

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 87
Entry Year 2015

Acreage: 1,795

County Marquette

Management Area: North Menominee Moraines

Revision Date: 08/05/2013

Stand Examiner: Theresa Sysol, Jennifer Burnham

Legal Description:

T42N R24W, Sections 5, 8, 17, 20-23, 33 and 34

Identified Planning Goals:

Timber, wildlife, recreation, and fisheries are the main uses of this area. The goal is to manage for all uses simultaneously and to provide, enhance and perpetuate their uses through proper management. Proposed forest treatments will help ensure the sustainability of the forest resource and continue to enhance the guality of the wildlife habitat.

Soil and topography:

The entire compartment falls within the McFarland Till Plain Land Type Association (LTA). The major timber types within the compartment are found on similar soils; poor quality hardwoods are found on loamy fine sand well drained with 0-6% slopes; aspen types are mainly found on the Nadeau-Mancelona Complex a well drained soil on 0-6% slopes; lowland conifers can be found on the poor drained mucks. Some sections along the Escanaba River contain Alvar land formations.

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

While the compartment has large acreage it is spread out through many sections with more of the area surrounded by private ownership and some industry lands, making some areas difficult to access. The surrounding properties are heavy to farming or past farming practices that remain open. The timbered areas are of similar timber types to those found on the State ownership. Evidence of high hunter use is present.

Unique Natural Features:

Ecological Reference Area (ERA) of Alvar exists in some places along the Escanaba River. Potential for Threatened and Endangered Species, MNFI records should be checked before management activities take place.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Deer yard is found along the river in the northern part of the compartment along with the very southern portion also considered deer yard.

Watershed and Fisheries Considerations:

Escanaba River and Hunters Brook are found within the compartment. Best management practices durning harvesting operations will take place to protect water quality.

Wildlife Habitat Considerations:

Compartment 87 is found within the North Menominee Management Area; which is a Drumlinized Ground Moraine in north Menominee and south Marquette Counties. The State Forest covers about 20,300 acres and is in scattered blocks. The dominant natural communities are poor conifer swamps and mesic northern forests. Major forest cover types include cedar, aspen, and mixed lowland conifer. In general, this area has a mid-range site quality. This management area provides multiple benefits to the public including forest products, dispersed recreational activities, and habitat for fish and wildlife species. Over half of the area is lowland conifer cover type (cedar, spruce, tamarack) interspersed with uplands of aspen and northern hardwoods. Historically this management area has been important deer winter range. Some of the most significant wildlife management issues in the management area are: habitat fragmentation; course woody debris; large living and dead standing trees (for cavities); mesic conifer (in a broad array of age classes); mature forest; early successional forest (jack pine, mixed swamp conifer, tag alder, and aspen); and deer wintering habitat.

The following have been identified as featured species for the North Menominee Management Area: American marten, snowshoe hare, and white-tailed deer. However, the featured species concept does not preclude the management for other wildlife species within a particular MA, rather it is simply intended to be as a tool to help prioritize or focus habitat management.

For lands purchased with Pittman–Robertson Act or Game and Fish funds, the primary objective of vegetative management must be wildlife restoration.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured glacial till. The glacial drift varies between 0 and 50 feet. The Ordovician Trenton and Black River Groups subcrop below the glacial drift. The Trenton and Black River are quarried for stone/dolomite elsewhere in the UP. Several gravel pits are located in the compartment, and potential appears to be good. Abandoned iron mines are located twelve miles to the north. Part of this township was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

County and private roads are in good condition for access into the compartments.

Survey Needs:

Corners may be needed in sections 20-23 where past harvests or establishement from private timber sales have not been conducted.

Recreational Facilities and Opportunities:

Recreational opportunities are plentiful which include, but are not limited to, ORV use, hunting, fishing, bird watching, and berry picking.

Fire Protection:

This compartment is part of the Gwinn Mangement Unit fire protection area. The three main timber types of hardwood, aspen and lowland types do not lend to large fire potential. Access to some of these areas may prove difficult because of private access and areas with the high water table.

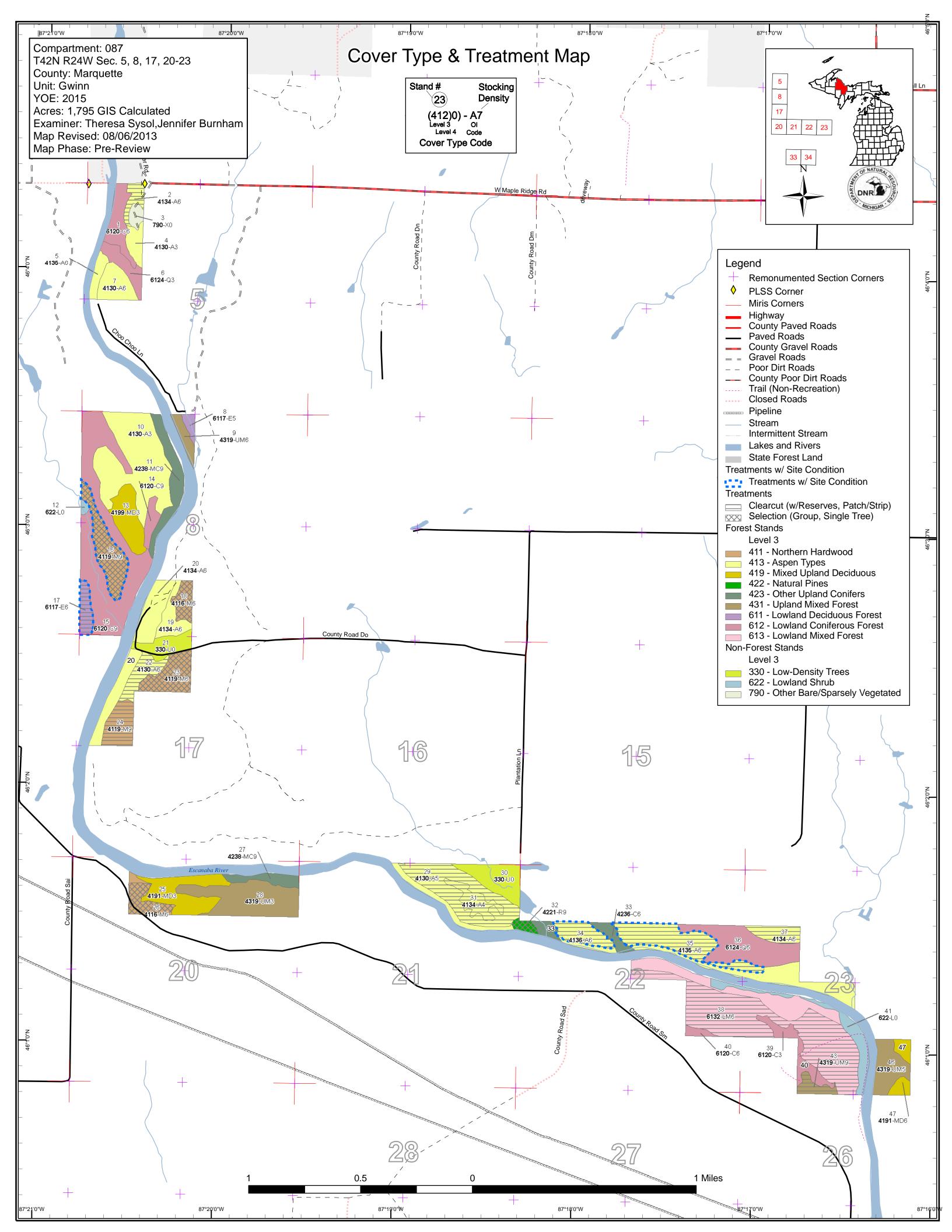
Additional Compartment Information:

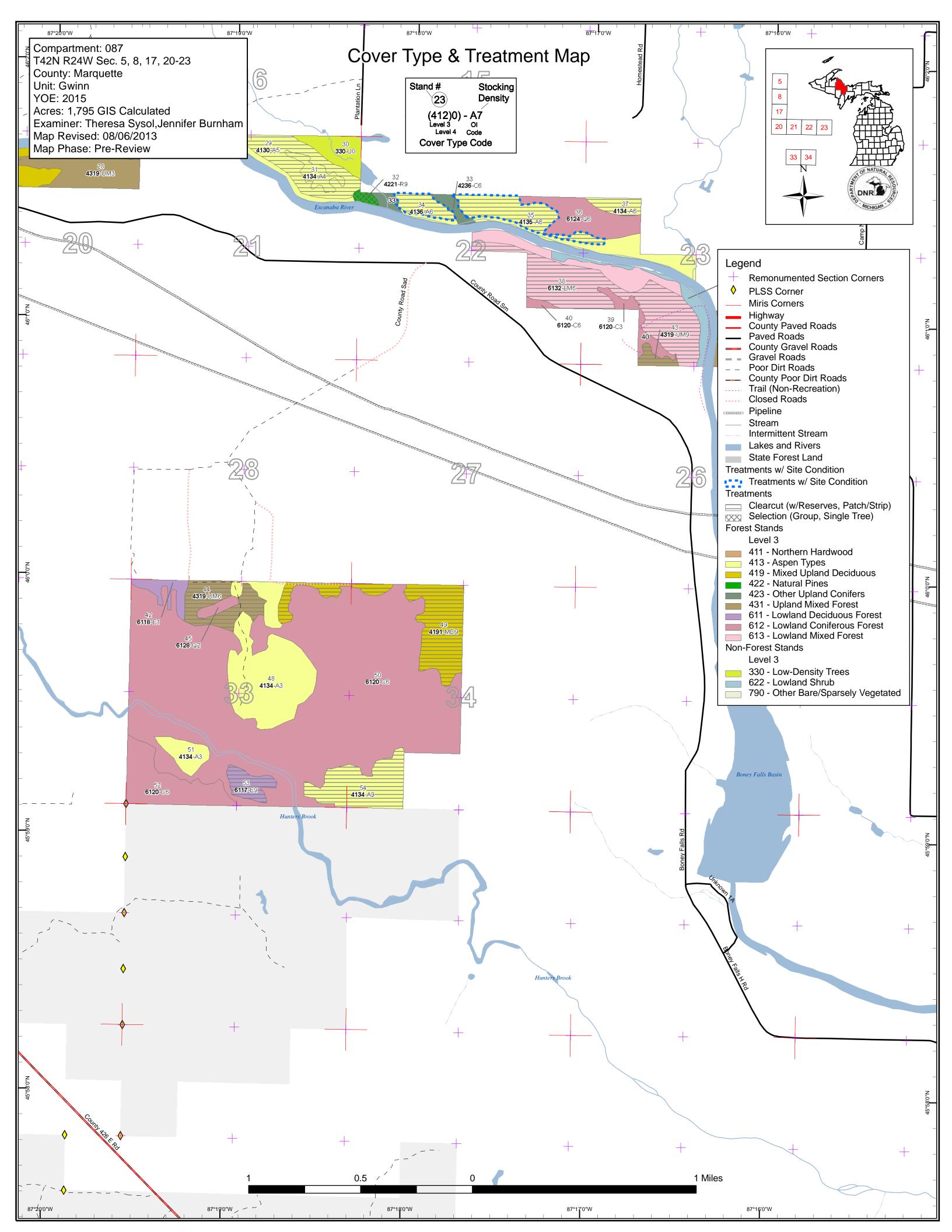
The following reports from the Inventory are attached:

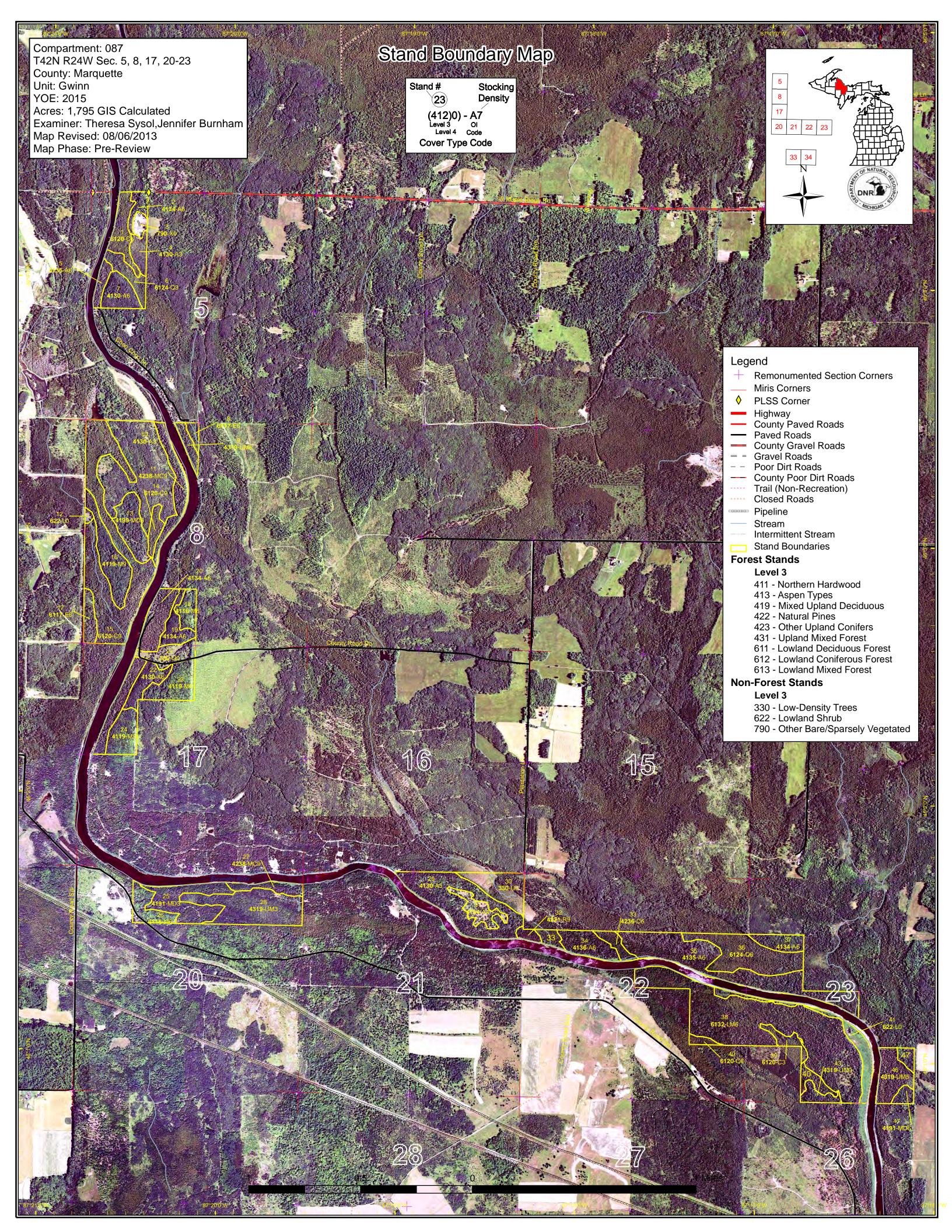
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

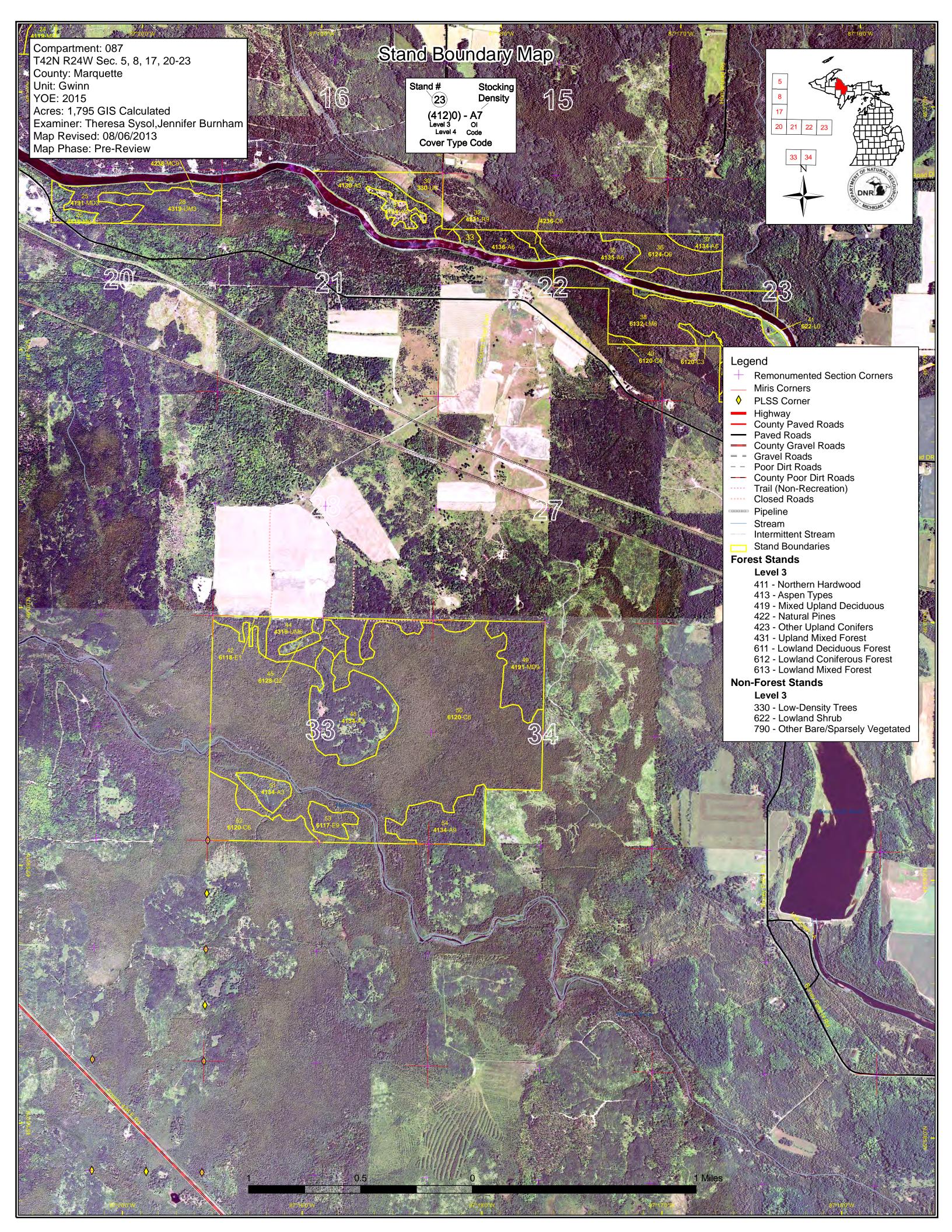
The following information is displayed, where pertinent, on the attached compartment maps:

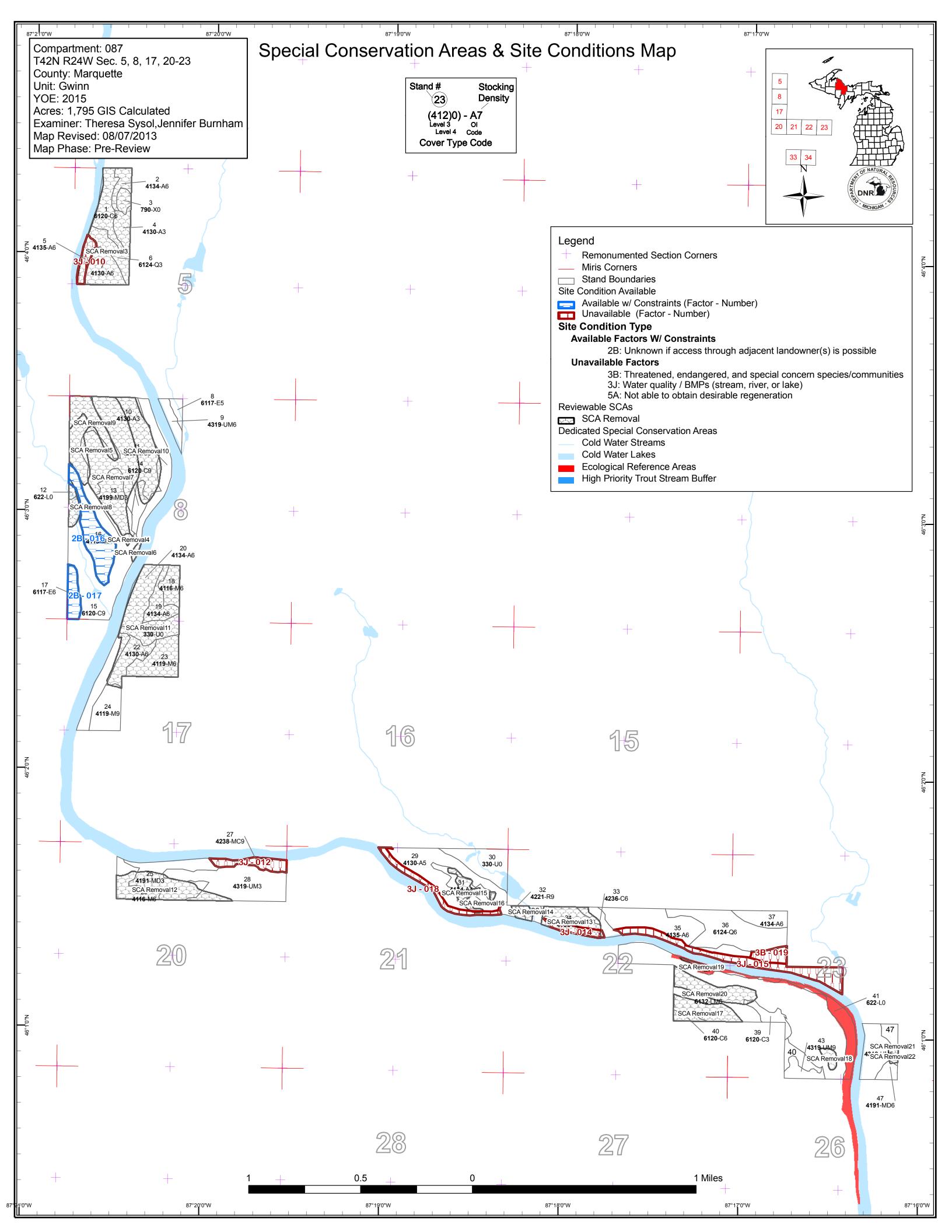
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

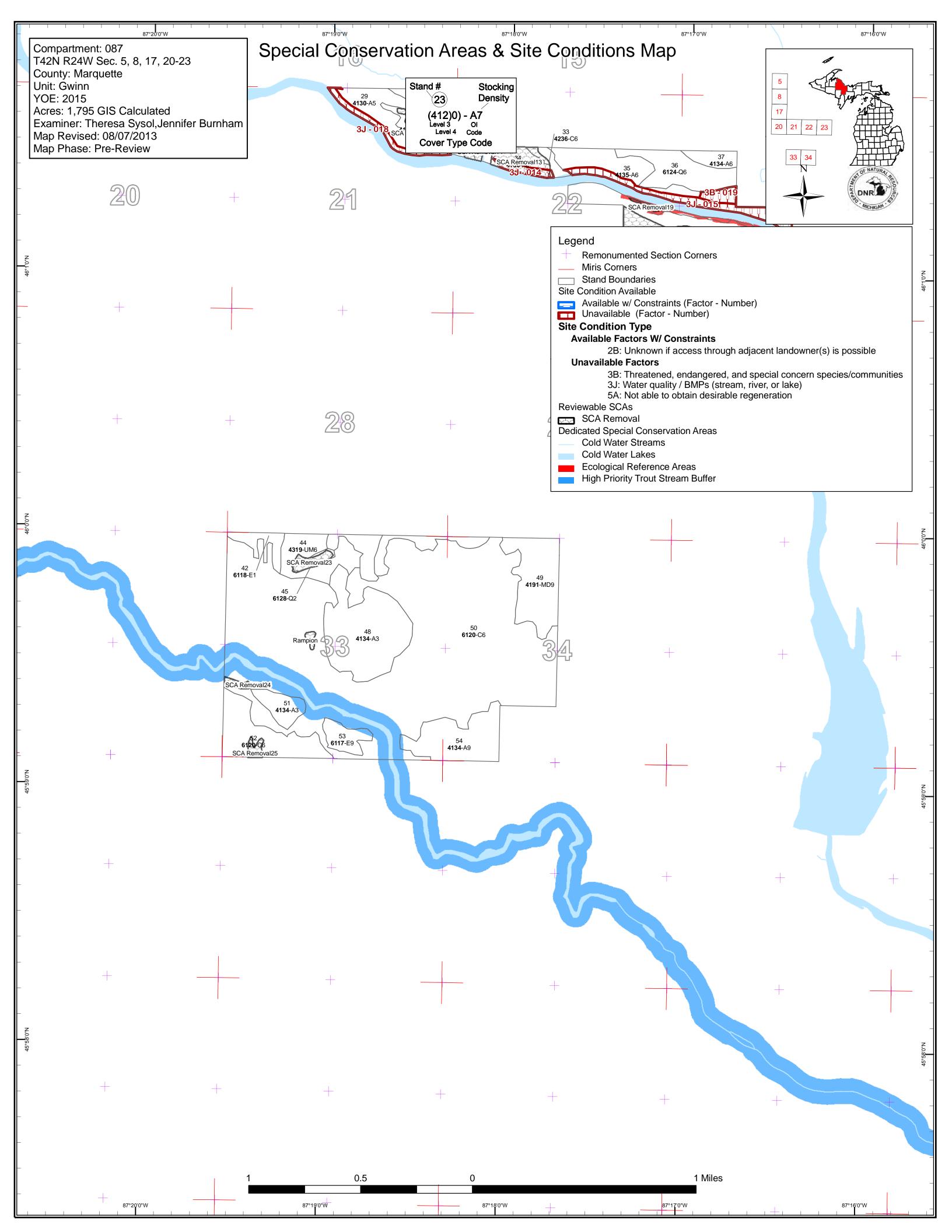












Jennifer Burnham: Examiner

Gwinn Mgt. Unit



	Age Class															
		6.0	70,70	Sp.	No. No. No.	AD AS	\$4.50 \	80 80 V	18 / S	8 8 8	88.00	00,00	70,70	No. No.	8 / A	or or
Aspen	0	0	90	138	24	0	0	11	186	6	0	0	0	0	454	
Bare/Sparsely Vegetated	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Cedar	0	0	0	0	6	0	0	0	9	57	14	578	85	0	749	
Low-Density Trees	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
Lowland Conifers	0	0	6	10	0	0	0	0	0	0	0	0	0	36	52	
Lowland Deciduous	0	0	0	12	0	0	0	0	21	3	0	0	0	0	36	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	124	0	0	0	0	0	124	
Lowland Shrub	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Mixed Upland Deciduous	0	0	19	0	26	0	0	0	73	0	0	0	0	0	118	
Northern Hardwood	0	0	0	0	0	0	0	54	24	0	0	0	0	0	77	
Red Pine	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	
Upland Conifers	0	0	0	0	0	0	0	0	0	27	0	0	0	0	27	
Upland Mixed Forest	0	0	0	40	0	0	0	0	38	6	0	0	0	17	101	
Total	53	0	114	200	56	0	0	65	478	98	14	578	85	54	1795	



Report 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit Year of Entry 2015

Compartment 087
Total Compartment Acres: 1,795

467

Acres by Treatment Type

Commercial Harvest - 467

Tree Planting - 0

Other - 0

Habitat Cut - 0

Opening Maintenance - 0

Total

403

64

	Cover Type by Harvest Method									
		#15 O.	(6,000) O	1,00 S	o line in the second	OEC OEC		S. C.		
Aspen Types	168	0	0	0	0	0	168			
Lowland Deciduous Forest	21	0	0	0	0	0	21			
Lowland Mixed Forest	95	0	0	0	0	0	95			
Mixed Upland Deciduous	65	0	0	0	0	0	65			
Natural Pines	0	3	0	0	0	0	3			
Northern Hardwood	15	61	0	0	0	0	76			
Upland Mixed Forest	38	0	0	0	0	0	38			

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 087 Year of Entry 2015

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	32087002-Cut	5.7	4134 - Aspen, Spruce/Fir	High Density Pole	81	111-140	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Specs:

S

Prescription Final harvest leaving retention per guidelines leaving some cedar, white pine, white spruce -these trees should be windfirm since blowdown has occured in the previous cuts. Keep cut boundary mainly on the upland topography, maintain proper 100' buffer to the river per fish division

<u>Other</u> This is small acreage so a negotiated sale may be necessary. Retention should include some big tooth aspen, raptor nest cavity species

Comments:

Monitor for regeneration <u>Next</u>

Steps:

Proposed

Start Date: 10/01/2014

32087018-Cut 8.3 4116 - Mixed N. High 78 81-110 Harvest Single Tree 4116 - Mixed N. Cmpt. Review 18 Hardwood - Aspen Density Selection Hardwood - Aspen Proposal

Pole

Prescription Mark to open crowns and allow for regeneration. May need to make larger openings to help with this.

Specs:

Reserve cedar and hemlock. Winter harvest would be nice because of the proximity to the deer yard. Other_

Comments:

Next

Steps:

Proposed 10/01/2014 Start Date:

78 51-80 Clearcut with Cmpt. Review 22 32087022-Cut 11 4 4130 - Aspen High Harvest 4130 - Aspen Density Reserves Proposal Pole

Prescription Final harvest leaving retention per guidelines leaving cedar, hemlock, black cherry and white pine, when present. Keep cut boundary mainly on

the upland topography, maintain proper 100' buffer to the river per fish division guidelines. Specs:

Other Consider winter harvest because of the proximity to the deer yard.

Comments:

Next Regeneration check

Steps:

Proposed

10/01/2014 Start Date:

23 32087023-Cut 18.1 4119 - Mixed High 78 111-140 Harvest Single Tree 4119 - Mixed Cmpt. Review Northern Hardwoods Northern Hardwoods Density Selection Proposal

Pole

Prescription Mark to promote diversity - may need to make larger gaps for better regeneration.

Specs:

Do not cut cedar, hemlock or yellow birch. Winter harvest b/c of the proximity to the deer yard would be nice. Other_

Comments:

<u>Next</u> Steps:

Proposed

Start Date: 10/01/2014

Compartment: 087 Gwinn Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2015 with No Limiting Factor s t а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment Cover Type** Approval n Method Objective **Status** d Name Density Age Range Type High 32087024-Cut 15.0 4119 - Mixed 78 111-140 Clearcut with 4119 - Mixed Cmpt. Review 24 Harvest Northern Hardwoods Density Log Reserves Northern Hardwoods Proposal <u>Prescription</u> Final harvest leaving the conifer in the stand some big tooth aspen and carvity next spp. Specs: <u>Other</u> Winter harvest would be nice because of the proximity to the deer yard. Poor quality stand -Comments: Regeneration check Next Steps: **Proposed** 10/01/2014 Start Date: 11.0 4116 - Mixed N. High 76 111-140 Single Tree 4116 - Mixed N. Cmpt. Review 26 32087026-Cut Harvest Hardwood - Aspen Density Selection Hardwood - Aspen Proposal Pole Prescription Mark to promote diversity in the stand. Do not cut cedar, favor black cherry. Specs: <u>Other</u> Winter harvest would be nice to consider because of the proximity to the deer yard. Comments: <u>Next</u> Steps: <u>Proposed</u> Start Date: 10/01/2014 32087029-Cut 37.7 4130 - Aspen Medium 86 51-80 Harvest Clearcut with 4130 - Aspen Cmpt. Review 29 Reserves Proposal Density Pole <u>Prescription</u> Final harvest with retention along the river. Conifer % is not high and could be left with out effecting regeneration. Specs: Reserve Elm where present and favor black cherry in retention. Other | Comments: <u>Next</u> Monitory for regeneration Steps:

Pole

10.5

<u>Prescription</u> Final harvest to promote better regeneration. Retain balsam fir. <u>Specs:</u>

<u>Proposed</u>

Start Date:

31

Other Aspen clones are of poor quality, not high volume, from slowly filling in the opening.

Low

Density

41

1-50

Harvest

Clearcut

4130 - Aspen

4134 - Aspen,

Spruce/Fir

Comments:

Monitor for regeneration

10/01/2014

32087031-Cut

<u>Next</u> Steps:

Proposed

Start Date: 10/01/2014

Cmpt. Review

Proposal

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 087 Year of Entry 2015

DEPARTMEN	DNR DNR
\	MICHIGAN

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32	32087032-Cut	3.3	42210 - Natural Red Pine	High Density Log	81 J	141-170	Harvest	Single Tree Selection	4221 - Natural Red Pine	Cmpt. Review Proposal

Prescription Thin stand to 120BA opening crowns to promote growth. Do not cut white pine.

Specs:

S

<u>Other</u> Stand is up on a ledge, thinning the area should not promote erosion into the river. The stand is too small to cut with out having the other starnds

Comments: treated around it.

Next Steps:

Proposed

10/01/2014 Start Date:

9.6 High 80 Cmpt. Review 37 32087037-Cut 4134 - Aspen, Harvest Clearcut with 4134 - Aspen, Spruce/Fir Density Reserves Spruce/Fir Proposal

Pole

Prescription Final harvest with no cut cedar. Cut in the winter or dry times of the year, there are some places that may hold water, this will help protect the Specs:

soils. Access is from the north.

<u>Other</u> Do not cut cedar, hemlock or ash

Comments:

<u>Next</u> Monitor regeneration

Steps:

<u>Proposed</u>

Start Date: 10/01/2014

32087038-Cut 95.5 6132 - Mixed 81-110 Harvest Clearcut with 6132 - Mixed Cmpt. Review 38 High Lowland Forest with Lowland Forest with Reserves Proposal Density Cedar

Cedar Pole

Prescription Final Harvest - no cut cedar, hemlock or ash- Retention along the river and/or patches where the cedar is higher in BA. Stand has potential to Specs:

hold water; a winter cut or cutting during the dry times of the year will help protect soils. Favor Black cherry, reserve all fir (young pole sized 10%

of stand with an ave. dbh of 7")

There is an open, mature aspen area on the SE side of the stand, because of the snowload I do not know if this is b/c the alvar area is "creeping" Other

into the timbered area, the soils map does not show a difference. Double check before setting up sale. Check lock box for sensitve information Comments:

Monitor regeneration <u>Next</u>

Steps:

Proposed

Start Date: 10/01/2014

6.0 4319 - Mixed 81-110 Harvest 4319 - Mixed 43 32087043-Cut High 86 Clearcut with Cmpt. Review **Upland Forest** Density Log Reserves **Upland Forest** Proposal

Prescription Final harvest, no cut hemlock or cedar.

Specs:

<u>Other</u> Comments:

Next monitor for regeneration

Steps:

Proposed

10/01/2014 Start Date:

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 087 Year of Entry 2015

DEPARTME	DNR MICHIGAN
	MICHIGAN

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
44	32087044-Cut	31.5	4319 - Mixed Upland Forest	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal

Prescription Final Harvest - no cut cedar or cherry, some balsam fir should be added in the retention area.

Specs:

S

Other Access is from the north.

Comments:

<u>Next</u> monitor regeneration

Steps:

<u>Proposed</u>

Start Date: 10/01/2014

49 32087049-Cut 65.3 4191 - Mixed High 111-140 Harvest Clearcut with 4191 - Mixed Cmpt. Review **Upland Deciduous Upland Deciduous** Proposal Reserves Density Log with Conifer

with Conifer

Prescription Final Harvest - no cut cedar, yellow birch or cherry (if present would be up on the hill) Some patches of balsam fir should be retained.

Specs:

<u>Other</u> Access from the north

Comments:

<u>Next</u> monitor for regeneration

Steps:

Proposed

Start Date: 10/01/2014

32087053-Cut 13.8 6117 - Lowland High 86 111-140 Harvest Clearcut with 6117 - Lowland Cmpt. Review 53 Deciduous, Mixed Density Log Reserves Deciduous, Mixed

Coniferous

Proposal

Coniferous

Prescription Final Harvest leaving cedar and hemlock if present.

Specs:

<u>Other</u> Access can be from the Escanaba Unit or crane mats over the creek in winter months.

Comments:

Next monitor for regeneration

Steps:

Proposed

10/01/2014 Start Date:

32087054-Cut 47.4 4134 - Aspen, High 86 81-110 Harvest Clearcut with 4134 - Aspen, Cmpt. Review Spruce/Fir Density Log Reserves Spruce/Fir Proposal

Prescription Final Harvest - no cut cedar or hemlock. Add some patches of balsam fir for retention.

Specs:

More conifer on the edges of the stand and where there is a lowland area through the middle. Leave this for retention. Regeneration in the Other Comments:

adjacent stands on private doing very well. Access from PVT to the south.

Next Monitor for regeneration

Steps:

Proposed

10/01/2014 Start Date:

Total Treatment

Acreage Proposed: 390.1

Gwinn Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 087 a Limiting Factor s Year of Entry 2015 t а **Treatment** CoverType BA **Treatment Treatment Cover Type** Acres Size Stand **Approval** n d Name Density Age Range Type Method Objective Status 23.7 4119 - Mixed High 81-110 4119 - Mixed Cmpt. Review 16 32087016-Cut 86 Harvest Single Tree Northern Hardwoods Density Log Selection Northern Hardwoods Proposal Prescription May need to make larger canopy openings when marking, winter harvest for deer yard area. Reserve cedar, hemlock and favor yellow birch. Specs: Other No regeneration, heavily browsed even in pockets where overmature canopy maple is dying out or breaking up. Regeneration and access is a concern for this stand. Comment: Next monitor for regeneration Steps: Proposed 10/01/2014 Start Date: Limiting Factor 5A: Not able to obtain desirable regeneration 7.7 6117 - Lowland 80 Harvest Clearcut with 6117 - Lowland Cmpt. Review 17 32087017-Cut High Deciduous, Mixed Density Reserves Deciduous, Mixed Proposal Coniferous Pole Coniferous <u>Prescription</u> Final harvest leaving the retention where the conifer is higher. Do not cut cedar or hemlock. Specs: Winter cutting would be nice considering the proximity to the deer yard. Other Comment: Next Monitor for regeneration Steps: Proposed Start Date: 10/01/2014 2B: Unknown if access through adjacent landowner(s) is possible **Limiting Factor** 32087034-Cut 12.5 4136 - Aspen, High 81 51-80 Harvest Clearcut with 4136 - Aspen, Cmpt. Review 34 Mixed Conifer Reserves Mixed Conifer Proposal Density Pole **Prescription** Final harvest with no cut cedar or ash. Cut in the winter or dry times of the year, there are some places that may hold water, this will help protect the soils. Access is from the north. Specs: Leave buffer recommended by Fish Div. Ash is mainly on the river bank. Other Comment: Next Monitor regeneration Steps: Proposed Start Date: 10/01/2014 3J: Water quality / BMPs (stream, river, or lake) **Limiting Factor** 33.2 51-80 4136 - Aspen, Cmpt. Review 35 32087035-Cut 4135 - Aspen, Cedar High 81 Harvest Clearcut with Density Mixed Conifer Proposal Reserves Pole Prescription Final harvest with no cut cedar or ash. Cut in the winter or dry times of the year, there are some places that may hold water, this will help protect the soils. Access is from the north. Specs: Retention can be along the river - buffer per Fish Div recommendations. Other Comment: monitor regeneration Next Steps: Proposed 10/01/2014 Start Date:

Limiting Factor

Acreage Proposed: 77.1

3J: Water quality / BMPs (stream, river, or lake)

Report 5 – Site Conditions

Gwinn Mgt. Unit

Sysol, Jennifer Burnham: Examiner

Compartment 087 Year of Entry 2015

Availa	ability for I	Management						
Total	Acres	Acres		Domina	nt Site	e Con	dition	s
Acres	Available	Not Available		No	5A	3J	3B	2B
454	404	50	Aspen	404		44	6	
749	749		Cedar	749				
52	52		Lowland Conifers	52				
36	36		Lowland Deciduous	28				8
124	124		Lowland Mixed Forest	124				
118	118		Mixed Upland Deciduous	118				
77	54	24	Northern Hardwood	54	24			
3	3		Red Pine	3				
27	18	8	Upland Conifers	18		8		
101	101		Upland Mixed Forest	101				
1,742	1,660	82	Total Forested Acres	1,652	24	53	6	8
	95%	5%	Relative Percent					

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
010	Not Available	3J: Water quality / BMPs (stream, river, or lake)	6				
С	comments:						
012	Not Available	3J: Water quality / BMPs (stream, river, or lake)	8				
С	comments:						
014	Not Available	3J: Water quality / BMPs (stream, river, or lake)	5				
	comments: 00' buffer along the	e Escanaba River					

Report 5 – Site Conditions

Compartment 087

Gwinn Mgt. Unit

Comments:

see locked comments

Year of Entry 2015 Sysol, Jennifer Burnham: Examiner Not Available 3J: Water quality / BMPs 015 24 (stream, river, or lake) Comments: 100' buffer along the Escanaba River 2B: Unknown if access No Limiting Factor 016 Available 24 through adjacent landowner(s) is possible Comments: 017 **Available** 2B: Unknown if access 8 through adjacent landowner(s) is possible Comments: **Not Available** 018 3J: Water quality / BMPs 9 (stream, river, or lake) Comments: 100' buffer along the Escanaba River 3B: Threatened, 019 Not Available 6 endangered, and special concern species/communities

Compartment: 087 Year of Entry: 2015



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
SCA Removal16 Comments does not meet the definit	Potential Old Growth		SCA Removal	0.5
SCA Removal4 Comments does not meet the definit	Potential Old Growth		SCA Removal	1.0
SCA Removal6 Comments POG	Potential Old Growth		SCA Removal	1.1
Rampion Comments	Potential Old Growth		SCA Removal	1.4
SCA Removal19 Comments does not meet the definit	Potential Old Growth		SCA Removal	1.7
SCA Removal21 Comments pog	Potential Old Growth		SCA Removal	1.7
SCA Removal22 Comments	Potential Old Growth		SCA Removal	1.7
SCA Removal24 Comments	Potential Old Growth		SCA Removal	2.3
SCA Removal18 Comments does not meet the definit	Potential Old Growth		SCA Removal	2.8
SCA Removal25 Comments	Potential Old Growth		SCA Removal	2.9
SCA Removal14 Comments does not meet the definit	Potential Old Growth		SCA Removal	3.0

Compartment: 087 Year of Entry: 2015



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
SCA Removal8 Comments does not meet the definiti	Potential Old Growth on of POG		SCA Removal	5.0
SCA Removal23 Comments CUT IN 1984 SALE # 04	Potential Old Growth		SCA Removal	5.6
SCA Removal15 Comments does not meet the definiti	Potential Old Growth on of POG		SCA Removal	6.5
SCA Removal5 Comments POG	Potential Old Growth		SCA Removal	12.6
SCA Removal9 Comments does not meet the definiti	Potential Old Growth on of POG		SCA Removal	13.3
SCA Removal17 Comments	Potential Old Growth		SCA Removal	15.5
SCA Removal20 Comments	Potential Old Growth		SCA Removal	16.2
SCA Removal13 Comments does not meet the definiti	Potential Old Growth		SCA Removal	17.5
SCA Removal10 Comments POG, CUT UNDER PERI	Potential Old Growth MIT 26-88-1.		SCA Removal	25.3
SCA Removal12 Comments POG, PORTIONS CUT	Potential Old Growth	1967-1970.	SCA Removal	27.2
SCA removal 1 Comments area does not have Type	Potential Old Growth I or II characteristics; remove and area	a will be protected by BMP's	SCA Removal	51.3

Compartment: 087 Year of Entry: 2015



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
SCA Removal7 Comments POG, AREA CUT IN 1985	Potential Old Growth		SCA Removal	56.1
SCA Removal3 Comments does not meet the definition	Potential Old Growth of POG		SCA Removal	59.0
SCA Removal11 Comments does not meet the definition	Potential Old Growth of POG		SCA Removal	79.2
SCA removal 2 Comments does not meet type I or II PC	Potential Old Growth OG, areas will be protected by BM	IP's	SCA Removal	110.8

Compartment: 087
Year of Entry 2015



Report 7 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical r sites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settler and British outposts, nineteenth century logging camps, mines at the Great Lakes, there are shipwrecks and other remains docum be identified by Natural heritage data from the State Historic Presthis compartment will be implemented in such a manner as to mathe sensitive nature of this information, no further detail about local	errestrial areas and Great Lakes nents and burial sites, as well as French and homesteads. Beneath the waters of enting the maritime trade. Such sites may servation Office. Proposed treatments in aintain the integrity of these sites. Due to
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildle and Waterfowl Production Areas, deer wintering complexes in low openings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitutions.	al Features Inventory (MNFI) within the toccurrences with viability ranks of A urity) ranking of endangered (1), may be located upon any ownership in of natural community types that are processes and values. The public may

s t				Report 8	– Forested	Stands Compartment: 087 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	High Density Pole	14.4	108		Trail though south end of the stand to the river. Nice stand of cedar overall with hort lived species scattered.
2	4134 - Aspen, Spruce/Fir	High Density Pole	5.7	81	111-140	Final harvest leaving retention per guidelines leaving some cedar, white pine, white spruce -these trees should be windfirm since blowdown has occured in the previous cuts.
4	4130 - Aspen	High Density Sapling	6.9	27		Stand cut under timber sale #026-85, "Rock Dump Block"; mainly an aspen, balsam fir mix with a small volume of cedar, maple and black spruce. Mix of upland and lowland ground with bracken, grasses and blackberry. Some dead aspen saplings.
5	4135 - Aspen, Cedar	High Density Pole	5.6	98	51-80	Dead balsam fir and aspen in stand, lots of younger fir present.
6	6124 - Lowland Spruce- Fir	High Density Sapling	10.1	30		Stand was cut for deer between 1983 and 1984 in small patches , no cedar regeneration coming in, cedar present is residual from cutting. If regeneration is a question (plus all the other stands noted with regen concerns) compartment may be a good candidate to start more cutting more for a managed deer yard.
7	4130 - Aspen	High Density Pole	13.4	46	81-110	Knob edges with 3-4 " dbh aspen and balsam fir, some maple saplings and poles; top of knob has bigtooth aspen, maple and paper birch. South 1/2 cut under timber sale # 007-81(roughly 5 acres) remainder was cut in 1967. Little to no regeneration, there is some blow down with the aspen and balsam fir.
8	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	3.0	91	51-80	Unnamed creek within the stand. Ash is dying or dead with browse on the live ash trees. Blow down and dead spruce and fir.
9	4319 - Mixed Upland Forest	High Density Pole	5.8	91	51-80	Ridge was potentially cut in the past (F3 with scattered paper birch, maple and quacking aspen)- old aspen replacing the balsam fir that is dying out.
10	4130 - Aspen	High Density Sapling	67.8	24		Aspen 20-40' in height. Hypoxylon fairly heavy in places. Stand cut in January, 1986-1989, #018-85-01, "Main branch block"
11	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Log	18.4	91	81-110	SCA Escanaba River influence (riparian and visual). Dead balsam fir and aspen, species are overmature. Cedar is found mainly along the river. May want to cut to help regenerate pioneer species before all are dead or dying.
13	4199 - Other Mixed Upland Deciduous	High Density Sapling	18.8	24	1-50	More maple than adjacent stand residual legacy types within the old G-type with small black cherry. M7/M3 with white spruce, cedar and black spruce in lowland swales. Cut in Jan, 1986-1989#018-85-01, "main branch block"
14	6120 - Lowland Cedar	High Density Log	6.0	140	200+	Blowdown and windthrow with no regeneration in these areas. Birch almost dead. Trace amount of large diameter hemlock and 5' tall white spruce. Cutting would help with age class however heavy deer browse and lack of regeneration in other stands advicate no cut.

S t	Gwinn Mgt. Unit			Report 8	– Forested	Stands Compartment: 087 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	6120 - Lowland Cedar	High Density Log	78.5	120	200+	Smaller 4' black ash, heavily browsed. Blow down with no regeneration. Trace amounts of balsam fir.
16	4119 - Mixed Northern Hardwoods	High Density Log	23.7	86	81-110	Leatherwood, raspberry brush, clubmoss, grasses and bracken. Low quality hardwood stems. No regeneration, heavily browsed even in pockets where overmature canopy maple is dying out or breaking up. Saw only a few small spruce and fir with the occasional ironwood and leatherwood. Regeneration and access is a concern for this stand.
17	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	7.7	80		OI called it a P6 with a fir understory with some high ground mixed in. Potential for maple and better aspen - age lends to dying out and probably converting to a conifer stand.
18	4116 - Mixed N. Hardwood - Aspen	High Density Pole	8.3	78	81-110	Stand was cut in 1970-1975, partial thinning and final harvest. The partial thinning is what isnot being prescribed. BA is not very high but the crowns have filled in from the previous cut. Fair to good quality wood, basswood are mainly multiple stems. Selection cut to promote regeneration.
19	4134 - Aspen, Spruce/Fir	High Density Pole	10.2	39	1-50	Cut in 70-75, edges have the most diversity, looks healthy.
20	4134 - Aspen, Spruce/Fir	High Density Pole	31.1	39	1-50	Final harvested in 1970-1975. Spruce is getting hit with budworm - the stand has small diameters and being close to the river not sure if a cut is the best way to go.
22	4130 - Aspen	High Density Pole	11.4	78	51-80	Final harvest - budworm is present with flagging on the stems - aspen is over mature.
23	4119 - Mixed Northern Hardwoods	High Density Pole	18.1	78	111-140	Closed canopy - selection cut for regeneration, fair to good quality.
24	4119 - Mixed Northern Hardwoods	High Density Log	15.0	78	111-140	Final harvest wood to get all the spp back into the stand - poor to fair quality of maple - good conifer on the edges.
25	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	26.4	40	1-50	part of timber sale #030-66
26	4116 - Mixed N. Hardwood - Aspen	High Density Pole	12.3	76	111-140	part of timber sale #030-66
27	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Log	8.3	98	111-140	Stand slopes to the river - left as buffer when adj stand was cut. Pioneer spp are starting to die out and fall - will eventually become a cedar stand. Some tips of the spruce and fir are showing signs of budworm.
28	4319 - Mixed Upland Forest	High Density Sapling	40.2	31	1-50	stand was part of timber sale #022-80; cut between the years of 82-85 assuming for deer yard. looks like they started cutting in the SE corner and moved west due to the size of the aspen in the area. Yes, zero plots. some areas of the stand are lowland some high ground.

S t	Gwini	Gwinn Mgt. Unit			Forested	Stands Compartment: 087 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	4130 - Aspen	Medium Density Pole	46.9	86	51-80	Final harvest - retention would be 300' buffer along the Escanaba River.
31	4134 - Aspen, Spruce/Fir	Low Density Pole	10.5	41	1-50	Stand is an old opening filling in with poor quality clones of aspen. Final harvest with adjacent stand.
32	42210 - Natural Red Pine	High Density Log	3.3	81	141-170	
33	42360 - Upland Cedar	High Density Pole	10.5	91	171-200	deer yard, deer in there now - using these areas to get to the river.
34	4136 - Aspen, Mixed Conifer	High Density Pole	15.7	81	51-80	Similar to the other aspen stands along the river - more mature conifer as you go east along the river. There are some areas in the stand that could hold water later on in the year. Deer use present. Ash is mainly near the river or where the canopy is more open.
35	4135 - Aspen, Cedar	High Density Pole	60.9	81	51-80	Similar to the other aspen stands along the river - more mature conifer as you go east along the river. There are some areas in the stand that could hold water later on in the year. Deer use present. Ash is mainly near the river or where the canopy is more open.
36	6124 - Lowland Spruce- Fir	High Density Pole	36.4	Uneven Age		only conifer stand on n side of river (in this area) rest is aspen. all about the same age. Deer yard old inventory and photos show a knob of aspen in the center (didn't go there). Budworm is in the stand- understory of conifers is going to convert aspen/white birch to a conifer stand. There are some pockets of cedar and ash along the river, there is a high probability of the cedar being scattered through the entire stand.
37	4134 - Aspen, Spruce/Fir	High Density Pole	9.6	80		would be nice to treat if working on harvests in area.
38	6132 - Mixed Lowland Forest with Cedar	High Density Pole	124.1	86	81-110	Stand is variable through out- All species except the cedar have met age criteria and there is blow down and mortality occuring through out. The area near the river contain more of the cedar. There is an open, mature aspen area on the SE side of the stand, because of the snowload I do not know if this is b/c the alvar area is "creeping" into the timbered area, the soils map does not snow a difference.
39	6120 - Lowland Cedar	High Density Sapling	6.1	42		Old stumps indicate harvesting area. Cedar is mainly 10-30' tall-appears that the west side of the stand is older than the east side. Healthy trees. Deer are in the red pine on pvt and not in this area.
40	6120 - Lowland Cedar	High Density Pole	8.8	86	81-110	Pioneer spp are dying out, cedar is poor quality but healthy. Stand is not very dense some areas have blow down occuring. Deer are using the area in the winter. Treatment would be to remove all spp except cedar and any hemlock that may be present.

S t	Gwin	Gwinn Mgt. Unit			Forested	Stands Compartment: 087 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	6118 - Lowland Deciduous with Cedar	Low Density Sapling	11.7	33	1-50	cedar strips cut in the 80's. There is cedar in the over story where left for seed source. The is ash, maple, aspen raspberries, spruce and fir in the understory - brushy from old browse. Did not notice new browse from this year. Because of the amount of snow i am not sure if there are smaller saplings
43	4319 - Mixed Upland Forest	High Density Log	6.0	86	81-110	Final harvest not cutting cedar and hemlock. Deer use in the area
44	4319 - Mixed Upland Forest	High Density Pole	31.5	80	81-110	Over mature stand, there is more cedar on the East side of the road - if no cut cedar some of the area could be the retention patch.
45	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density	5.5	29	1-50	TS# 044-084-02- Cedar present are those left for seedtree. Other spp doing well, with the snow load not sure if cedar is recruiting or not.
46	4319 - Mixed Upland Forest	Medium Density Pole	17.4	Uneven Age		The over story spp; spruce, aspen, maple are dying out from age and budworm - the BA is not a fully stocked stand. The spp in the understory contains; aspen, spruce, fir, red maple, with come cedar near the river and on the wet edges near the east end. The new stand is going to be a mix like the other aspen types along the river just younger.
47	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	7.7	80		Stand transitioning to the more conifer types to the west. Trail road cut from the pvt on the north boudary - goes to the river.
48	4134 - Aspen, Spruce/Fir	High Density Sapling	96.3	30		Cut under Timber Sale "Hunters Block " Reneration looks really good. Good mix of spp coming.
49	4191 - Mixed Upland Deciduous with Conifer	High Density Log	65.3	86	111-140	Mostly an upland stand, there are some areas where the cedar and other lowland spp are present mainly in pockets or around the edges of the stand. Final harvest stand leaving cedar and hemlock.
50	6120 - Lowland Cedar	High Density Pole	578.0	110	141-170	Stand is mainly a pole sized cedar stand with areas of almost pure cedar (1-0 acre patches). Blow down is occurring in areas where the larger diameter cedar and spruce are present. These areas are mainly on the outer edge of the stand and not the interior. All of the species present, except for the cedar are at maturaty and ready for harvest, however cedar would need to be cut for operability. The spruce and fir show some signs of flagging from budworm but it is not heavy at this time. In the open areas there are some young fir coming in 5 to 10' tall, there is some tag alder, willow and black ash in the stand but patchy and very small amounts.
51	4134 - Aspen, Spruce/Fir	High Density Sapling	14.8	20		Half of the stand was cut in 1993 and the other half in 1997-can't really tell on the ground where the change occured. The cedar and spruce present is the residual left from the treatment. Regeneration is coming in well.
52	6120 - Lowland Cedar	High Density Pole	46.7	92	81-110	Nice pole stand of cedar - there are some areas where it is more open from blow down or areas where the water table stays up and tag alder is growing. Healthy stand.

S t a n d	Gwinn Mgt. Unit			Report 8	– Forested	Stands Compartment: 087 Year of Entry: 2015
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	13.8	86	111-140	Would be nice to treat this stand to help with spp diversity in the compartment. Small acreage and a long haul, if the Escanaba unit decides to treat stands in their Cmpt 87 maybe it could be done together.
54	4134 - Aspen, Spruce/Fir	High Density Log	47.4	86	81-110	More conifer on the edges of the stand and where there is a lowland area through the middle. Lease this for retention. Regeneration in the adjacent stands on private doing very well. Expect the same with this stand. Final harvest, no cut cedar or hemlock.

Report 9 - Nonforested Stands

Compartment: 087 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	790 - Other Bare/Sparsely Vegetate	3.7	No	Unspecified	
12	6220 - Alder/willow	1.2	No	Unspecified	
21	3303 - Mixed Low Density Trees	12.1	No	Unspecified	
30	3303 - Mixed Low Density Trees	19.2	No	Unspecified	There is some aspen in the NE corner of the stand, it is about 4 acres. Access would be through the PVT
41	622 - Lowland Shrub	16.5	N\A	Unspecified	