



Newberry Forest Management Unit
Compartment Review Presentation
Compartment #42020 Entry Year: 2014
Compartment Acreage: 2,225 County: Luce

Revision Date: 09/06/2012

Stand Examiner: Jason Tokar

Legal Description: T48N R11W, Sec. 3, 4 & 9; T49N R11W, Sec. 27-28, 33-35

RMU (if applicable): This compartment is located within the Two Hearted Headwaters Management Area.

Management Goals: Maintain and promote the characteristics and integrity of the proposed Quiet Area (Pretty Lake Quiet Area), as well as promote old growth forest characteristics through natural processes and very limited silvicultural treatments.

Soil and Topography: The soil type is predominately Croswell-Spot complex. Rubicon sand, Paquin sand, Rousseau-Spot complex, and Markey mucky peat are also major soil types. There are minor soil components of Wallace sand, Carbondale, Lupton and Tawas mucks. The topography ranges from wet, lowlands to relatively flat ground to gentle ridges. Steep sand banks are found along many portions of the Two Hearted River.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is mainly continuous State ownership with one parcel of Nature Conservancy land along the south boundary and one 40 acre parcel on the south side of Long Lake consisting of multiple small private land ownerships. Development is minimal due to primarily State ownership adjacent to the compartment. The area is used heavily for recreation activity such as camping, hiking, canoeing, fishing, ORV riding and some hunting.

Unique, Natural Features: Extensive wetland interspersed with mature pine and northern hardwoods. Dry mesic northern forest record within compartment (Pretty Lake Pinery, AB ranked). Potential for rare plants of rich mesic forests: *Carex assiniboinensis*, new england sedge, *Galium kam*, showy orchis, Ginseng, Goblin Fern. Potential for rare plants of dry northern forest and dry mesic northern forest: *Dalibarda repens*, pine drops. Potential for wetland plants such as Canada rice grass, autumnal water star wort, Wiegand's sedge, alga pondweed, english sundew, and moor rush
Loon record from Pretty Lake. Potential for goshawk, eagle and osprey in pine stands. Potential for RSH in M9 stands. Potential for Incurvate Emerald, ebony boghaunter, Frigga fritallry and Freija fritillary in bog and fen habitat.

Archeological, Historical, and Cultural Features: None known within the compartment. Archeological site listed adjacent to the north of the compartment boundary.

Special Management Designations or Considerations: The Pretty Lake Complex has been proposed as a Quiet Area. The vast majority of this compartment lies within this proposed quiet area designation. The southern portion of the compartment also falls within the Two Hearted River Natural River corridor.

Watershed and Fisheries Considerations: Fisheries Values: Excellent
Fisheries Concerns: This compartment contains the Pretty Lakes Quiet Area where a series of lakes are located. No treatments are located near any of the lakes, so Fisheries has no concerns at this time.

Wildlife Habitat Considerations: Compartment 20 lies in north western Luce county and is in the Seney Sand Lake Plain ecological sub-subsection. The compartment surrounds the Pretty Lakes complex proposed wilderness area and is in the Two Hearted Headwaters Management Area where black bear, blackburnian warbler, pileated woodpecker, and american marten are designated featured species. The compartment is dominated by mature cover types primarily consisting of white pine, northern hardwoods, upland mixed and mixed conifer types, and spruce with numerous small lakes interspersed. The area has been managed as a wilderness area in the past and no treatments are prescribed in the compartment this entry year. The compartment serves a vital purpose for wildlife species requiring large stands of mature cover types such as american marten and blackburnian warbler, and serves numerous other wildlife species needs for resting and escape cover, travel corridors, nest, den, and roosting sites and food sources. Loons nest in the compartment and waterfowl species use the lakes as resting sites during migration.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness. The Cambrian Munising Formation subcrops below the glacial drift. There is not economic use for the Munising. There are no gravel pits in the area, and potential appears to be limited. There is no economic oil and gas production in the UP.

Vehicle Access: Access into the compartment can be achieved from County Road 439, leading to Pretty Lake Campground, Poplar Camp Road on the west side of the compartment and Long Lake Trail and one small woods road from the east to the south sections of the compartment. This compartment is managed as a non-motorized area.

Survey Needs: No survey work is needed.

Recreational Facilities and Opportunities: Facilities include the Pretty Lakes SF Campground and proposed Quiet Area. Recreational opportunities include canoeing and kayaking, fishing, camping, wildlife viewing, hiking, hunting, snowmobiling and dog sledding.

Fire Protection: Large fire potential is low in this area because of the mixture of hardwood and mixed pine complexes broken up by a variety of lakes and marshes. Access is limited and may require short roads built for suppression activities.

Additional Compartment Information: Recommendation to close a small two track road heading into Section 33 from Poplar Camp Road to help maintain the integrity of the proposed Quiet Area and non motorized management. A Director's Order will be needed. One closed road on the west side of Pratt Lake will need to have the berm re-established and a "No Motorized Vehicles" sign installed. ORV activity has worn the berm down.

➤ **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**

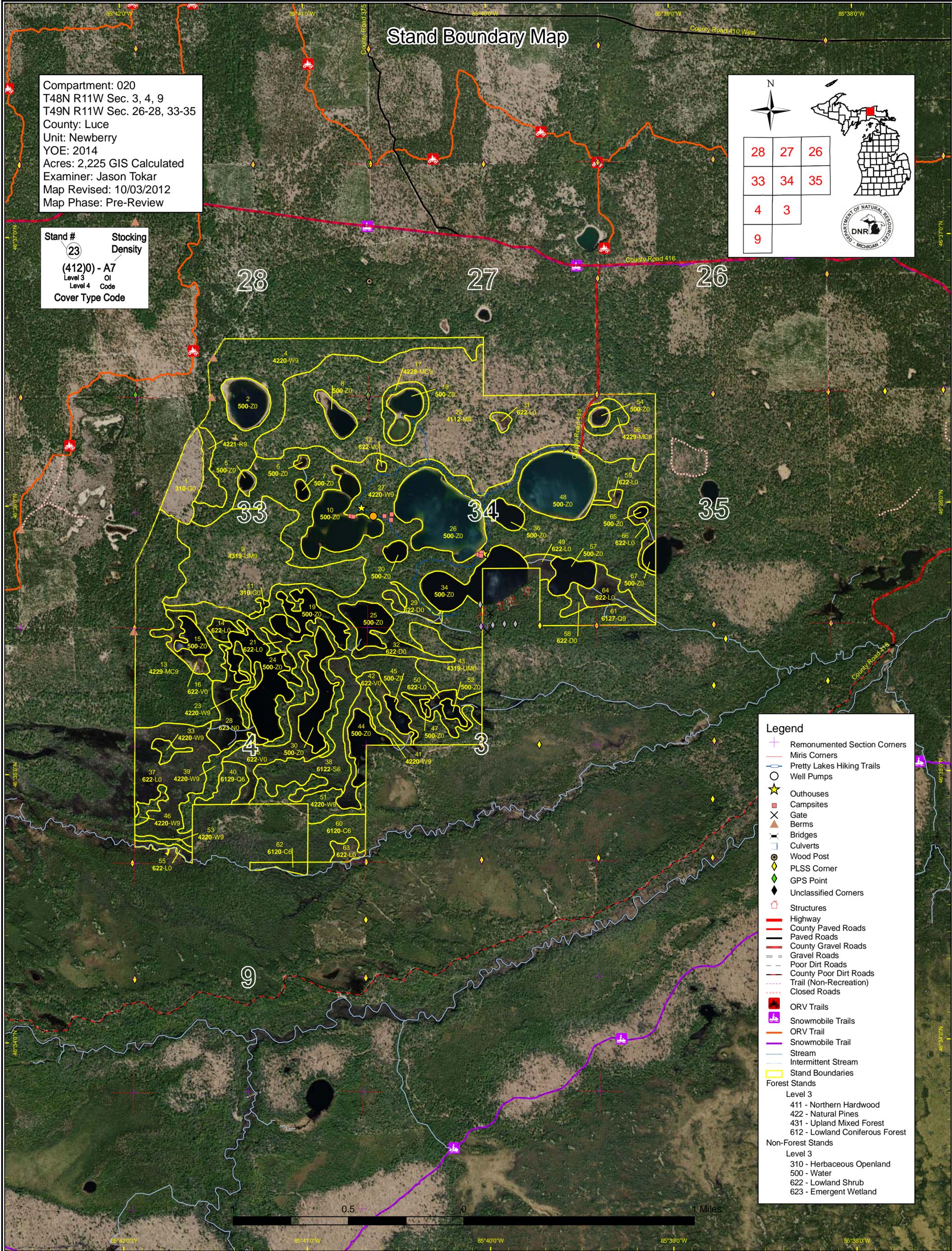
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Stand Boundary Map

Compartment: 020
 T48N R11W Sec. 3, 4, 9
 T49N R11W Sec. 26-28, 33-35
 County: Luce
 Unit: Newberry
 YOY: 2014
 Acres: 2,225 GIS Calculated
 Examiner: Jason Tokar
 Map Revised: 10/03/2012
 Map Phase: Pre-Review

Stand #
 (23)
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

28	27	26
33	34	35
4	3	
9		



Legend

- Remonumented Section Corners
- Miris Corners
- Pretty Lakes Hiking Trails
- Well Pumps
- Outhouses
- Campsites
- Gate
- Berms
- Bridges
- Culverts
- Wood Post
- PLSS Corner
- GPS Point
- Unclassified Corners
- Structures
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- ORV Trails
- Snowmobile Trails
- ORV Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

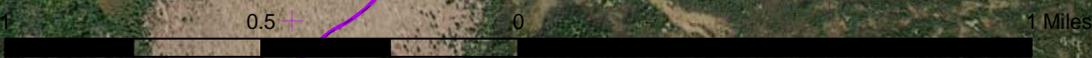
Level 3

- 411 - Northern Hardwood
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

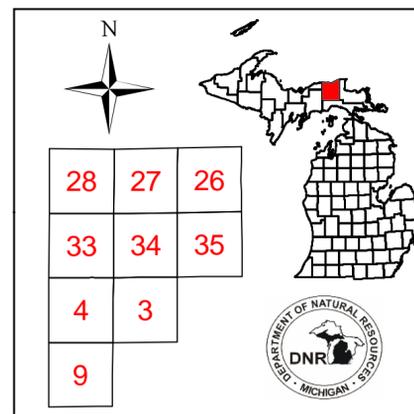
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Dedicated & Proposed Special Conservation Area Map

Compartment: 020
 T48N R11W Sec. 3, 4, 9
 T49N R11W Sec. 26-28, 33-35
 County: Luce
 Unit: Newberry
 YOE: 2014
 Acres: 2,225 GIS Calculated
 Examiner: Jason Tokar
 Map Revised: 10/03/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



- Legend**
- Remunented Section Corners
 - Miris Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas
 - SCA - Special Conservation Area
 - SCA Removal
 - Dedicated Special Conservation Areas
 - Campgrounds
 - Cold Water Streams
 - Cold Water Lakes
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Forest Stands
 - Level 3
 - 411 - Northern Hardwood
 - 422 - Natural Pines
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 - Non-Forest Stands
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 - 310 - Herbaceous Openland
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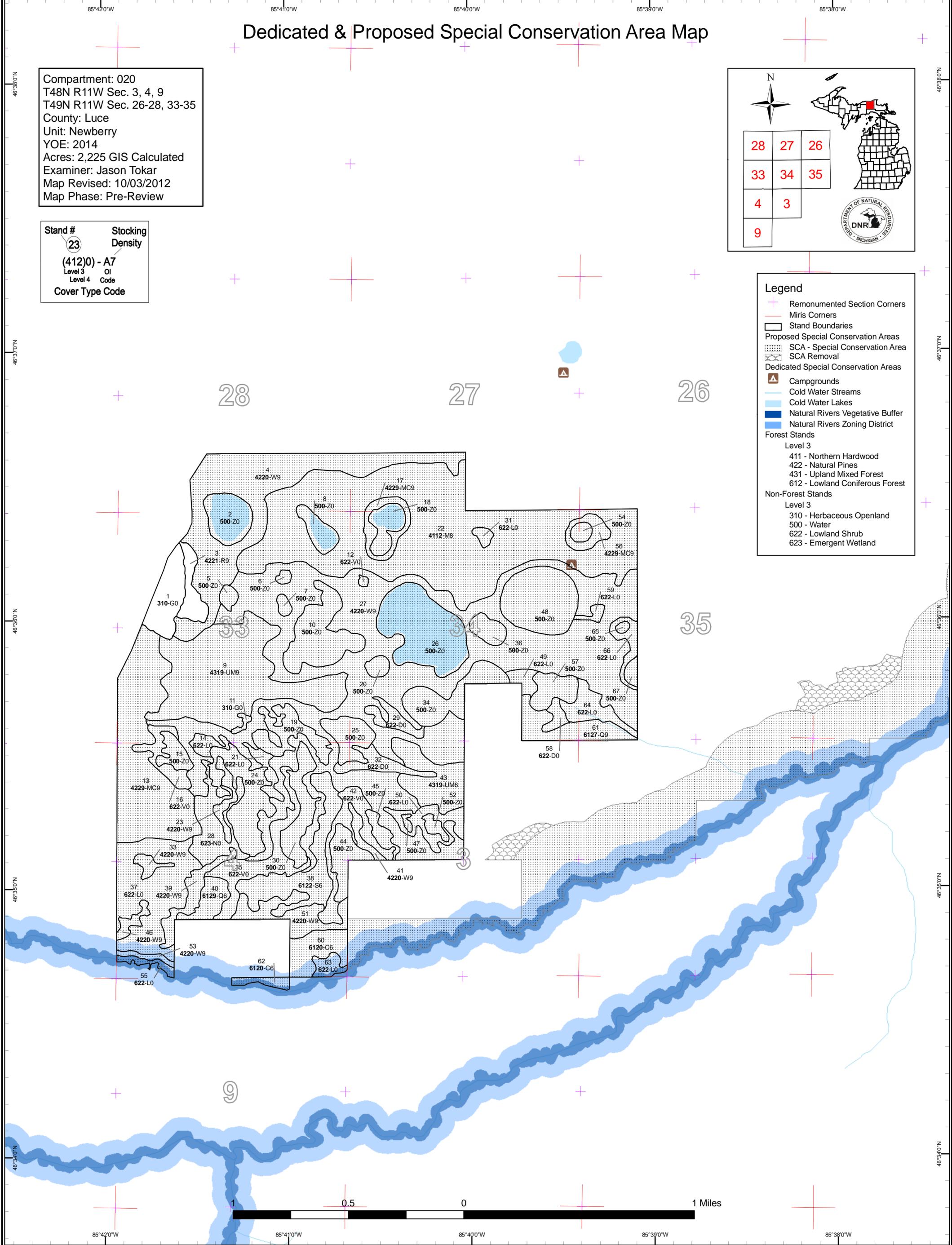


Table 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Unretn Age
Bog	74	0	0	0	0	0	0	0	0	0	0	0	0	0	74
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	29	0	29
Herbaceous Openland	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Lowland Conifers	0	0	0	0	0	0	0	0	0	27	0	0	14	0	41
Lowland Shrub	158	0	0	0	0	0	0	0	0	0	0	0	0	0	158
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	49	0	0	49
Marsh	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	120	0	22	0	0	142
Northern Hardwood	0	0	0	0	0	0	0	0	0	332	0	0	0	0	332
Red Pine	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14
Treed Bog	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	176	0	0	0	0	176
Water	435	0	0	0	0	0	0	0	0	0	0	0	0	0	435
White Pine	0	0	0	0	0	0	0	0	0	0	0	688	0	0	688
Total	754	0	668	0	760	42	0	2225							



Table 2 – Proposed Treatment Summaries

Newberry Mgt. Unit
Year of Entry 2014

Compartment 020
Total Compartment Acres: 2225

Acres by Treatment Type

Commercial Harvest - 0	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 27
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
	#Error	#Error	#Error	#Error	#Error	#Error	#Error
Total	#Error	#Error	#Error	#Error	#Error	#Error	#Error



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	NF_42020001- Regen check	26.8	3103 - Rubus-Fern				Other	Unspecified	42220 - Natural Jack Pine	Cmpt. Review Proposal

Prescription Monitor for success of desired regeneration, jack pine. Regeneration check in 2014.
Specs:
Other Regen check in summer 2011 showed 445 tr/ac (JP-137 tr/ac, RP-171tr/ac, WP-137 tr/ac). Currently the regen is less than 3 ft tall.
Comments:
Next If desired jack pine regeneration is not at a fully stocked level, plant the site with jack pine.
Steps:
Proposed
Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 26.8**

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Error

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: #Error

**Total Treatment
Acreage Proposed: 0**

Stand	Newberry Mgt. Unit		5 – Forested Stands			Compartment: 020	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
3	42210 - Natural Red Pine	High Density Log	13.9	94	111-140		Harvested as sale #030-04, completed on 11/16/2007. Scarification (FTP #42-619) completed 10/31/2008. Regen check in summer 2011 showed 445 tr/ac (JP-137 tr/ac, RP-171tr/ac, WP-137 tr/ac).
4	42200 - Natural White Pine	High Density Log	136.7	110	111-140		Natural white pine stand with red pine, birch, aspen.
9	4319 - Mixed Upland Forest	High Density Log	139.8	90	111-140		Stand contains a lot of large diameter white pine, red maple and red pine. Most of the beech has died out of the stand. White birch is mainly in the western side of the stand and is dying off. Supercanopy white pine. Thick subcanopy, a mix of all species, 10-20 ft tall avg. Large diameters, fair amount of dead and down material.
13	42290 - Natural Mixed Pine	High Density Log	119.5	94	111-140		Large diameter white pine with red pine and black spruce. Minor component of red maple. Trace to 2% of aspen, white birch and balsam.
17	42290 - Natural Mixed Pine	High Density Log	12.5	112	111-140		Large diameter white pine with red pine, red maple and hemlock. Areas thicker to white pine, others with more hemlock mixed in. Good maple component throughout. Borders Deer Lake.
22	4112 - Maple, Beech, Cherry Association	Medium Density Log	332.3	91	51-80		Stand has the appearance of "falling apart" due to the high beech component dying out (BBD). Canopy is very open in spots due to the dying beech. Red maple, hemlock and white pine. Very thick subcanopy of red maple, beech, striped maple. Lots of dead and down material from the beech mortality.
23	42200 - Natural White Pine	High Density Log	7.9	112			
27	42200 - Natural White Pine	High Density Log	481.2	112	141-170		Large diameter white pine with red pine, red maple, paper birch, aspen and hemlock. Some variability through the stand but all one big complex of natural white pine around the Pretty Lakes quiet area. Areas thicker to white pine, others with more white birch mixed in. Good maple component throughout. Lower areas have more black spruce mixed in.
33	42200 - Natural White Pine	High Density Log	4.9	112			
38	6122 - Black Spruce	High Density Pole	49.2	115	51-80		
39	42200 - Natural White Pine	High Density Log	15.6	112	81-110		
40	6129 - Mixed Coniferous Lowland Forest	High Density Pole	13.6	125	51-80		
41	42200 - Natural White Pine	High Density Log	5.8	112	81-110		White pine ridge, large diameters. White birch is dying out of the stand. Red maple, aspen and red pine. Occasional hemlock. Mix of species in subcanopy.



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Newberry Mgt. Unit

5 – Forested Stands

Compartment: 020
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4319 - Mixed Upland Forest	High Density Pole	35.9	90	81-110	Small diameter red maple with large diameter, tall white pine and red pine. Large diameter aspen. Super canopy white pine and red pine.
46	42200 - Natural White Pine	High Density Log	5.3	112	111-140	
51	42200 - Natural White Pine	High Density Log	27.2	112	81-110	White pine ridge, large diameters. White birch is dying out of the stand. Red maple, aspen and red pine. Occasional hemlock. Mix of species in subcanopy.
53	42200 - Natural White Pine	High Density Log	3.7	112	111-140	
56	42290 - Natural Mixed Pine	High Density Log	9.9	112	111-140	Large diameter white pine with red pine, red maple and hemlock. Areas thicker to white pine, others with more hemlock mixed in. Good maple component throughout. Borders a small lake.
60	6120 - Lowland Cedar	High Density Pole	23.2	140	81-110	
61	6127 - Lowland Pine	High Density Log	27.1	93	111-140	Large diameter white pine with smaller spruce, maple, scattered large aspen. Pockets of hemlock. Much of the stand is lower ground than other white pine stands in the area.
62	6120 - Lowland Cedar	High Density Pole	5.7	140	81-110	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3103 - Rubus-Fern	26.8	Natural Regen	Jack Pine	Stand was planted in 1940. Harvested as sale #030-04, completed on 11/16/2007. Scarification (FTP #42-619) completed 10/31/2008. Regen check in summer 2011 showed 445 tr/ac (JP-137 tr/ac, RP-171 tr/ac, WP-137 tr/ac). Currently the regen is less than 3 ft tall.
2	50 - Water	23.2	No	Unspecified	Pratt Lake
5	50 - Water	4.0	No	Unspecified	Dry, August 2012
6	50 - Water	2.0	No	Unspecified	Dry, August 2012.
7	50 - Water	2.8	No	Unspecified	Almost completely dry, August 2012
8	50 - Water	11.8	No	Unspecified	Sid Lake
10	50 - Water	43.4	No	Unspecified	Beaverhouse Lake
11	3102 - Grass	1.9	No	Unspecified	
12	6225 - Bog	1.1	No	Unspecified	
14	6229 - Mixed lowland shrub	6.3	No	Unspecified	
15	50 - Water	9.5	No	Unspecified	North Branch lakes. Almost completely dried up, August 2012.
16	6225 - Bog	13.6	No	Unspecified	
18	50 - Water	14.4	No	Unspecified	Deer Lake
19	50 - Water	23.4	No	Unspecified	North Branch Lakes. Almost completely dried up, August 2012.
20	50 - Water	4.9	No	Unspecified	Bullhead Lake
21	6229 - Mixed lowland shrub	7.7	No	Unspecified	
24	50 - Water	41.5	No	Unspecified	North Branch Lakes. Almost completely dried up, August 2012.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
25	50 - Water	18.8	No	Unspecified	North Branch Lakes. Very low water level, August 2012.
26	50 - Water	65.8	No	Unspecified	Camp Eight Lake
28	6239 - Mixed Emergent Wetland	30.0	No	Unspecified	
29	6224 - Treed Bog	10.1	No	Unspecified	
30	50 - Water	24.5	No	Unspecified	North Branch Lakes. Almost dried up, August 2012.
31	6229 - Mixed lowland shrub	3.2	No	Unspecified	
32	6224 - Treed Bog	13.5	No	Unspecified	
34	50 - Water	30.8	No	Unspecified	Long Lake
35	6225 - Bog	34.0	No	Unspecified	
36	50 - Water	9.4	No	Unspecified	Brush Lake
37	6229 - Mixed lowland shrub	76.3	No	Unspecified	
42	6225 - Bog	25.3	No	Unspecified	
44	50 - Water	17.2	No	Unspecified	Small lake. Very low water level, August 2012.
45	50 - Water	6.8	No	Unspecified	Small lake. Very low water level, August 2012.
47	50 - Water	1.4	No	Unspecified	
48	50 - Water	50.6	No	Unspecified	Pretty Lake
49	6229 - Mixed lowland shrub	6.3	No	Unspecified	
50	6229 - Mixed lowland shrub	17.5	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
52	50 - Water	4.1	No	Unspecified	
54	50 - Water	4.1	No	Unspecified	Small Lake. Almost completely dried up, August 2012.
55	6229 - Mixed lowland shrub	4.5	No	Unspecified	
57	50 - Water	15.5	No	Unspecified	Otter Lake
58	6224 - Treed Bog	5.3	No	Unspecified	
59	6229 - Mixed lowland shrub	3.1	No	Unspecified	
63	6229 - Mixed lowland shrub	6.7	No	Unspecified	
64	6229 - Mixed lowland shrub	17.3	No	Unspecified	
65	50 - Water	1.5	No	Unspecified	
66	6229 - Mixed lowland shrub	8.9	No	Unspecified	
67	50 - Water	3.5	No	Unspecified	Bob Lake

**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.

Stand	SCA Type	SCA Name	Acres	Comments
multiple - see	Unique Site - SCA	Pretty Lake Proposed Quiet Area	2184.3	Area is being managed as a proposed "Quiet Area". It was proposed back in 1993 but has never been officially designated. Management has been in accordance with the proposed Quiet Area designation.



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.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.