

Revision Date: July 19, 2010

Stand Examiner: Kevin LaBumbard

Legal Description: T44N R21W Section(s) 22-25, 36

Identified Planning Goals ('Management Area' or 'RMU', if applicable): Chatham/Autrain Moraines MA.

Management Goals: Located just a few miles south of Gwinn, this compartment contains a variety of timber types and is a very popular recreational area, primarily for hunting. Management goals of the scheduled hardwood stands are to improve stem quality and diameter class distribution while maintaining species diversity, conifer content, and den trees. One aspen stand is scheduled and currently under contract. All harvest plans will also include considerations for conifer retention, coarse woody debris, and BMP's, with all hemlock, cedar, and white pine to be retained where present. We will retain all species represented and all size classes including the large legacy trees. Special Conservation Area stands are included along the Dexter Creek and Whitefish River drainages to protect and enhance the riparian values and wildlife travel corridors.

Soil and Topography: Geological features included moraines and till plains in the uplands and glacial drainageways in the lowlands. Soils are well drained loams, very poorly drained mucks and poorly drained loams. Major soil associations include Trenary, Chatham, Carbondale, and Emmet.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is surrounded by a mix of nonindustrial private land to the west, corporate land to the south and east, State land to the north, and the Hiawatha National Forrest on the southeast.

Unique, Natural Features: Potential for northern goshawk, red-shouldered hawk, spruce grouse, and blackbacked woodpecker. Potential for eagle, osprey, and great blue heron rookery. Potential for moose and wolf. Potential for frigga fritillary, freija fritillary and red-disked alpine in bogs. Potential for wood turtle. Potential for auricled tway-blade, veiny meadow rue, western dock, Farwell's water-milfoil, alternate leaved water-milfoil, and linear-leaved gentian along riparian areas. Potential for calypso orchid, rayless mountain ragwort, and ram's head lady's-slipper in conifer swamps.

Archeological, Historical, and Cultural Features: None identified with HAL

Special Management Designations or Considerations: Special Conservation Area stands 22,24,25,27,28.

Watershed and Fisheries Considerations: Dexter Creek, East Branch of the Whitefish River.

Wildlife Habitat Considerations: This compartment lies within the Chatham/AuTrain Moraines Management Area. In Special Conservation Areas, maintain movement corridors for wildlife species and the protection of riparian areas. Promote biological legacies such as old forest characteristics in the form of snags, coarse woody debris, and intact nutrient cycles. Maintain or increase biodiversity in northern hardwood stands through retention of associate species. In stands scheduled to treat this entry period, maintain conifer cover in transitional zones as well as wildlife movement corridors

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist primarily of medium-textured glacial till and minor peat and muck and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 0 and 50 feet. The Ordovician Trenton Group subcrops below the glacial drift. The Trenton is quarried for stone/dolomite elsewhere in the UP. Gravel pits are located within the compartment, and potential appears to be good in the upland areas. This compartment has never been leased. There is no economic oil and gas production in the UP.

Vehicle Access: Vehicle access is very good from west Alger County's June Road, with several good dirt roads and 2-tracks throughout the compartment.

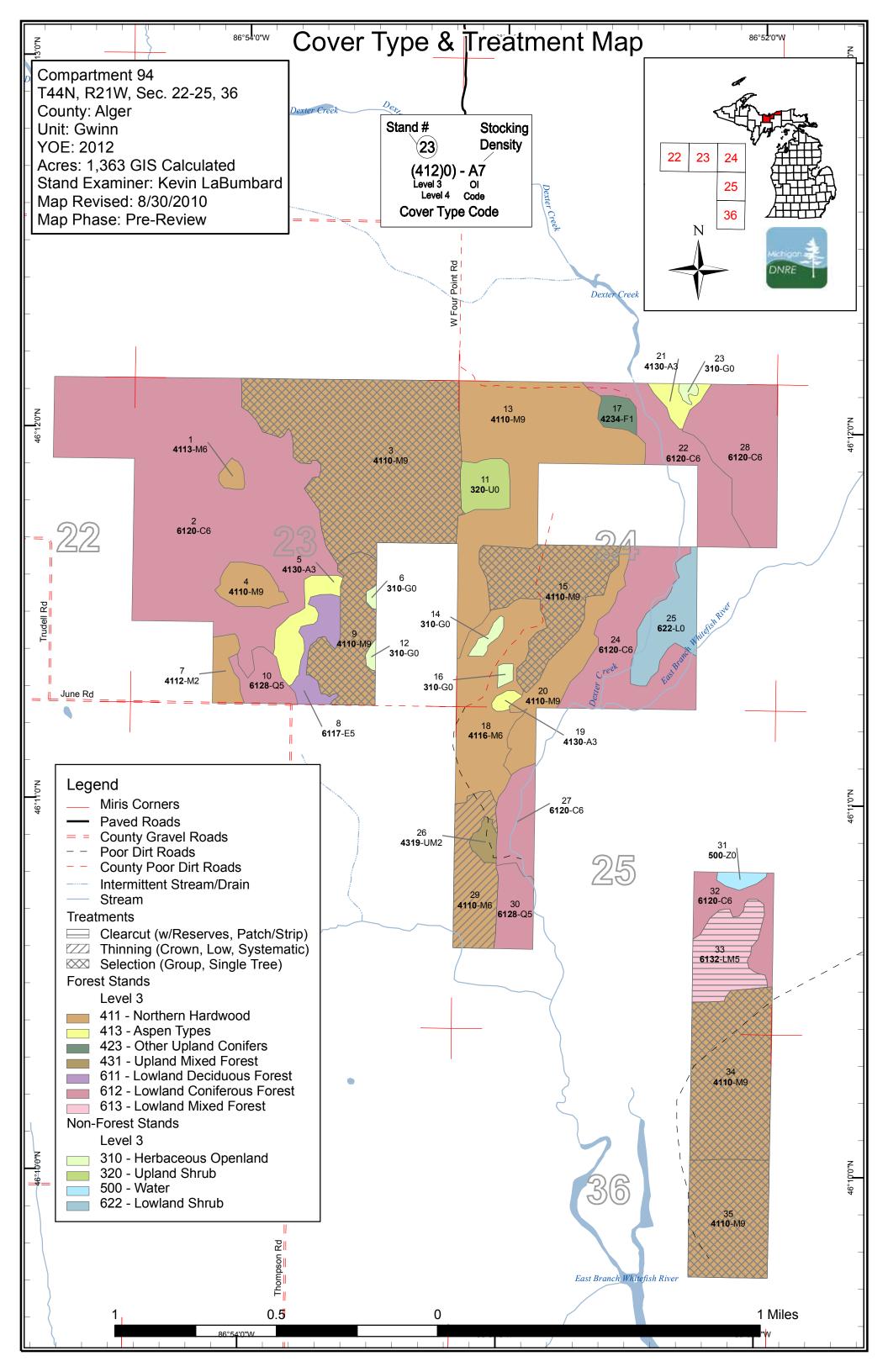
Survey Needs: None at this time.

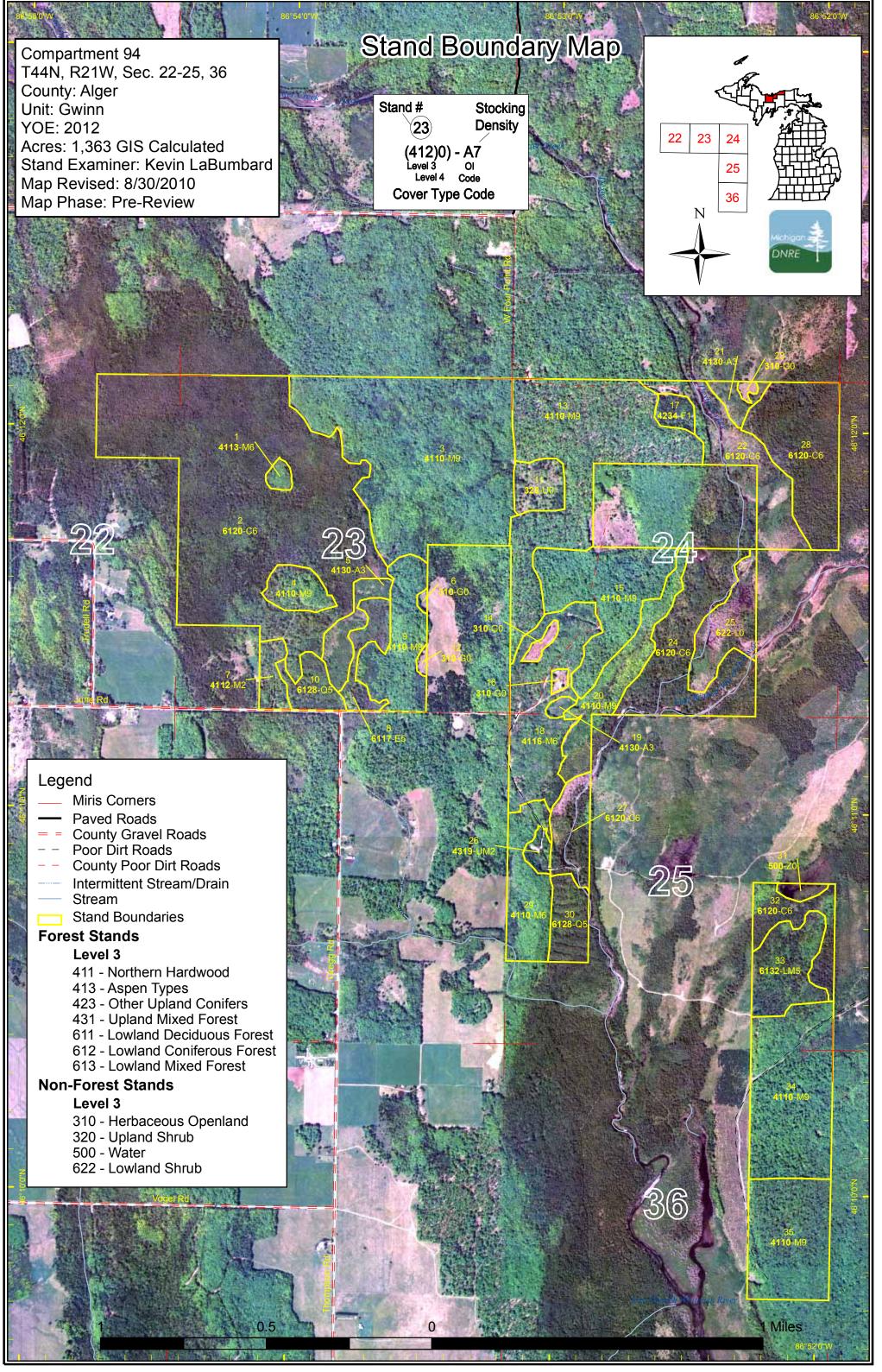
Recreational Facilities and Opportunities: Good trout fishing in Dexter Creek. Fishing and canoeing on the Whitefish River. Very good grouse, woodcock and deer hunting.

Fire Protection: There is a low risk of wildfire in this compartment.

Additional Compartment Information:

- > The following reports from the Inventory are attached:
 - Total Acres by Cover Type and Age Class
 - Proposed Treatment Summary
 - Proposed Treatments No Limiting Factors
 - Proposed Treatments With Limiting Factors
 - Stand Details (Forested and Nonforested)
 - Dedicated and Proposed Special Conservation Areas
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - Base feature information, stand boundaries, cover types, and numbers
 - Proposed treatments
 - Details on the road access system





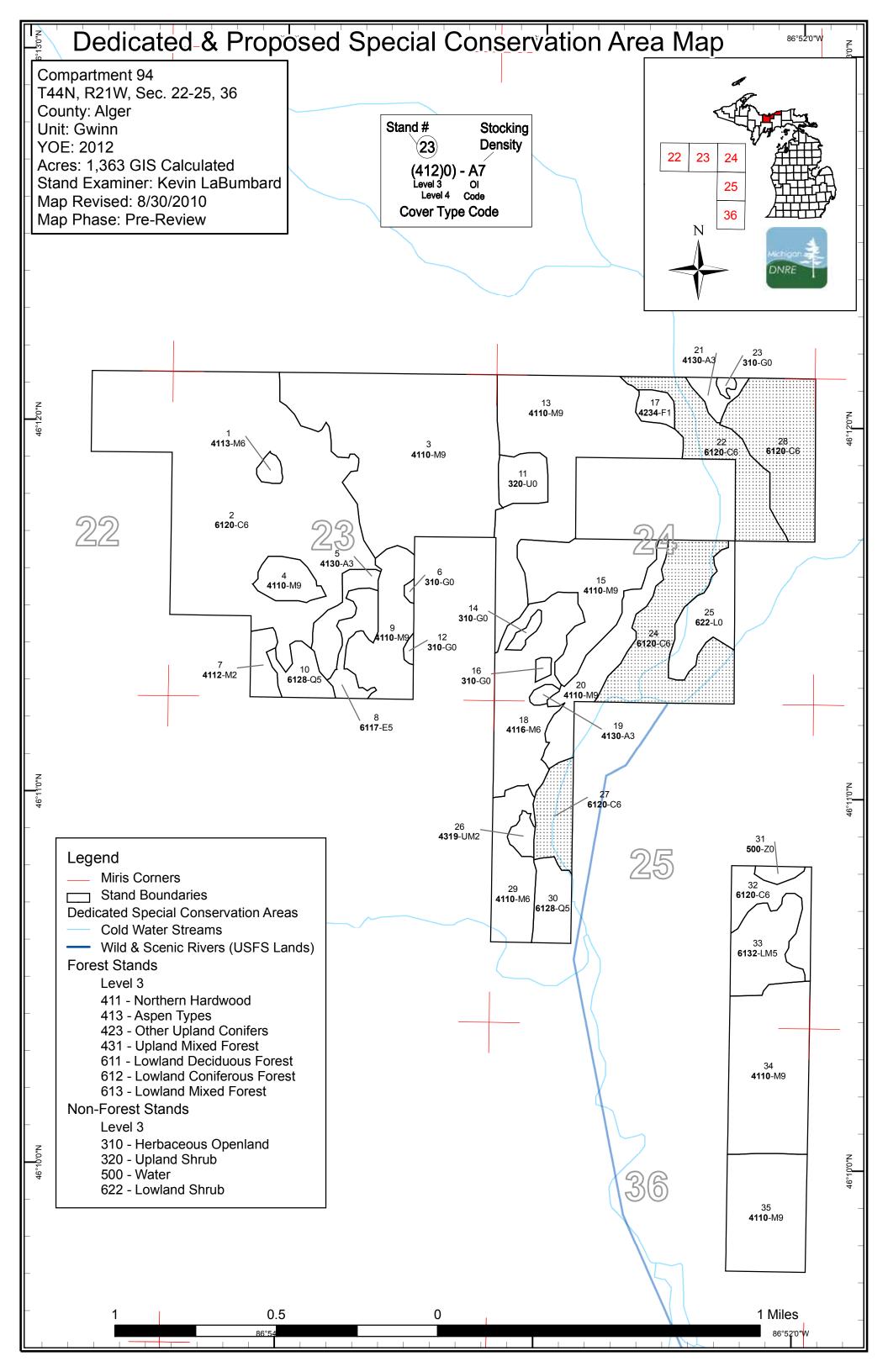


Table 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit

Data updated before 10:00 AM

Compartment 094 Year of Entry 2012



							Age	Class									
	Nor	A See	6.z	^{70,79}	67. 0.	67. ja	10-10-10-10-10-10-10-10-10-10-10-10-10-1	85.05	60.00		69.00	66:00	00 ¹⁰	817.911	170× 1710	Not the second s	le,
Aspen	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	25	
Cedar	0	0	0	0	0	0	0	0	0	0	497	0	0	0	0	497	Į
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	I
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	Ι
Lowland Deciduous	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15	I
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	33	Ι
Lowland Shrub	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	Ι
Northern Hardwood	0	0	0	0	0	0	62	0	0	324	297	0	0	0	10	693	I
Upland Mixed Forest	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	I
Upland Shrub	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	Ι
Upland Spruce/Fir	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7	Ι
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	Ι
Total	56	0	33	5	0	0	62	0	0	339	858	0	0	0	10	1363]

Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM Gwinn Mgt. Unit Compartment 094 Year of Entry 2012 Total Compartment Acres: 1363 Acres by Treatment Type Commercial Harvest - 481 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0 Habitat Cut - 0 Tree Seeding - 0 Pesticide - 0 **Opening Maintenance - 0 Cover Type by Harvest Method** Hill Street Steenen oo See 17ee Contraction of the second Timing Selection, U.S. ALLER Lowland Mixed Forest 33 0 0 0 0 0 33 0 414 34 448 0 Northern Hardwood 0 0 33 414 0 0 34 0 481 Total

S t		Data		Gwinn Mgt. Unit Nated before 10:00 A			atments Pro imiting Fac		Compartment: 094 Year of Entry 2012	
a n d		tment ime	Acres	s Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	32094	003-Cut	174.5	4110 - Sugar Maple Association	High Density Log	81	Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
Presc Specs	•			tand, concentrating in t ark to a residual BA of a		s. Retain	most of the ch	erry, and basswood while	e removing most of the	aspen and fir
<u>Other</u> Comr								occassional cherry. Appro om the previous harvest.	oximately 10 ba of 1 sti	ck sawtimber
<u>Next</u> Steps	<u>):</u>	Check re	egenera	ation per certification re	quirements.					
9	32094	009-Cut	39.9	4110 - Sugar Maple Association	High Density Log	81	Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
Presc Specs		Select c	ut the st	tand concentrating on	stem quality and sp	acing wh	ile retaining div	rersity and wildlife attribute	es.	
<u>Other</u> Comr	<u>.</u> ments:							evious harvest in 1979. T low birch and fir. Mark to		ing component,
<u>Next</u> Steps	<u>):</u>	Check re	egenera	ation per certification re	quirements.					
15	32094	015-Cut	60.8	4110 - Sugar Maple Association	High Density Log	81	Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
Preso Spece				be scheduled for a sele < to an average residua		prove ove	rall stand quali	ty yet retain species diver	sity, conifer content, ar	d wildlife
<u>Other</u> Comr		trees. A	reas of		ion from the last tre			od poletimber stand with contains a few cherry, ye		
<u>Next</u> Steps	<u>):</u>	Monitor	regener	ration according to cert	ification requiremen	nts.				
29	32094	029-Cut	34.4	4110 - Sugar Maple Association	High Density Pole	e 81	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
Preso Spece		Mark the possible		to 75-80 BA concentra	ting on removing tw	vins, low f	orks, and poor	ly developed crowns. Ma	intain as much species	diversity as
<u>Other</u> Comr	_	Primarily and alon		0 0 1	stand with basswoo	d and an	occasional red	maple and yellow birch.	Balsam fir regen is pre	sent in pockets
<u>Next</u> Steps	<u>):</u>	Review t	reatme	nt results in 10 years.						
33	32094	033-Cut	32.8	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	93	Harvest	Clearcut with Reserves	Aspen, Mixed Conifer	Cmpt. Review Proposal
Presc Specs		This star	nd was	prepped in 2001, curre	ntly under contract	(022-09-0	01).			
<u>Other</u> Comr	nents:	It consis	sts of lo	w, wet aspen, balm, ce	edar, fir, spruce, an	d black a	sh.			
<u>Next</u> Steps	<u>):</u>	Monitor	for rege	eneration per certification	on requirements.					
34	32094	034-Cut	81.2	4110 - Sugar Maple Association	High Density Log	93	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
Presc Spece		This star attributes		be scheduled for a sele	ction harvest to imp	prove ove	rall stand quali	ty yet retain species diver	sity, conifer content, ar	id wildlife
<u>Other</u> Comr								ock. Additional species in g trees, and a good mapl		/ birch, cherry,
<u>Next</u> Steps	<u>):</u>	Monitor	regener	ration per certification g	juidelines.					

S t	•		Gwinn Mgt. Unit ed before 10:00 Al			atments Pre .imiting Fac		Compartment: 094 Year of Entry 2012	
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	32094035-Cut	57.7	4110 - Sugar Maple Association	High Density Log	93	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
Prese Spec		currently	under contract to LaF	leur #22-09-01 wa	is original	lly assigned to I	Maule in 2002.		
<u>Othe</u> Com	<u>r</u> The star <u>ments:</u>	nd consist	ts of hard maple, cherr	y, and red maple	poles and	l sawtimber witl	h scattered hemlock.		
<u>Next</u> Steps		regenerat	tion per certification rec	quirements.					
A	Total Treatmer creage Propose		31.2						

S t	Data		inn Mgt. Unit before 10:00 AM			ents Prescrib ng Factor	Compartment: 094 Year of Entry 2012		
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presci Specs									
<u>Other</u> Comm	<u>nent:</u>								
<u>Next</u> Steps:	<u>.</u>								
	ng Factor and No ment Reason	<u>0</u>							
	Total Treatmer reage Propose		0						

Data updated before 10:00 AM

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Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2012

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
Prescription Specs:								
<u>Other</u> Comments:								
<u>Next</u> <u>Steps:</u>								
Total Trea	atment							

Acreage Proposed:

S t	Gwinr		5 – Foi Data update	ested Sta	Market Party and American Street Party and Americ	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4113 - R.Maple, Conifer	High Density Pole	3.6	93		OI stand #6 Remote, small island of hardwood surrounded by a large swamp conifer stand.
2	6120 - Lowland Cedar	High Density Pole	278.5	93		Former OI stand 1. Q6C2. Most of the cedar is relatively small.
3	4110 - Sugar Maple Association	High Density Log	174.5	81	111-140	OI stand #8 Sugar maple and basswood 5 stick pole stand with scattered aspen and fir andh occassional cherry. Approximately 10 ba of 1 stick sawtimber trees. Rolling, ridgey terrain. Sugar maple saplings are well established from the previous harvest.
4	4110 - Sugar Maple Association	High Density Log	14.2	81	81-110	Sugar maple pole stand with a few sawlog sized trees, including basswood. Scattered yellow birch and hemlock, especially on the west side of the stand. There is a good carpet of sugar maple seedlings but they are being heavily browsed repeatedly with most of the seedlings shorter than 2' tall.
5	4130 - Aspen	High Density Sapling	15.8	15		OI stand 18 Clearcut in 1994 under permit # 29-92-01. Some low areas with dogwood, spruce, and balm but mostly upland.
7	4112 - Maple, Beech, Cherry Association	Medium Density	10.2	Uneven Age		OI stand # 15. The current stand consists of poor quality red maple over fir saplings, with occasional white spruce, sugar maple, hemlock, and cherry poles. The "shelterwood" harvest of the red maple in the early 90's has resulted in excellent fir regeneration with the stand converting to fir.
8	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	15.3	84		OI stand # 11 Black ash swale with cedar. Typical E5.
9	4110 - Sugar Maple Association	High Density Log	39.9	81	111-140	OI stand 19. Sugar maple and basswood sawlog stand with excellent regeneration from the previous harvest in 1979. There is a strong fir sapling component, especially in the northern section of the stand. The stand also contains a few yellow birch and fir. Select cut the stand concentrating on stem quality and spacing while retaining diversity and wildlife attributes.
10	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	13.7	93		Cedar strip cuts made in 1975. Most of the residual cedar strips have blowdown with approximately 50% of the cedar still standing. The clearcut strips have decent aspen and fir regeneration but no cedar.
13	4110 - Sugar Maple Association	High Density Log	119.2	93	51-80	OI stands 20 and 42. Select cut in 2004-5 under contract #22-02-01. Rolling terrain. High quality sugar maple stand.

S t	Gwinn Mgt. Unit				orested Sta ted before 1	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	4110 - Sugar Maple Association	High Density Log	60.8	81	111-140	OI stand 38. Treated in 1993 under contract #30-92-01. High quality sugar maple and basswood poletimber stand with 4-5 stick poles and 1- 2 log sawtimber trees. Areas of good maple regeneration from the last treatment. The stand also contains a few cherry, yellow birch, and hemlock. This stand will be scheduled for a selection harvest to improve overall stand quality yet retain species diversity, conifer content, and wildlife attributes. Hilly, rolling terrain that drops off sharply to the east.
17	42340 - Upland Spruce/Fir	Low Density Sapling	7.1	15		OI stand 405. Former wildlife opening filling in with spruce/fir. F2
18	4116 - Mixed N. Hardwood - Aspen	High Density Pole	61.6	55	51-80	OI stand 25 Poor quality hardwood stand that developed from stump sprout origin. The stand also incorporates an old opening which has filled in with cherry brush, aspen and soft maple. Higher concentration of aspen in the south.
19	4130 - Aspen	High Density Sapling	2.4	16		Cut in 1993 under contract #30-92-01.
20	4110 - Sugar Maple Association	High Density Log	35.3	93		OI stand 37. Essentiall the same stand as stand #15 but growing on a steep inoperable hillside, the old bank from outlet of Lake Duluth. It is a high quality sugar maple and basswood poletimber stand with 4-5 stick poles and 1-2 log sawtimber trees. The stand also contains a few cherry, yellow birch, and hemlock.
21	4130 - Aspen	High Density Sapling	7.2	19		Cut in 1991 with stand 34 of Compt. 96. 2"-4" aspen with scattered fir. Some willow in the wet areas.
22	6120 - Lowland Cedar	High Density Pole	43.7	93		
24	6120 - Lowland Cedar	High Density Pole	68.7	93		OI stand 28. Swamp conifer stand with some cedar and fir regeneration. Scattered hemlock.
26	4319 - Mixed Upland Forest	Medium Density	5.2	25		OI stand 76. Small fir stand mixed with aspen surrounding an old gravel pit.
27	6120 - Lowland Cedar	High Density Pole	21.7	93		OI stand 43. Mixed swamp conifers with tamarack. The Whitefish River flows thru this stand. SCA.
28	6120 - Lowland Cedar	High Density Pole	60.8	93		OI stand 26. Swamp conifer stand with some cedar and fir regeneration. Scattered hemlock.
29	4110 - Sugar Maple Association	High Density Pole	34.4	81	111-140	OI stand 45. Primarily an even-aged sugar maple stand with basswood and an occasional red maple and yellow birch. Balsam fir regen is present in pockets and along the frindge.

S t	Gwinn Mgt. Unit				brested State	e comparamenta e com
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	18.3	93		Cedar strip cuts made in 1975. Most of the residual cedar strips have blowdown with approximately 50% of the cedar still standing. The clearcut strips have decent aspen and fir regeneration but no cedar.
32	6120 - Lowland Cedar	High Density Pole	23.2	93		Swamp conifers with black ash and balm. Could almost call this stand an E type, especially on the north and west. Low and very wet.
33	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	32.8	93		OI stand 50. This stand was prepped in 2001, currently under contract (022- 09-01). It consists of low, wet aspen, balm, cedar, fir, spruce, and black ash.
34	4110 - Sugar Maple Association	High Density Log	81.2	93	111-140	OI stand 54. Good quality northern hardwood stand with a good hemlock component of hemlock. Additional species include basswood, yellow birch, cherry, elm, and super canopy white spruce. The stand also contains large diameter snag trees, and a good maple regeneration. This stand will be scheduled for a selection harvest to improve overall stand quality yet retain species diversity, conifer content, and wildlife attributes.
35	4110 - Sugar Maple Association	High Density Log	57.7	93	111-140	OI stand 55. Stand is currently under contract to LaFleur #22-09-01 was originally assigned to Maule in 2002. The stand consists of hard maple, cherry, and red maple poles and sawtimber with scattered hemlock.

Gwinn Mgt. Unit

6 – Nonforested Stands

Compartment: 094 / Year of Entry: 2012



Data updated before 10	:00 AM
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Stand	Cover Type	Acres	Gen Cmts:
6	3102 - Grass	1.1	Extreme western edge of a larger (private lands) grass opening.
11	3205 - Mixed Upland Shrub	14.8	Old natural grass opening filling in with cherry brush and fir along the edges.
12	3102 - Grass	1.4	Extreme western edge of a larger (private lands) grass opening.
14	3102 - Grass	3.2	Small grassy opening.
16	3102 - Grass	1.9	Old wildlife opening.
23	3102 - Grass	1.6	Old wildlife opening.
25	6220 - Alder/willow	28.3	
31	50 - Water	3.9	Beaver flooding



7 – 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.

Data updated before 10:00 AM

Stand	SCA Type	SCA Name	Acres	Comments
22	Unique Site - SCA	32094022	43.7	Swamp conifer stand with some cedar and fir regeneration. Scattered hemlock. Retain as a Special Conservation Area to protect the riparian and wildlife values along Dexter Creek.
24	Unique Site - SCA	32094024	68.7	Swamp conifer stand with some cedar and fir regeneration. Scattered hemlock. Former potential old growth designation, this stand should remain an SCA to protect the riparian values along The East Branch of the Whitefish River.
27	Unique Site - SCA	32094027	21.7	Mixed swamp conifers with tamarack. The Whitefish River flows thru this stand. Former potential old growth designation, this stand should remain an SCA to protect the riparian values along the East Branch of the Whitefish River.
28	Unique Site - SCA	32094028	60.8	Swamp conifer stand with some cedar and fir regeneration. Scattered hemlock. Former potential old growth designation, this stand should remain an SCA to protect the riparian values along Dexter Creek.



8 – 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.

Conservatio	on Type	Data updated before 10:00 AM Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.	
SCA	Wild and Scenic Rivers	Wild and Scenic Rivers are established under authority of the National Wild and Scenic Rivers Act, Public Law 90-542, as amended. Each Wild and Scenic River has a river specific Federal management plan, and State agencies may enter into written cooperative agreements with the administering Federal agency for the management of Wild and Scenic Rivers that are upon State-owned lands. There are 18 miles of Federal designated Wild and Scenic Rivers that are located within the State Forest.	