. Harlow Lake in its entirety is contained in this tract. Lake Superior makes up the eastern boundary of the compartment. For YOE2019 stand 41 has a soft factor limit in place for survey needed. In the event a survey is completed removing the soft factor, the proposed clear cut in stand 41 should have a 300 foot buffer placed along this cold tributary to Harlow Creek.

Wildlife Habitat Considerations:

Compartment 204 is found within the Huron Mountains Management Area; on a Bedrock-Controlled Ground Moraines and till-floored lake plains in northern Baraga and Marquette Counties. Most of the natural communities in this area are mesic northern forests and poor conifer swamps. Major forest cover types include Northern Hardwood, Aspen and Hemlock. The area receives significant snowfall and represents almost 20% of the WUP State Forest hemlock resource. This area

provides critical wintering habitat for white tailed deer, especially along the Lake Superior shoreline. Additionally, some of the largest tracts of mature forest in the Great Lakes (e.g. McCormick Tract, Craig's Lake Wilderness State Park, and the Huron Mountain Club) occur within or adjacent to this management area. The current condition and spatial arrangement of these areas provide some of the best opportunities within the WUP, state, and Great Lakes for area sensitive wildlife that require large tracts of mature forest, mesic conifer or corridors between such areas. The wildlife priority here is to manage for old growth forest characteristics, in a fairly un-fragmented condition, with particular emphasis on protecting the hemlock component. This strategy will protect thermal cover, provide for wildlife movement corridors, and provide habitat for a variety of species. This includes minimizing habitat fragmentation; insuring adequate course woody debris; retain or develop large living and dead standing trees (for cavities); mesic conifer; mature forest; within-stand diversity; closed canopy forest; and deer wintering complexes.

The following have been identified as featured species for the Huron Mountains Management Area: American Marten, Blackburnian Warbler, and White-Tailed Deer.

Mineral Resource and Development Concerns and/or Restrictions

An active sand/gravel operation is located along Big Bay Road just south of the compartment, but there does not appear to be sand and gravel potential within the compartment. Granite/gneiss is at the surface within the compartment and could be used for dimension stone. There is no known metallic mineral potential within the compartment and there has been no history of mineral leasing. There is no economic oil and gas production in the UP. The state currently does not own any of the mineral rights beneath the compartment.

Vehicle Access:

Access to this compartment is fair with a roads accessing the west half of the compartment as well as the east portion of the compartment. Access to the middle of the compartment is limited due to steep topography.

Survey Needs:

The western edge of the compartment may need some survey work for proposed timber sales. Some corner work may be needed on the north east corner to clear up a possible trespass.

Recreational Facilities and Opportunities:

This area is extremely popular for year round recreation. A use study should be done to better quantify use intensity and patterns here. Currently there is 6 rental cabins, 2 day use beech areas, a boating access site and handicap fishing pier, 25 plus miles of hiking and mountain bike trails including the North Country Trail (NCT). Some of those trails are designated for winter fat tire bike use and some are limited to snowshoe, and back country ski use. Popular activities here during the spring and summer here are sun bathing, beach walking, dog walking, trail running, hiking, mountain biking, weddings, fishing and berry picking. In the fall hunting is an additional popular activity. Winter activities here include snowshoeing, dog walking, backcountry skiing, ice fishing, and fat tire biking.

Fire Protection:

High usage rates along with fire prone ecosystems make fire occurrence here quite common. Terrain here hilly with rock outcrops and thin soils making mechanized firefighting difficult. there are also many sensitive areas that would suffer more damage from fig fighting then fires themselves. A fire plan should be written and implanted to minimize the impact of fire suppression within the area. Signage and other fire prevention efforts should be focused here due to large numbers of collage students using the area particularly in fall.

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

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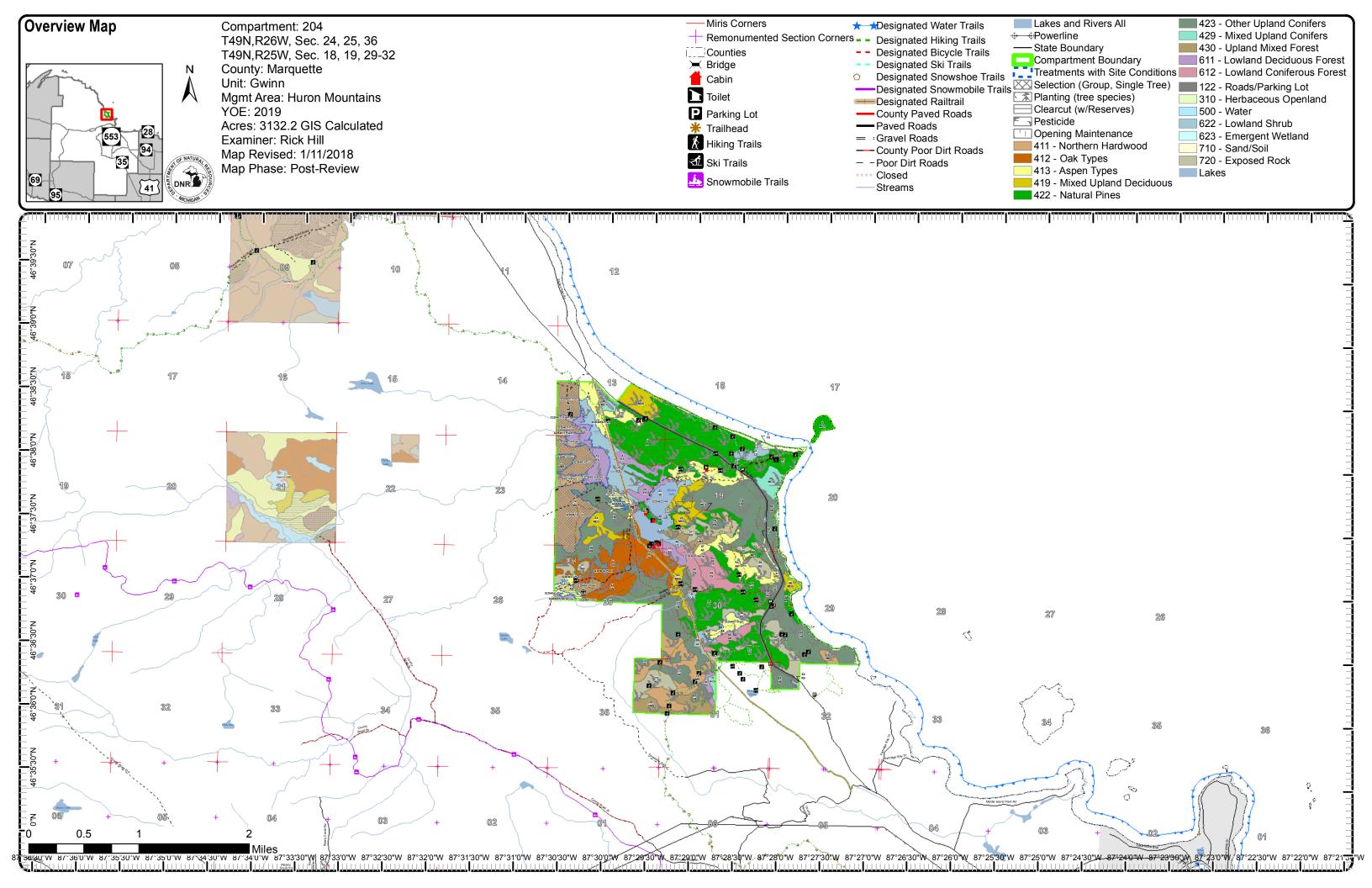
Compartment 204 Year of Entry 2019

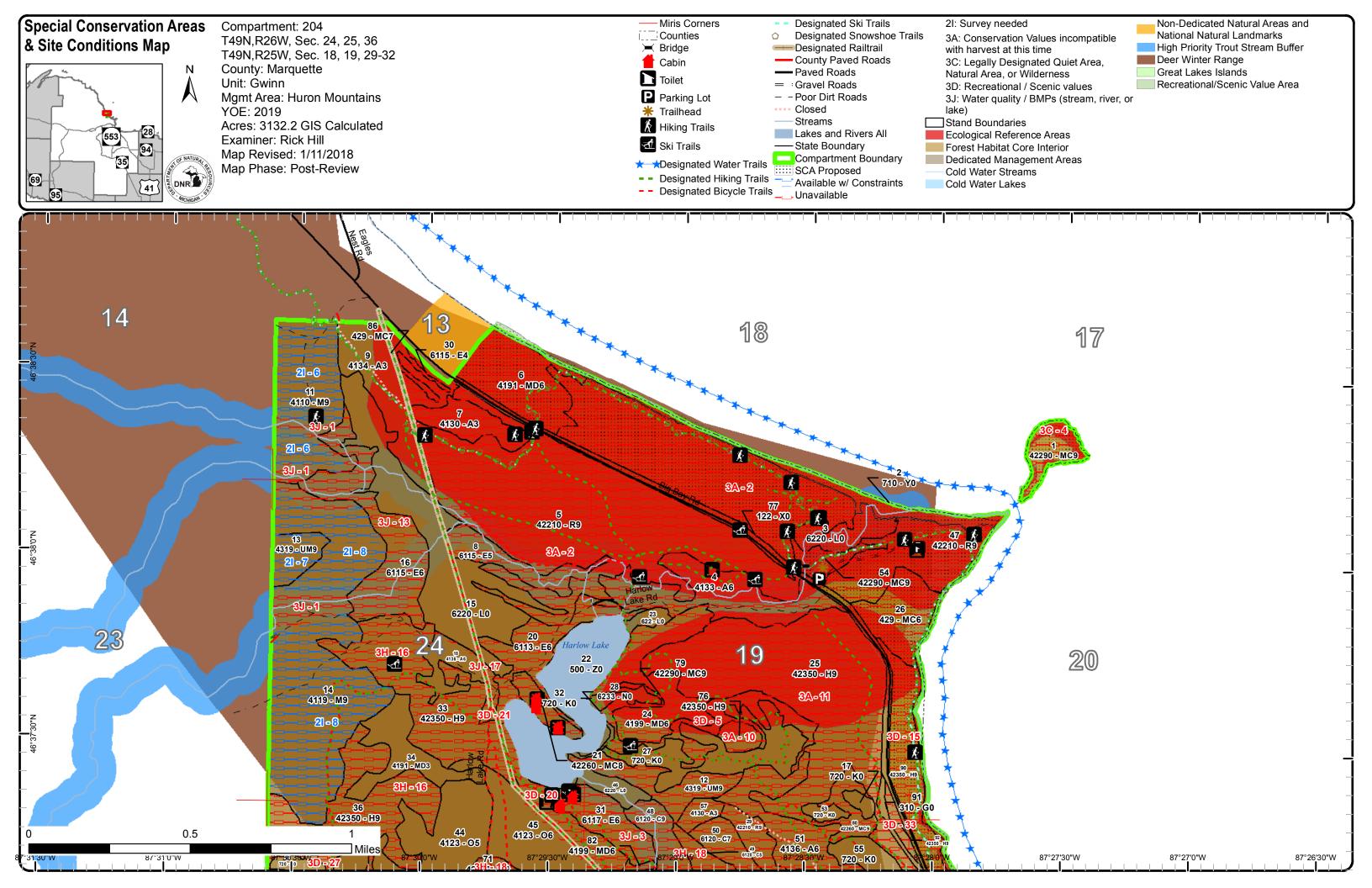
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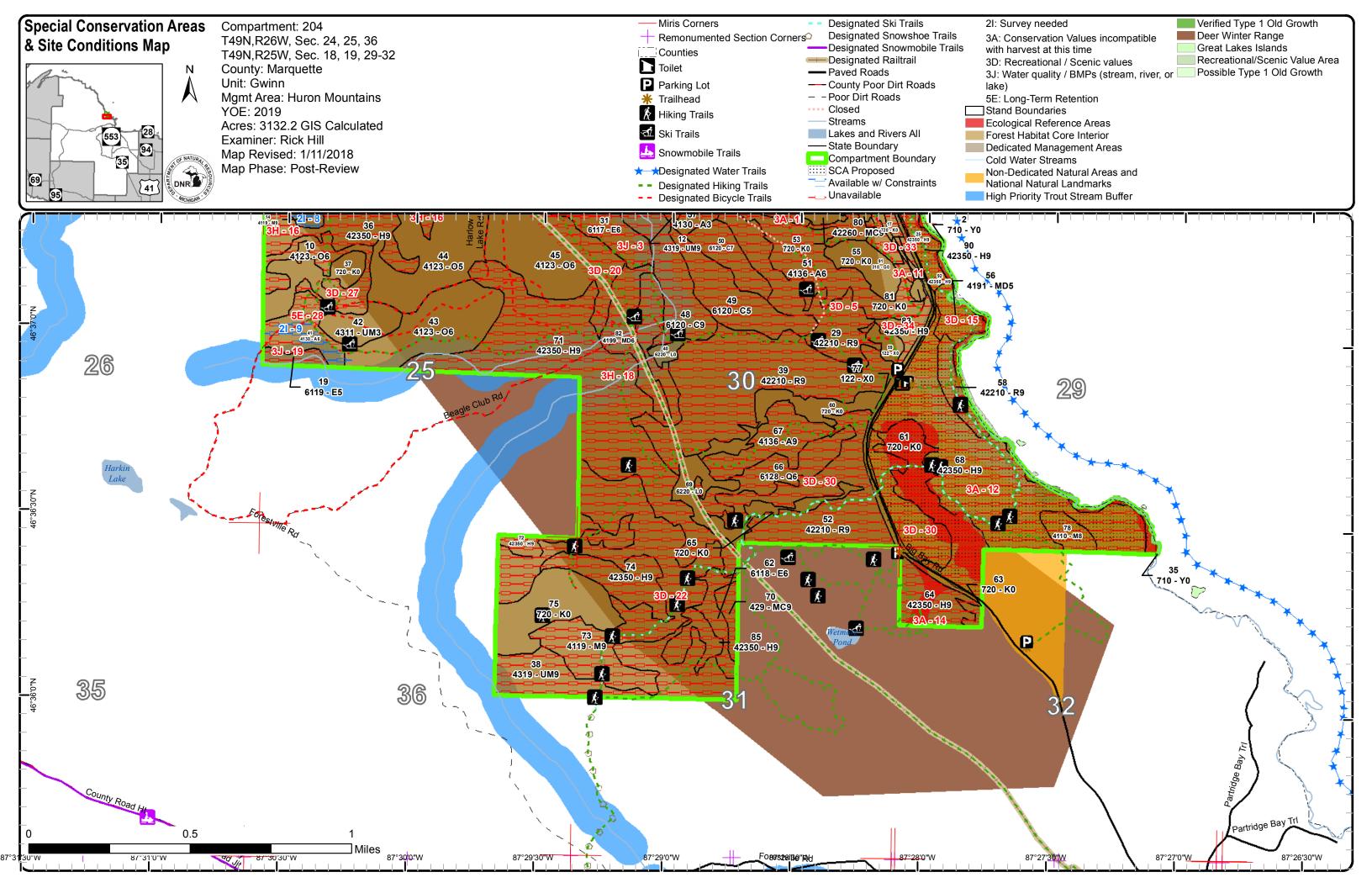


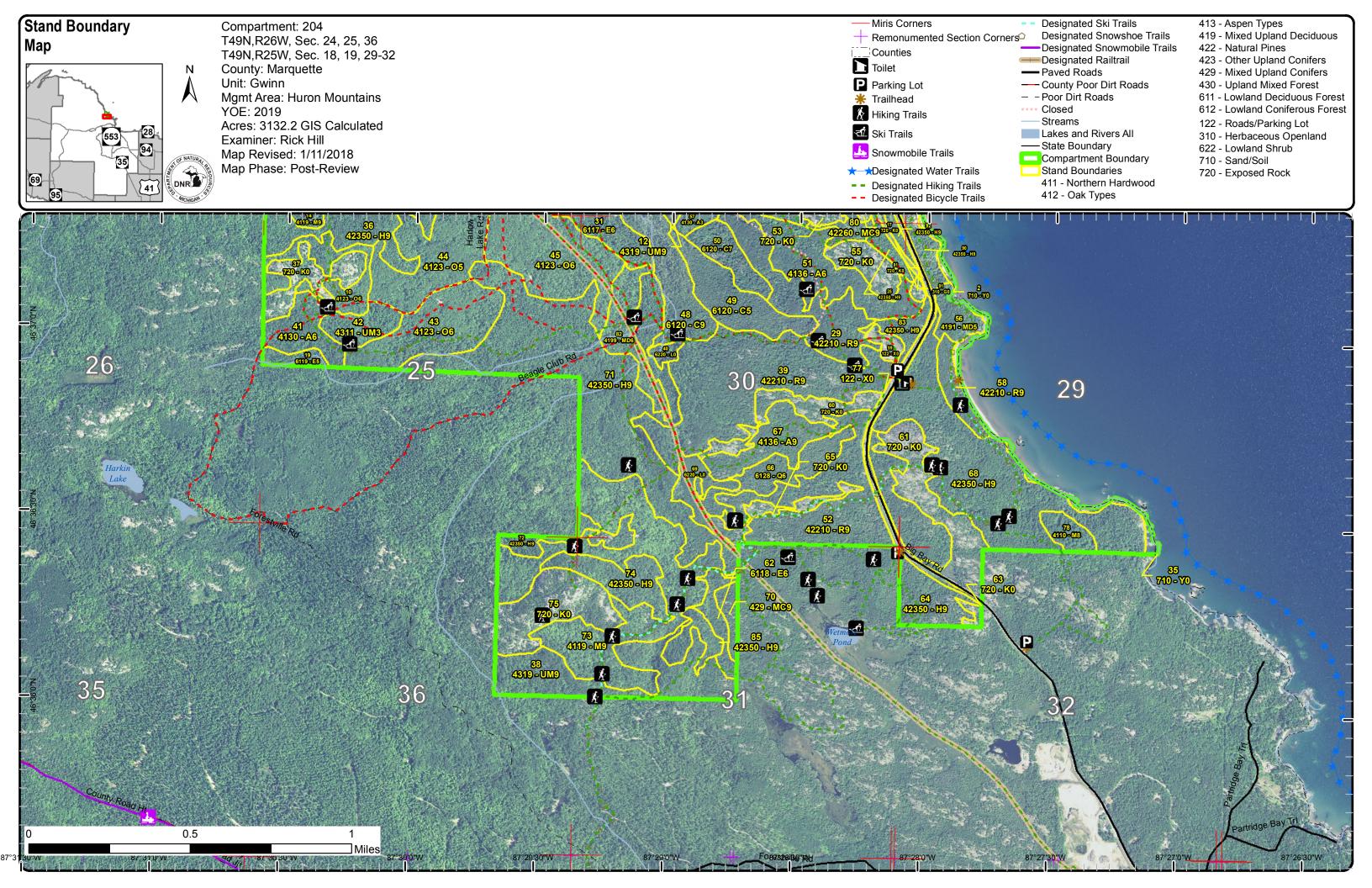
Age Class

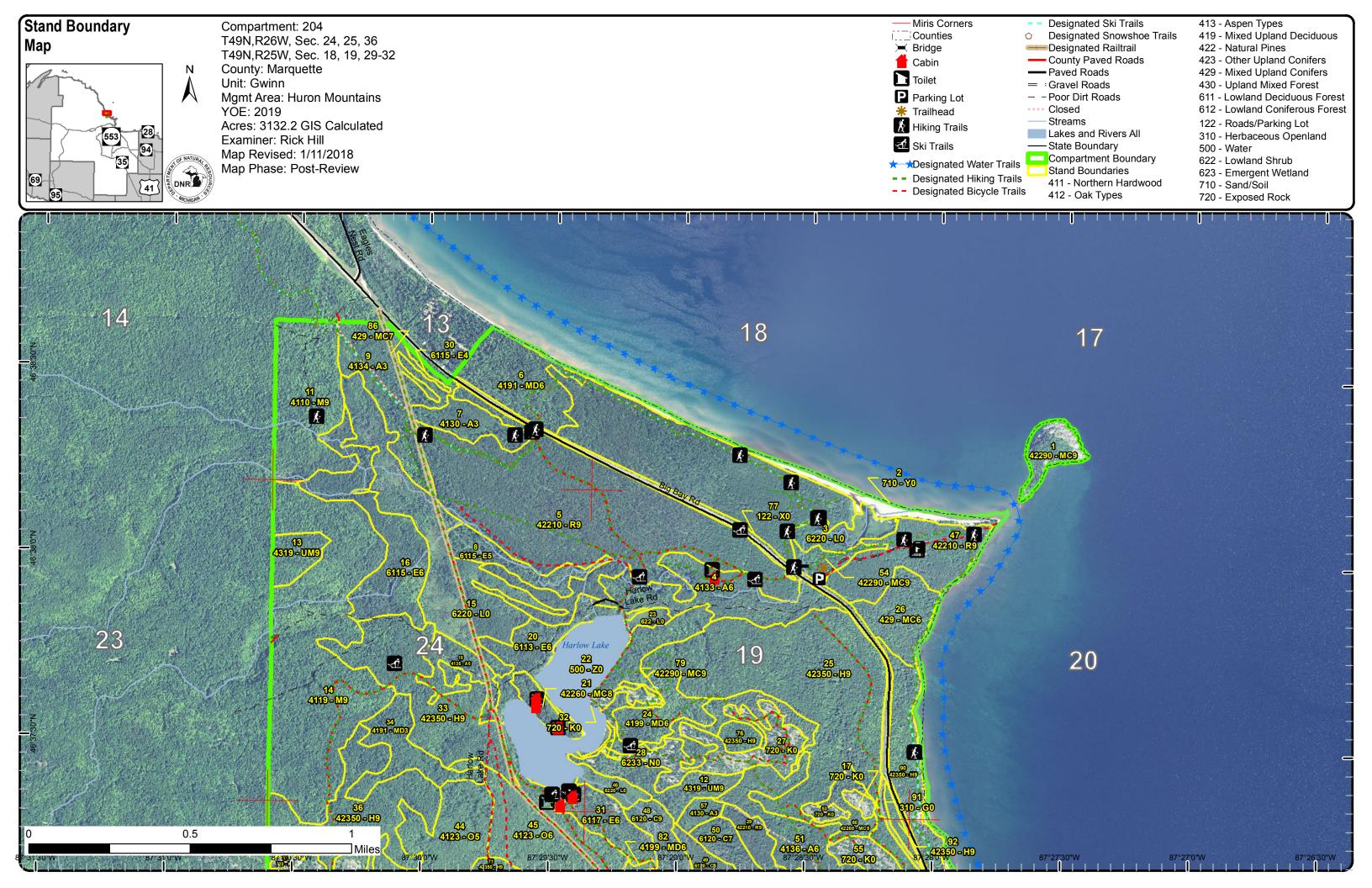
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Aspen	0	0	0	62	0	0	18	0	0	98	0	0	0	0	0	0	0	49	227
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	32	31	0	16	0	79
Exposed Rock	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
Hemlock	0	0	0	0	0	0	0	0	0	0	58	166	76	0	10	0	50	307	667
Herbaceous Openland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Conifers	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	23
Lowland Deciduous	0	0	0	0	0	0	0	63	75	0	0	0	0	10	0	0	0	0	147
Lowland Shrub	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131
Marsh	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Mixed Upland Deciduous	0	0	0	27	0	0	0	22	0	84	0	11	0	0	0	0	0	0	144
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	28	15	21	0	0	10	74
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	339	339
Oak	0	0	0	0	0	0	0	0	0	196	0	0	0	0	0	0	0	0	196
Red Pine	0	0	0	0	0	0	0	0	0	0	0	112	0	0	330	0	0	174	616
Sand, Soil	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Upland Conifers	0	0	0	0	0	0	0	0	0	0	10	27	6	0	0	0	0	0	43
Upland Mixed Forest	0	0	0	14	0	0	0	0	0	0	0	0	0	53	0	0	0	36	103
Urban	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Water	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Total	472	0	0	103	0	0	18	85	75	401	68	316	110	110	392	0	66	915	3130

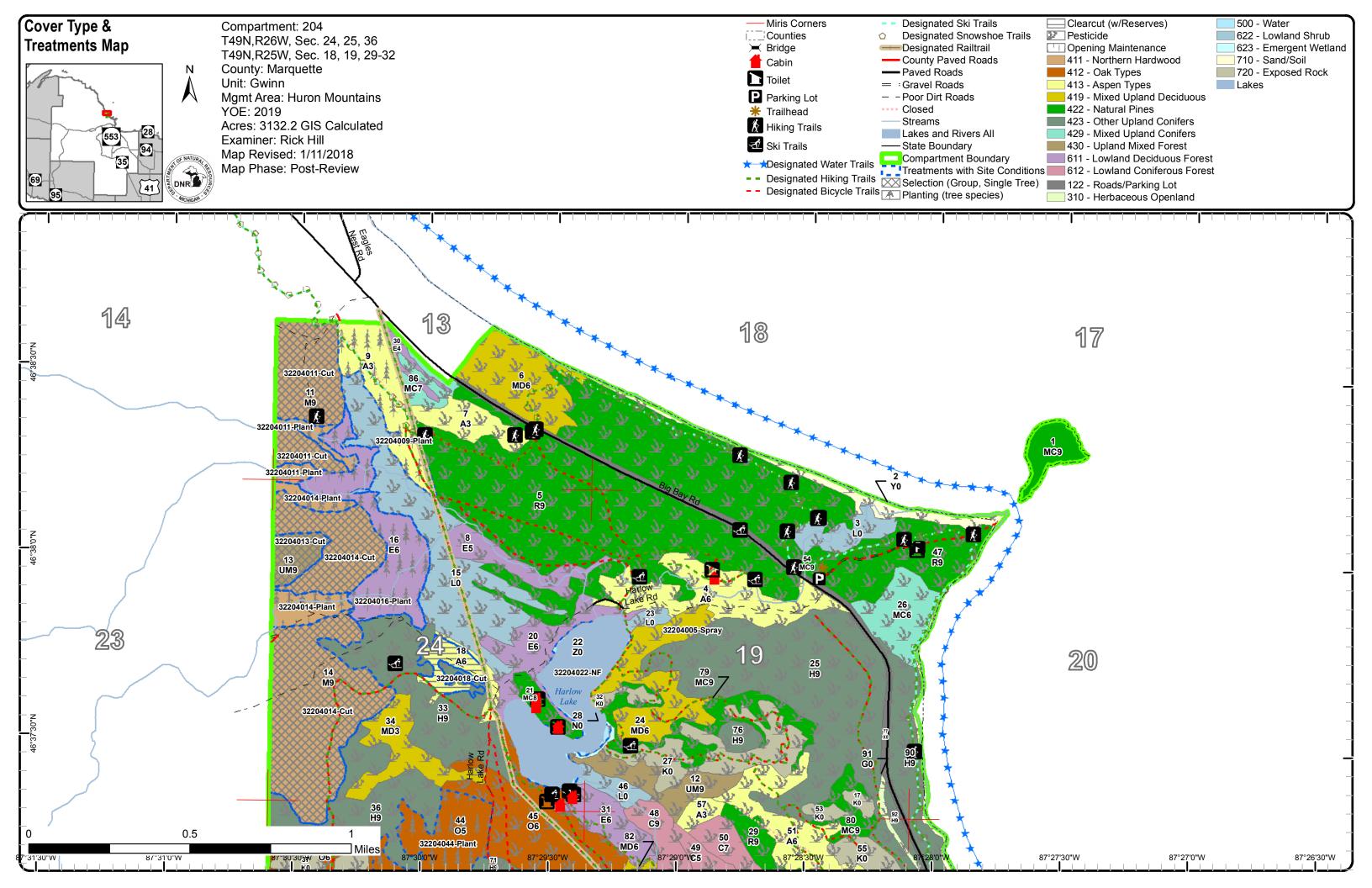


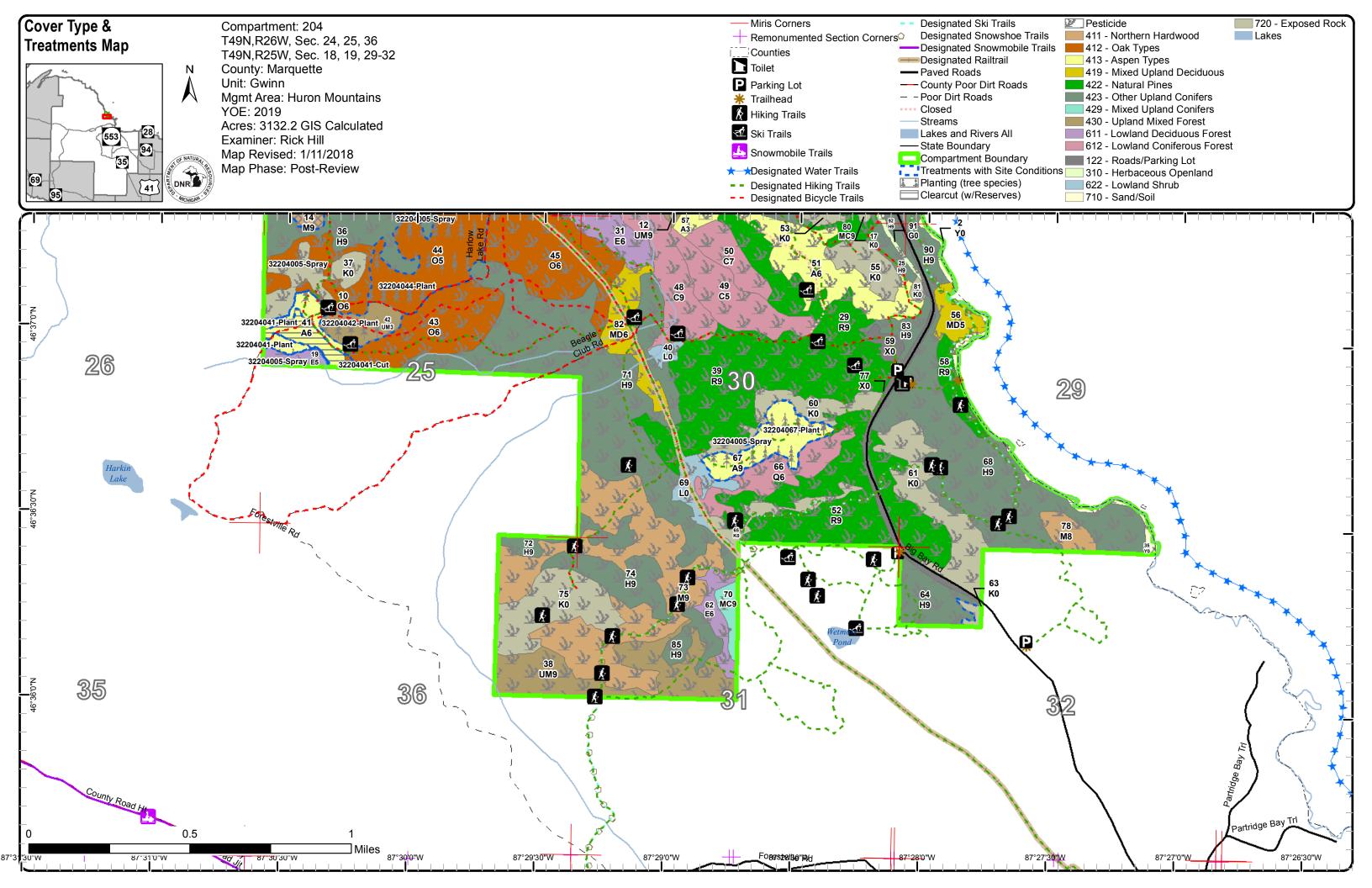














Report 2 – Treatment Summary

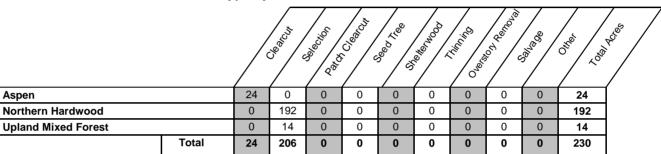
Gwinn Mgt. Unit Year of Entry: 2019

Acres of Harvest

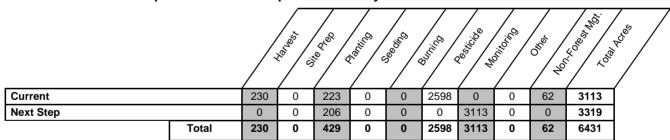
Compartment 204
Total Compartment Acres: 3,132

Commercial Harvest -Harvests with Site Condition - 230 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Compartment: 204 Year of Entry: 2019

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
5	32204005- Spray	2598.1	42210 - Natural Red Pine	Sawtimber Well	134	81-110	Pesticide	Hand Application	4221 - Natural Red Pine	Uneven- Aged	Draft Field Boundary

Site Condition: Conservation Values **Habitat Cut: No**

Prescription Monitor, spray, pull invasive species as they are found. Focus monitoring efforts on areas of heavy use, ERAs, road corridors, and trail corridors.

Next Step Monitoring, Herbicide Use

Treatments:

Acceptable N/A

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

32204009-37.2 4134 - Aspen, Sapling 26 51-80 **Planting** Underplant 413 - Aspen Even-Aged Draft Field **Plant** Spruce/Fir Well Boundary

Habitat Cut: No Site Condition:

Prescription Plant hemlock and mast species using LSWP crew as labor. Plant in gaps where regen has not come back well.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Hemlock, mast species

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

32204011-Cut 52.0 4110 - Sugar Maple Sawtimber Single Tree 411 - Northern Draft Field 111-Harvest Even-Aged Association Well 140 Selection Hardwood Boundary

Site Condition: Survey Needed **Habitat Cut: No**

Prescription This stand should be harvested using a selection system. Use the complete marker as a guide. Target residual basil area of 80 square feet. Favor hemlock and yellow birch though tree selection. Areas of high hemlock density may be excluded from the harvest area or be left Specs:

unmarked. This treatment will improve habitat for white-tailed deer and blackburnian warbler.

Next Step Monitoring, Natural Regen (Re-Inventory); Planting, Underplant

Treatments:

Acceptable Sugar Maple, Red Maple, Hemlock, Basswood, Red Oak, and Yellow Birch.

Regen: Other

Buffer creeks in stand appropriately. Two temporary bridges may be needed. The north country trail passes thought the stand. The trail should be buffered or protected during sale prep and cutting. This will be a winter only harvest due to wildlife and recreation concerns. Due to wildlife Comment: concerns no chipping will be allowed. and tops should be smashed where possible to protect young maples. Ensure The NCT is protected during

treatment operations. Treatment will only be south of the trail. Use pathway protection specs and sign the trail.

Proposed Start Date: 10/01/2018

32204011-10.2 4110 - Sugar Maple Sawtimber 105 111-**Planting** Underplant 411 - Northern Uneven-Draft Field **Plant** Association Well Hardwood 140 Aged Boundary

Habitat Cut: No Site Condition: BMPs

Prescription Plant hemlock with Lake Superior Watershed Partnership crews. Try to plant in gaps and along riparian areas bordering Harlow Creek and Nash

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Hemlock

Regen: Other Comment:

Proposed Start Date: 10/01/2018

Next Step

Acceptable Hemlock

Regen: Other

Comment:

Proposed Start Date: 10/01/2018

16 32204016-55.4 6115 - Lowland Ash Poletimber 76 81-110 **Planting** Underplant 611 - Lowland Even-Aged Draft Field Well Deciduous **Plant** Boundary Forest

Habitat Cut: No Site Condition: BMPs

Prescription Underplant mast trees using LSWP Crews 200 trees to be planted. Plant in areas where black ash is dominant and in areas that are gaps. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Swamp white oak, bur oak, hickory

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

Comment:

Proposed Start Date: 10/01/2008

32204041-10.7 4130 - Aspen Poletimber 83 81-110 Draft Field 41 **Planting** Underplant 413 - Aspen Even-Aged Well Boundary **Plant**

Habitat Cut: No Site Condition: Recreational/Scenic

Prescription Underplant hemlock using LSWP conservation crews.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Hemlock

Regen: Comment:

Proposed Start Date: 10/01/2018

Gwinn Mgt. Unit Report 3 -- Treatments Compartment: 204 s Year of Entry: 2019 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age n Method Objective d Name CoverType Density Age Range Type Structure **Status** 4199 - Other Even-Aged 42 32204042-14.3 4311 - Pine, Aspen Sapling Underplant Draft Field 24 Immatu **Planting** Mixed Upland **Plant** Mix Well Boundary Deciduous **Habitat Cut: No Site Condition:** Prescription Plant hemlock in gaps that have not regenerated using LSWP crews. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Hemlock Regen: Other Comment: **Proposed Start Date:** 10/01/2018 Draft Field 44 32204044-51.1 4123 - Red Oak Poletimber 80 81-110 **Planting** Underplant 412 - Oak Types Even-Aged Medium Boundary **Plant Habitat Cut: No Site Condition:** Prescription Plant hemlock using LSWP crews focus on gaps. Specs: Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Hemlock Regen: Other Comment: **Proposed Start Date:** 10/01/2018 84 Draft Field 67 32204067-24.5 4136 - Aspen, Sawtimber 81-110 **Planting** Underplant 413 - Aspen Even-Aged Mixed Conifer Well Boundary **Plant** Site Condition: Recreational/Scenic **Habitat Cut:** No Prescription Plant hemlock Using LSWP crews. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments:

Acceptable Hemlock

Regen:

<u>Other</u> Comment:

Proposed Start Date: 10/01/2018

Total Treatment 3112.8 **Acreage Proposed:**

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Availa	ability for	Managemen	nt								
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	ditions	3		
Acres	Available	With Condition	Not Available		21	ЗА	3C	3D	3Н	3J	5E
227	50	9	168	Aspen	9	18		141		5	3
79	0	0	79	Cedar					79		
189	150	0	39	Exposed Rock		39					
668	0	0	668	Hemlock	0	291		93	284		
3	3	0	0	Herbaceous Openland							
23	0	0	23	Lowland Conifers				23			
147	0	0	147	Lowland Deciduous		25		40		82	
131	115	0	16	Lowland Shrub		16					
2	2	0	0	Marsh							
144	27	0	117	Mixed Upland Deciduous	0	42		75			
74	0	0	74	Natural Mixed Pines		10	15	49			
339	1	192	146	Northern Hardwood	192	9		107		30	
197	141	1	55	Oak	1			55			
616	0	0	616	Red Pine		377		238			
37	36	0	1	Sand, Soil		1					
44	0	0	44	Upland Conifers		38		6			
103	14	14	75	Upland Mixed Forest	14			75			
47	47	0	0	Urban							
62	62	0	0	Water							
3,132	648	216	2,267	Total Forested Acres	216	867	15	903	362	117	3
	21%	7%	72%	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 Dominant Site No. 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)	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						

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2	Unavailable	3A: Conservation Values incompatible with harvest at this time	527	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: 2017 - Evaluated fo	or SBW. Stand is within LPI trac	t east o	of Co. Rd. 550.			
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	21	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3C: Legally Designated Quiet Area, Natural Area, or Wilderness	15	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified
	Comments:						
5	Unavailable	3D: Recreational / Scenic values	392	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments: 2017-Currently und	er inventory.					
6	Available	2I: Survey needed	52	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	2I: Survey needed	14	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified
	Comments:						

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8	Available	2I: Survey needed	140	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified	
(Comments:							
9	Available	2I: Survey needed	10	Unspecified	Unspecified	Unspecified	Unspecified	
(Comments:							
10	Unavailable	3A: Conservation Values incompatible with harvest at this time	6	Unspecified	Unspecified	Unspecified	Unspecified	
(Comments:							
11	Unavailable	3A: Conservation Values incompatible with harvest at this time	155	Unspecified	Unspecified	Unspecified	Unspecified	
(Comments:							
12	Unavailable	3A: Conservation Values incompatible with harvest at this time	156	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	3D: Recreational / Scenic values	Unspecified	Unspecified	
	Comments: Four ERA EOs, deer yard, NCT, Harlow lake trail system							
13	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	55	Unspecified	Unspecified	Unspecified	Unspecified	
(Comments:							

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14	Unavailable	3A: Conservation Values incompatible with harvest at this time	23	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	3D: Recreational / Scenic values	Unspecified	Unspecified
	Comments: ERA Mesic Northe	rn Forest, Deer Yard, Wetmore	Pond T	rials			
15	Unavailable	3D: Recreational / Scenic values	57	3A: Conservation Values incompatible with harvest at this time	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unspecified	Unspecified
	Comments:						
16	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	130	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
18	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	232	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
	Comments: Deer Yard, Trails						

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Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	3D: Recreational / Scenic values	54	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Cabin Sites						
Unavailable	3D: Recreational / Scenic values	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	3D: Recreational / Scenic values	223	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	3D: Recreational / Scenic values	26	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
	Unavailable Comments: Cabin Sites Unavailable Comments: Unavailable Comments: Unavailable Comments: Unavailable Comments:	(stream, river, or lake) Comments: Unavailable 3D: Recreational / Scenic values Unavailable 3D: Recreational / Scenic values Comments: Unavailable 5E: Long-Term Retention	(stream, river, or lake) Comments: Unavailable 3D: Recreational / Scenic values Comments: Cabin Sites Unavailable 3D: Recreational / Scenic values Comments: Unavailable 3D: Recreational / Scenic values Comments:	Comments: Unavailable 3D: Recreational / Scenic values 54 3J: Water quality / BMPs (stream, river, or lake) Comments: Cabin Sites Unavailable 3D: Recreational / Scenic values 4 Unspecified Comments: Unavailable 3D: Recreational / Scenic values 223 3A: Conservation Values incompatible with harvest at this time Comments: Unavailable 3D: Recreational / Scenic values 26 Unspecified Comments: Unavailable 5E: Long-Term Retention 3 Unspecified	Comments: Unavailable 3D: Recreational / Scenic values Unavailable 3D: Recreational / Scenic values	Comments: Unavailable 3D: Recreational / Scenic values 54 3J: Water quality / BMPs (stream, river, or lake) Unavailable 3D: Recreational / Scenic values 4 Unspecified Unspe

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30	Unavailable	3D: Recreational / Scenic values	135	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
C	Comments:						
33	Unavailable	3D: Recreational / Scenic values	4	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
34	Unavailable	3D: Recreational / Scenic values	8	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

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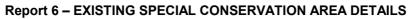


Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* 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
	Visual Management Area	Recreational/Scenic Value Area	Proposed SCA	25
Comments LPI Point Beach				
Island	Visual Management Area	Recreational/Scenic Value Area	Proposed SCA	14
Comments SCA = LITTLE PRESQUE	ISLE. Oak pine type with rock out c	roppings on the north side.		
LPI Lakeside	Visual Management Area	Recreational/Scenic Value Area	Proposed SCA	491
Comments SCA = Harlow Lake recrea	tion area. Recreational trails throug	gh this area.		
Sugarloaf Old Growth Hemlock	Type 1 or Type 2 Old Growth	Verified Type 1 Old Growth Area	Proposed SCA	49
Comments SCA = Harlow Lake recrea	tion area. Recreational trails throug	gh this area.		
Sugarloaf Old Growth Hemlock	Type 1 or Type 2 Old Growth	Possible Type 1 Old Growth Area	Proposed SCA	49
Comments				
SCA = Harlow Lake recrea	tion area. Recreational trails throug	h this area.		

Gwinn Mgt. Unit Compartment: 204
Year of Entry 2019





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

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condi- stocked trout populations and those of other coldwater fish spe- conditions for coldwater fishes may occur in Michigan lakes if t groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisherica	ecies to persist from year to year. Suitable they are relatively deep, have substantial of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish speyear to year. Coldwater streams in Michigan typically provide to contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	ecies (e.g., slimy sculpin) to persist from hese conditions due to substantial
SCA	Great Lakes Islands	Great Lakes Islands provide significant habitat for numerous s animals, several of which are endemic or largely restricted to t isolation, islands provide good examples of many Great Lakes ecosystems, and thus have potential to provide insights for un- disturbance on the increasingly fragmented ecosystems of the	he Great Lakes region. Due to their s-associated natural communities and derstanding the consequences of human
SCA	Habitat Area	An area that provide some specific need for the life cycle of wi and Waterfowl Production Areas, deer wintering complexes in openings and savannas. Habitat areas are distinct from critica endangered or threatened species (such as Kirtland's warbler general in nature, are not primarily associated with threatened covered by species recovery plans that are developed in coop	lowland conifer communities, grassland I habitat designated for recovery of or piping plover areas) in that they are more or endangered species, and are not
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and V proposed for legal dedication, but for which legal dedication by nomination process is defined by Part 351, Wilderness and Na Environmental Protection Act, 1994 PA 451. The program is a require the submittal of a Natural Areas Nomination Packet to proposed sites in various stages of review. Final dedication of Areas is accomplished through legislative action.	y legislature has not occurred. The atural Areas, of the Natural Resources and dministered by the DNR. Nominations the DNR. This is an active program, with
SCA	Type 1 and Type 2 Old Growth	Old-Growth forest (also termed primary forest, ancient forest, of forest, or primeval forest) is an area of forest that has few or ne exhibits unique ecological features related to age, composition are of natural origin. They may be dominated by late succession American beech), or may be a very old example of a stand do species (i.e. oak, or red pine).	o signs of human disturbance and that and associated structure. Old growth forests onal forest species (i.e. sugar maple and
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems influences the aquatic ecosystem and vice-versa. Because of streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their ef as aesthetics, habitat, bank stability, timber production, and the	the unique conditions adjacent to lakes, n diversity of plants and wildlife. Riparian ffects on water quality and quantity, as well
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific marrules, as governed by Part 5, Department of Natural Resource 324.504). Section 38 of the Administrative Procedures Act (Mothe promulgation of rules. This is an active program, with one DNR.	s, of the NREPA (MCL 324.502(2) and CL 24.238) provides for public requests for
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and Environmental Protection Act, 1994 PA 451. The program require the submittal of a Natural Areas Nomination Packet to proposed sites in various stages of review. Final dedication of Areas is accomplished through legislative action.	is administered by the DNR. Nominations the DNR. This is an active program, with

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* 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 public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.	 servatio Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
		J	identified as Element Occurrences (EOs) by the Michigan Natural context of their natural community classification system. Eleme (Excellent) or B (Good) and a Global (G) or State (S) element (I threatened (2), or rare (3) serve as an initial base of ERAs. The the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological	ral Features Inventory (MNFI) within the nt Occurrences with viability ranks of A rarity) ranking of endangered (1), by may be located upon any ownership in s of natural community types that are processes and values. The public may

S t	Gwinr	Mgt. Unit		Report 7	Forested	Stands Compartment: 204 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42290 - Natural Mixed Pine	Sawtimber Well	15.2	126	51-80	Little Presque Isle, a rocky island in lake superior. This island features a number of ecological reference areas including sandstone lakeshore cliffs and granite bedrock lakeshore. This island gets a lot of recreation use from beech goers that walk or swim to it depending on water depth.
4	4133 - Aspen, Mixed Pine	Poletimber Well	49.4	84	81-110	Riparian valley with Harlow Creek flowing though it. There are a few recreation trails that pass though this stand. The Harlow Lake Road/Forestville Road run along the south edge of the stand. Due to the stands location sandwiched between two ERAs natural process should be allowed to run there course. Hazard trees should be cut as needed.
5	42210 - Natural Red Pine	Sawtimber Well	330.1	134	81-110	This stand is an ecological reference area for dune and swale land form along Lake Superior. The stand is split by County road 550. Stand ranges in stocking and size classes. there are a number of trails within this stand including the NCT, Songbird Trail, Red Pine mountain bike trail. A DNR rental cabin is also present within the stand. The stand borders Harlow Creek. Part of the area is also within the boundaries of a non dedicated natural area.
6	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	42.0	89	81-110	Dune and swale ecological reference area complex along Lake Superior. Intolerants experiencing heavy mortality. Succeeding to spruce-fir, scrub maple, and white pine. This area will be allowed to naturally succeed. This stand is within a non dedicated natural area. Both the Songbird Trail and the North Country Trail pass though this stand.
7	4130 - Aspen	Sapling Well	18.5	24	Immature	This stand was harvested in 1989 by Cain Brothers Logging under Presque Isle #1 32-030-89-01. All oak and hemlock where left within the sale. red and white pine where marked for removal. this stand is now part of a wooded dune and swale ecological reference area.
8	6115 - Lowland Ash	Poletimber Medium	19.5	76	81-110	Riparian area with Harlow creek flowing though it. the pines trail passes along the edge of this stand. Watch this area for EAB as well as invasive plants.
9	4134 - Aspen, Spruce/Fir	Sapling Well	37.2	26	51-80	This stand was harvested by Cain Brothers Logging in 1990 under Presque Isle Railroad 32-034-89-01. All cedar, oak, hemlock, pine and fir under 2 sticks under 6 inches in diameter at breast height was left. Regeneration is coming along quite nicely with some areas being dominated by aspen and some being dominated by spruce/fir. The north country trail passes thought this stand. Hiking and mountain bike trails use the old railroad grade present within the stand.
10	4123 - Red Oak	Poletimber Well	22.1	83	111-140	This oak stand surrounds the top of the world rock outcrop. The jedi trail and The start of the doc nobs trail pass though this stand. Erosion is an issue in some areas on the trails these areas most likely can be rerouted or armored to protect them.

s t	Gwinr	Gwinn Mgt. Unit			Forested	Stands Compartment: 204 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
11	4110 - Sugar Maple Association	Sawtimber Well	62.5	105	111-140	This stand was harvested in 2002 by Heidtman logging using a selection system. TS#101-99-01,Echo Lake Road. This stand was also harvested in 1977, and 1978 using a selection system previous to the DNR acquiring the parcel. The North Country Trail passes though the northern edge of this stand Harlow creek passes thought this stand, and Nash creek is the stands southern boundary. This stand is ready for a selection harvest. this area is part of the echo lake deer wintering complex. Browsing here is heavy and makes hardwood regeneration a challenge.
12	4319 - Mixed Upland Forest	Sawtimber Well	22.4	80	51-80	This is a diverse stand that is heavy influenced by soil depth and aspect. in the wetter valleys there is more hardwood present. the thin soiled rocky uplands are more demented by red and white pine. This stand also borders Harlow Lake and a bedrock glade.
13	4319 - Mixed Upland Forest	Sawtimber Well	13.5	105	81-110	A portion of this stand was harvested in 2002 . This stand was also harvested in 1977, and 1978 using a selection system previous to the DNR acquiring the parcel.
14	4119 - Mixed Northern Hardwoods	Sawtimber Well	160.2	105	111-140	This stand was harvested by Hidtman Logging in 2002. The sale was a marked hardwood selection sale # 32-103-99-01 Harlow Lake Hdwd Sale. A mountain bike and hiking trail leading to the summit of the "Top of The World passes though a part of the stand. this trail was originally built for cross-country skiing and could be rerouted in areas to improve sustainability and reduce erosion issues This stand is ready for a selection harvest the trail needs to be protected during the harvest there are drains, streams, and some wet areas that need to be protected as well. This stand is part of a deer wintering complex and shows signs of browsing this will present a regeneration challenge. Bismarck Creek flows thought the stand, Nash creek is the northern boundary of the stand.
16	6115 - Lowland Ash	Poletimber Well	55.4	76	81-110	Black ash growing in riparian area near the confluence of Harlow, Nash and Bismarck creeks. Emerald ash bore will be a major disturbance here. Effects on creeks will preclude any salvage or pre salvage efforts of the ash.
18	4136 - Aspen, Mixed Conifer	Poletimber Well	17.9	56	81-110	Aspen stand growing along Nash road and Harlow Lake road. The stand grows in veins into the adjacent hemlock stand. Stand should be harvested as the aspen is mature. This harvest will also provide food and cover for wildlife. Buffer lowland to the north and the parking lot to the east, also use top of the world trail as a buffer.
19	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	5.7	60	51-80	Small riparian valley with a tributary of potluck creek flowing though it.
20	6113 - Lowland Maple	Poletimber Well	29.3	61	81-110	Lowland hardwood with streams flowing in and out of Harlow Lake. Harlow Lake Rd passes though this stand. the area around the road should be monitored for invasive species.
21	42260 - Natural Pine, Mixed Deciduous	Sawtimber Medium	9.6	105	81-110	This stand was once the site of a boy scout camp that camp has been gone for some time. At this time there are 3 DNR rental cabins located within this stand. These cabins are quite popular and are rented most of the year Garlic Mustard was pulled here by NMU in 2016 no FTP due rec site exemption

S t	Gwinn	Mgt. Unit		Report 7	– Forested	Stands Compartment: 204 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	4199 - Other Mixed Upland Deciduous	Poletimber Well	42.4	88	81-110	Aspen, birch and maple stand on slope ranging from lowlands adjacent to Harlow lake to rocky highlands. Some singletrack trails run though this stand. This stand is directly adjacent to an ERA and will be allowed to succeed naturally.
25	42350 - Upland Hemlock	Sawtimber Well	154.6	139	201+	High qualify northern mesic forest, featuring true old growth hemlock This stand is an ecological reference area for mesic northern forest. A mountain bike/hiking trail passes though this stand this trail links the Harlow Lake area to the gavel pit trailhead/parking area. reroute trails as needed to minimize erosion and avoid wet areas. This area is part of the Echo/Harlow Lake Deer Yard and as a result deer herbivory has severely impacted the understory.
26	429 - Mixed Upland Conifers	Poletimber Well	27.4	100	81-110	This stand was heavy damaged by a wind event in 1988 the site has naturally come back to a spruce fir mix. this stand is part of a non detected natural area. This stand is also adjacent to two ERAs. The NCT passes though this stand as well as some other singletrack trails. this stand receives a lot of use due to its proximity to the beech.
29	42210 - Natural Red Pine	Sawtimber Well	39.9	118	141-170	A portion of this stand was prepared for a timber sale in 1989 (Presque Isle #2) Sale was bid out but later canceled. Very diverse stand ranging widely in stocking and composition. Some areas are interspersed with rock outcrops with others being mottled with pockets of aspen. Also contains areas of white pine inclusions.
30	6115 - Lowland Ash	Poletimber Poor	5.6	61	51-80	This stand is part of a wooded dune and swale ERA. monitor this area for invasive species coming from CR550.
31	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	21.2	65	81-110	The cabin trails pass though this stand. The stand was savaged under sale (#31-88) after a wind storm. John Heidtman cut windthrown aspen nearer the road.
33	42350 - Upland Hemlock	Sawtimber Well	72.2	115	201+	Hemlock growing on the north slope of a large hill. There are a couple of big tooth aspen inclusion within the stand. The stand has some wet drains present within it. The Harlow Lake Road and the Bismarck Road pass though the stand. The top of the world trail passes though this stand. The trail may need some reroutes to address soil erosion and unsustainable slopes. This stand is within the Echo Lake Deer Wintering Complex due to deer herbivory there is little in the way of understory here and browse lines are well defined even on balsam fir.
34	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	27.2	25	Immature	This stand was cut in 1990 by B & G forest products under Harlow Lake Sale (32-032-89-1). All oak and hemlock where left in the harvest. At the time of harvest ski trails where present and where protected from harvest. Regeneration at this point is looking good.
36	42350 - Upland Hemlock	Sawtimber Well	57.8	96	201+	Hemlock growing on the north slope of a large hill. There are a couple of big tooth aspen inclusion within the stand. The stand has some wet drains present within it. The Harlow Lake Road and the Bismarck Road pass though the stand. The top of the world trail passes though this stand. the trail may need some reroutes to address soil erosion and unsustainable slopes. This stand is within the Echo Lake Deer Wintering Complex due to deer herbivory there is little in the way of understory here and browse lines are well defined even on balsam fir.

S t	Gwinn	Mgt. Unit		Report 7	– Forested	Stands Compartment: 204 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4319 - Mixed Upland Forest	Sawtimber Well	53.1	126	111-140	A diverse stand that is slowly converting to pine, spruce and fir. The vegetation here is highly dependent on aspect and soil depth. The Wetmore trail system as well as the NCT and a trail leading to the summit of Hogsback mountain are present here. this stand should be allowed to succeed naturally.
39	42210 - Natural Red Pine	Sawtimber Well	100.5	108	141-170	Harlow Lake recreation area. Very diverse stand ranging widely in stocking and composition. Some areas are interspersed with rock outcrops with others being mottled with pockets of aspen. The Beagle Club road effectively makes up the north boundary of this stand. Singletrack trails pass though the stand.
41	4130 - Aspen	Poletimber Well	20.0	83	81-110	There was some limited harvesting of wind throw here in 1988. The aspen here is over mature and should be harvested. parts of the Jedi trail, and the doc nobs trail pass though the stand. the Jedi trail should be the eastern edge of any treatment here. the top of the world outcrop should be buffered as well. The far south edge of the stand is a long slope dropping to a small creek it should be left out of the harvest as well.
42	4311 - Pine, Aspen Mix	Sapling Well	14.3	24	Immature	Cut in 1992 by Heidtman forest products under Presque Isle #4 32-033-89-01. All oak, white pine, and red pine where left within the sale. regeneration is coming back well with a mix of big tooth, red maple, and pine making up the bulk of the new growth. The western boundary of the stand is the Jedi trail, the doc nobs trail pass though the stand.
43	4123 - Red Oak	Poletimber Well	44.8	80	81-110	This stand is primarily oak, with intolerant associates starting to fall out. This stands proximity to deer yard habitat make herbivory heavy in this area. Regenerating oak here would be a challenge here and most likely cost probative. this stand is best served being left as a mast source and a area of mature forest. Note adjacent aspen treatment may bleed over into this stand slightly to harvest aspen.
44	4123 - Red Oak	Poletimber Medium	55.1	80	81-110	Harvested in 2000 by Heidtman Logging leaving oak, pine, yellow birch, hemlock, spruce, and fir. TS#32-102-99-01 Harlow Oak Release. Northern hardwood inclusion on the north side was selectively cut. In addition this stand was salvage cut in 1988 to salvage windthrow. Currently much of the regeneration from the harvest shows signs of browsing. The prevalent browsing due to the stands location within the Echo Lake Deer Wintering Complex. Regeneration here will be problematic due to browsing pressure this stand is best served being left as a mast source for wildlife.
45	4123 - Red Oak	Poletimber Well	74.5	80	111-140	This stand is home to two rental cabins. Some hazard tree work is done in the vicinity of the cabins annually. the site generally improves with maple becoming more common as the stand approaches Harlow Lake. Some portion of this stand was harvested under (#31-88) Due to storm damage. John Heidtman cut windthrown aspen near the road. Stand is poor to moderate quality oak with birch aspen and other short lived intolerants aging out. there is some maple starting to come in the understory. With this stands location adjacent to good thermal cover this area is most likely best served being left as a mast source. heavy deer use would make regeneration here difficult due to herbivory. There are a number of trails present within this stand including the old railroad grade, and the Jedi trail.

S t	Gwinn	Gwinn Mgt. Unit			– Forested	Stands Compartment: 204 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	42210 - Natural Red Pine	Sawtimber Well	47.2	134	141-170	Dune and swale land form along Lake Superior. Stand ranges in stocking and size classes. The area around Little Presque Isle Point shows signs of previous wind damage. While the interior portions of the stand are slightly younger without any major wind damage.
48	6120 - Lowland Cedar	Sawtimber Well	31.8	126	141-170	Lowland riparian corridor for Putluck Creek. This stand is a fairly dense cedar stand. Its location in the deer yard makes it important snow intercept and thermal cover for deer. Beagle Club road and a singletrack trail (the cabin trail) skirt the edges of this stand.
49	6120 - Lowland Cedar	Poletimber Medium	31.2	130	51-80	
50	6120 - Lowland Cedar	Sawtimber Poor	15.7	156	1-50	This stand is an upland/lowland transition area that appears to have once been a closed canopy cedar stand. this stand was heavily impacted by wind most likely in 1988. the overstory was decimated by this wind much of those trees are laying on the forest floor now as CWD. the gaps created by the wind event are dominated by fir. Natural succession should be allowed to continue here.
51	4136 - Aspen, Mixed Conifer	Poletimber Well	53.3	86	81-110	This is a large and diverse aspen stand growing on rocky soil. it may have been harvested at one time in the past or may of fire origin. Multiple singletrack trails pass though this stand. Areas showing excessive erosion should be rerouted. A portion of this stand was prepared for a timber sale in 1989 (Presque Isle #2) Sale was bid out but later canceled. Natural succession should be allowed to carry this stand toward a pine dominated forest type.
52	42210 - Natural Red Pine	Sawtimber Well	86.9	130	111-140	This is a diverse stand that is heavily influenced by soil depth and aspect with areas bordering on bedrock glades and areas that have cedar growing in them due to poor drainage. there are multiple singletrack trails that pass though this stand including the NCT. CR550 also splits the stand. Natural succession should be allowed to occur here.
54	42290 - Natural Mixed Pine	Sawtimber Well	9.8	134	111-140	Dune and swale land form along Lake Superior. This stand is the riparian corridor for Harlow Creek it generally has more white pine then the surrounding forest. The NCT and song bird trails pass though this stand. The song bird trail parking lot is sited in this stand as well.
56	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	10.7	102	81-110	Stand appears to be a result of fire exclusions on a rocky knob. Soils are quite thin so growth and site potential are quite low here. The North Country Trail passes thought the stand.
57	4130 - Aspen	Sapling Well	6.0	25	51-80	Judging by the Woody debris present on the forest floor and the lack of a cutting record this stand is a result of a wind event. Likely in 1988, at present this stand is a fully stocked aspen stand.
58	42210 - Natural Red Pine	Sawtimber Well	11.0	104	171-200	Wetmore landing day use area, multiple trails pass though this stand. This stand receives heavy public use from hikers and beach goers.

S	Gwinn	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 204 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	6118 - Lowland Deciduous with Cedar	Poletimber Well	10.3	120	111-140	This stand is sandwiched between two rocky uplands. a small unnamed creek starts here (possibly a tributary to potluck creek). The North Country Trail and Wetmore trails effectively make up the north and south boundaries of this stand.
64	42350 - Upland Hemlock	Sawtimber Well	20.6	225	111-140	This stand is a ecological reference area for mesic northern forest, this stand is displaying characteristics of old growth and will be nominated for type 1 old growth. This stand is directly adjacent to the parking lot and access site for the trails leading to Wetmore Pond. Multiple trails pass though the area leading to Wetmore Pond and Hogsback Mountain beyond, this stand is also part of a deer wintering complex and shows signs of heavy browsing as a result.
66	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	23.3	84	81-110	This stand is part of the headwaters of potluck creek.
67	4136 - Aspen, Mixed Conifer	Sawtimber Well	24.5	84	81-110	Aspen stand sandwiched between bedrock glade, and the headwaters Potluck creek. This stand is a patchy mix aspen, and pine. of The "Potluck Trail" is a mountain bike/hiking trail present in this sand. This trail are showing signs of some erosion. some areas are also routed though wet drains, springs and other sensitive areas. Many of there areas have been armored, but more could be done in some areas. continue to evaluate for reroutes, armoring or boardwalks where necessary.
68	42350 - Upland Hemlock	Sawtimber Well	109.5	251	141-170	This stand is an uneven aged hemlock stand there are portions if not all of the stand that qualify as type one old growth with hemlock ages pushing 250 years old. This stand is also an ecological reference area for mesic northern forest per a site visit with MNFI in the summer of 2016. There is an old cabin site within this stand not much is left other then a small clearing and the remints of a fireplace. The NCT and other trails pass though this stand there are some areas that could benefit from reroute and armoring to protect sensitive areas. This stand is also part of a deer wintering complex and shows signs of heavy browsing.
70	429 - Mixed Upland Conifers	Sawtimber Well	6.3	115	81-110	A diverse stand growing on rocky area that grades into a bedrock glade in areas. Natural succession should be allowed to take place here.
71	42350 - Upland Hemlock	Sawtimber Well	153.8	106	201+	This hemlock stand may have some history of harvest for bark used in the leather tanning presses. though evidence of this is hard to find. Multiple recreation trails pass thought this stand. Many of these trails are showing signs on erosion some trails are also routed though wet drains, springs and other sensitive areas. these trails should be evaluated for reroutes, armoring or boardwalks where necessary. This stand also is used by wintering deer judging by the heavy browse on the understory. Due to this maintaince of the hemlock overstory for snow intercept is a priority here.
72	42350 - Upland Hemlock	Sawtimber Well	12.4	106	111-140	Hemlock growing on the northern slope of hogback mountain. With the access to this site I think this site was not logged but is of fire origin. The western route to the summit of hogback mountain passes though this stand. This trail is showing signs on erosion also some may also be routed though wet drains, springs and other sensitive areas. these trails should be evaluated for reroutes, armoring or boardwalks where necessary. This stand is also on the edge of a deer wintering complex which may be effecting understory composition.

S t	Gwinr	Gwinn Mgt. Unit			Forested	Stands Compartment: 204 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
73	4119 - Mixed Northern Hardwoods	Sawtimber Well	107.4	79	111-140	Hardwood growing on the slopes of hogback mountain. With the access to this site I think this site was not logged but is of fire origin. Both routes to the summit of hogback mountain pass though this stand. This trails are showing signs on erosion also some may also be routed though wet drains, springs and other sensitive areas. these trails should be evaluated for reroutes, armoring or boardwalks where necessary. This stand is also on the edge of a deer wintering complex which is effecting understory composition.
74	42350 - Upland Hemlock	Sawtimber Well	23.0	178	141-170	Hemlock stand on the north slope of hogsback mountain, the topography of this area leads me to believe that this stand has never been logged. Trails leading to the summit of hogsback mountain pass through this stand. Many of these trails are showing signs on erosion some trails are also routed though wet drains, springs and other sensitive areas. these trails should be evaluated for reroutes, armoring or boardwalks where necessary. This stand is also a part of a deer wintering complex which has effected understory development.
76	42350 - Upland Hemlock	Sawtimber Well	6.4	238	201+	Small pocket of old growth hemlock this stand was present on the 1938 photos. it shows all of the signs of old growth and has no evidence of cutting.
78	4110 - Sugar Maple Association	Sawtimber Medium	9.1	251	81-110	This is a small pocket of hardwood within a larger hemlock stand. Per a field day with MNFI it will be part of a larger ecological reference area. This stand is also true old growth and meets our criteria for type one old growth. Due to this stands position on the lake shore windthrow is a dominant disturbance on this site which is keeping the basil area down here. This stand is located in a deer wintering complex and shows signs of heavy browsing.
79	42290 - Natural Mixed Pine	Sawtimber Well	28.1	110	141-170	A natural pine stand growing on the edge of a bedrock glade the stand has variable densities and species composition depending on soil depth and aspect.
80	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	11.4	130	111-140	This pine dominated stand is the "forested Portion of a bedrock glade". Fire is the main form of disturbance here. the Rickels trail passes though this stand.
82	4199 - Other Mixed Upland Deciduous	Poletimber Well	21.9	65	111-140	Most of this stand is relatively young in comparison to surrounding forest. It appears as though much of this stand is a result of the rail corridor filling in after it was abandoned. some areas of this stand may have been salvaged after a wind storm in 1988. There are a number of trails present within this stand including the old railroad grade, and the Jedi trail.
83	42350 - Upland Hemlock	Sawtimber Well	8.0	136	111-140	Small Hemlock stand, a singletrack trail passes though this stand. There may be some limited deer wintering use here though none was noted in the winter of 2016-17.
85	42350 - Upland Hemlock	Sawtimber Well	10.2	130	111-140	Hemlock Growing on a rocky nob. Some red pine is mixed in on the thinner soils. There was evidence of deer use here in the winter of 2016-17. The Wetmore Trail system passes though this stand.
86	429 - Mixed Upland Conifers	Sawtimber Poor	10.2	96	51-80	Part of a Wooded dune and swale ERA.

S t a n d	Gwii		Report 7	– Forested	Stands Compartment: 204 Year of Entry: 2019	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
90	42350 - Upland Hemlock	Sawtimber Well	35.2	130	141-170	This stand is a small part of a larger hemlock forest complex. the north country trail passes though this stand. There is a large set of steps on the NCT here these where installed over 20 years ago due to age and use they could use some work to fix some erosion issues and fix some railings and steps. There is also a lakeside trail that has formed from years of people hiking along the lake shore this trail has some erosion issues and would benefit from some reroutes and armoring. This stand is also included within the deer wintering complex though the habitat here is not as good as it is in adjacent stands.
92	42350 - Upland Hemlock	Sawtimber Well	4.1	110	201+	Small Hemlock fragment sandwiched between old 550 corridor and CR550. There is vary little regeneration in the stand due to deer herbivory.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	710 - Sand, Soil	28.3	No	Little Presque Isle beach. This area is vary popular with many visitors frequenting the beech year round. Several ERAs are present within the stand, activity's here should be monitored to insure negative impacts to the area are minimized.
3	6220 - Alder/willow	15.8	No	The mouth of Harlow Creek, comprised mainly of alder and willow.
15	6220 - Alder/willow	86.4	No	Riparian area with Harlow creek, Nash creek, and Bismark creek. An old railroad grade that is now used as a non motorized trail passes though this stand.
17	720 - Exposed Rock	3.2	No	Bedrock Glade with a mix of trees in low density's growing on it.
22	500 - Water	61.5	No	Harlow Lake; Quite popular for fishing, and paddling features pike, bass and panfish. Some duck hunting occurs on the lake as well. DNR wildlife division is planting wild rice here. 2016 - 100 lbs. of wild rice was planted in the southern 'lobe' of Harlow Lake. A 2017 assessment found poor recruitment. 2017 - 100 lbs. of wild rice was planted around the perimeter of the northern 'lobe' of Harlow Lake in acceptable habitat.
23	622 - Lowland Shrub	4.2	No	Lowland along the shore of Harlow Lake.
27	720 - Exposed Rock	37.3	No	This is a bedrock glade with pockets of pine, aspen, and oak. The bear back trail passes though this stand.
28	6233 - Wet Meadow	1.7	No	Shoreline of Harlow Lake, a relatively slow transition to the adjacent uplands.
32	720 - Exposed Rock	5.1	No	Bedrock on the edge of Harlow lake. A mix of oak and white pine the bear back trail passes though this stand.
35	710 - Sand, Soil	8.8	No	Wetmore Beach, and rocky shoreline bordering lake superior this area sees a lot of visitors year round. Spotted knapweed was pulled here by NMU in 2016 no FTP due rec site exemption. Much of this site is an ERA for sand and gravel beach and granite bedrock lakeshore. Continued monitoring and invasive species control here is warranted.
37	720 - Exposed Rock	19.7	No	Top of the World, scenic overlook with panoramic views of the surrounding country side. there are numerous hiking and mountain biking trails that pass though this stand. Historically there was a DNR cross country ski trail in this area. this area is also utilized by back country skiers as well. This area is also classified as a bedrock glade. This site should be monitored for invasive species.
40	6220 - Alder/willow	3.4	No	Beaver pond made by daming the potluck creek.
46	6220 - Alder/willow	8.5	No	Riparian area where potluck creek flows into Harlow lake.
53	720 - Exposed Rock	3.6	No	Bedrock Glade with a mix of trees in low density's growing on it.



Stand	Cover Type	Acres	Managed Site	General Comments:
55	720 - Exposed Rock	14.3	No	Bedrock Glade with a mix of spices growing in low concentrations on it.
59	122 - Road/Parking Lot	4.8	No	An old gravel pit, this area is used for parking on occasion. Area was treated with an herbicide under 32-649 in the summer of 2006 to eradicate the invasive exotic "Clusterhead Pink". The stand has two recreation trails passing though it. Parking bumpers installed under 32-798
60	720 - Exposed Rock	18.3	No	Granite bedrock glade with a mix of species growing on it in low densities. This stand has two singlerack trails that pass though it. one of these trails may benefit from some armoring or a reroute due to water issues and erosion.
61	720 - Exposed Rock	37.0	No	This stand is a high quality example of a bedrock glade community making up a larger complex of ecological reference areas. this stand is part of the ridge that makes up sugarloaf mountain. The North Country trail passes thought this stand. Part of this stand burned in 2010.
63	720 - Exposed Rock	2.1	No	Bedrock glade part of a larger ecological reference area, that stretches into adjacent lands.
65	720 - Exposed Rock	9.7	No	Bedrock glade, some red pine and jack pine is scattered and growing in pockets of soil. The north country trail travels along this ridge.
69	6220 - Alder/willow	12.7	No	Headwaters of potluck creek and large area of lowland brush. An old railroad grade that once linked Marquette to Big Bay passed thought this stand . This Grade is now a trail that links the Wetmore Pond/ Hogsback mountain trails to the south to the Harlow Lake trails to the north.
75	720 - Exposed Rock	37.5	No	Hogsback Mountain, Multiple trails lead to the summit. Many of the trails are in need of reroutes due to erosion. This stand is a bedrock glade and burned in 1988.
77	122 - Road/Parking Lot	42.6	No	County Road 550 (the Big Bay Road)
81	720 - Exposed Rock	1.6	No	
91	310 - Herbaceous Openland	3.4	No	Old corridor for County road 550 now just a utility ROW. This area has had resource damage from off road truck use in the past.