

MICHIGIAN DEPARTMENT OF NATURAL RESOURCES

WILDLIFE DIVISION

Management Plan for the Halifax Grouse Enhanced Management Site



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May 2015

Introduction

The Halifax Grouse Enhanced Management Site (GEM) was established in 2015 to promote ruffed grouse hunting and hunter walk-in access to intensively managed grouse habitat in Michigan. The Halifax GEM is one of many such GEMs that were developed in the Upper Peninsula (UP) around this time. In addition to providing excellent hunting opportunities and grouse habitat, they will provide wildlife viewing opportunities and help support local economies.

The GEMs are designed to primarily benefit ruffed grouse and woodcock but aspen, the primary cover type, provides valuable habitat for numerous other wildlife species including breeding and foraging habitat for chestnut-sided and golden winged warblers, browse for white-tailed deer and moose, and food for snowshoe hare. Our intention is that these areas will be utilized by local and non-resident hunters and for many purposes such as aiding in hunter recruitment and retention and for educational purposes to showcase intensive aspen management. The UP GEMs will support our local forest economy and further tie communities to our natural resources by capitalizing and expanding on the forest tourism industry, in accordance with the Department of Natural Resources' (DNR) Managed Public Land Strategy.

Inventory

The Halifax GEM consists of approximately 2693 acres of state forest land about 20 miles north of the town of Newberry and about 20 miles west of the town of Paradise in northern Luce County. The GEM is located in portions of sections 4, 5, 8, 9, 10, 15, 16, 21 and 22 of T48N R8W (Appendix 1) and is split into northern and southern portions by M-123. Aspen types comprise 1,393 acres of the GEM (Appendix 2) while other cover types present include northern hardwoods, lowland conifer (including some cedar and hemlock stands), lowland types along creeks and smaller amounts of spruce, fir and red pine.

There are five parking lots that provide access to the GEM, three on the north side of M-123 and two on the south side of M-123 from which a network of forest roads/trails originate. Other trails will be added to the network as a result of continued logging activity in the area.

A network of closed logging roads throughout the GEM provides forest trails that are available for walk-in access. The primary access points are trails originating

from parking areas along County road 500 (two locations), M-123 (two locations), and Halifax road (one location). Gates/berms at all locations block vehicular traffic allowing for desired walk-in access. Other access points are located throughout the GEM but do not provide the same ready access to the forest trail network. The entire area is closed to motorized vehicles.

MANAGEMENT ACTIONS

Goal 1: Promote preferred habitat for ruffed grouse.

Ruffed grouse prefer young aspen stands (< 25 years old) with high stem densities for brood rearing, feeding, and escape cover. Older trees provide important sites for roosting, drumming, and food sources. Grouse feed on buds, catkins, and leaves as well as the flower buds of older aspen (> 25 years old) (Hammill & Visser, 1984). Thus, various age classes of aspen, in proximity to one another, are important to grouse throughout their annual cycle. Aspen stands also provide important habitat characteristics for other wildlife. Woodcock prefer young aspen growth, particularly when it is in association with moist soils where they probe for earthworms. Aspen stands also provide browse and cover for white-tailed deer, moose, and snowshoe hare. Older trees provide snags that are used by cavity nesting species and eventually as drumming logs. In areas with adequate lowland conifer nearby, moose will use young aspen stands for browse. Edges between young and old stands, as well as transitions between aspen stands and other adjacent cover such as lowland conifers or openings, tend to support numerous species of shrubs and are used by various wildlife species. A variety of bird species use all age classes of aspen for breeding and foraging as well.

Aspen are relatively shade-intolerant. Stands are managed via clearcutting to allow adequate sunlight for young growth. Cutting also tends to spur growth of these species through root sprouts, or clones. White birch, often a component of aspen stands and another important tree for ruffed grouse and other wildlife, also does best in full sunlight.

Aspen stands will be managed in small blocks to encourage multiple age classes in close proximity to one another to provide optimum ruffed grouse habitat. Although past forest management activities promoted multiple blocks of young aspen, most mature stands were treated and resulting blocks are relatively young; further age class diversity and a reduction in overall stand size is desired. Stand age currently varies from approximately 0 to 75 years, but the majority of stands (72% of the aspen, roughly 1,000 acres) are 20 years old or younger.

Future management will focus on reducing the current size of aspen stands to approximately 20 acres, diversifying age classes of aspen stands with the objective of having up to 10 age classes present at one time, and improving on stand adjacency so stands of various ages are proximate to one another. To accomplish this, some areas may be treated prior to maturity. The treatment rotation map in Appendix 3 shows aspen blocks for treatment and the planned treatment rotation for each stand and Tables 1 and 2 provide details by rotation year and stand level details. The rotation will occur such that the GEM area is re-entered on 5 year intervals to treat stands. The highly interspersed habitat created by these treatments should encourage use of the area by ruffed grouse as well as the other wildlife species listed above.

Stand treatments will primarily be conducted through commercial timber sales where possible. However, some non-commercial timber stand improvements may be necessary at times. During stand treatments, conifers ≤ 4 inches dbh may be left uncut since low conifer cover can be important to grouse (Hammill & Moran, 1986). Efforts will be made to maintain stand diversity by leaving cedar, hemlock, and under-represented species. Any oak, dogwood, or other mast-producing species will generally be maintained and promoted. Some tree or shrub species may be planted near or along trails to enhance food resources. Those species include wild raisin, dogwood, cranberry, holly, red oak, beaked hazelnut, or other native or naturalized species. Small slash piles may be encouraged during harvest activities where feasible and practical to enhance cover for snowshoe hare.

Goal 2: Enhance the recreational opportunities for hunting.

The primary purpose of this area is to enhance the hunting opportunities here, and create a destination for hunting. Similar areas are being developed on state land across the Upper Peninsula. Although the emphasis is on ruffed grouse, the area is intended to be available for hunting all huntable species and management should encourage others such as white-tailed deer, woodcock, and snowshoe hare whenever possible.

Hunting opportunities will be enhanced using a number of methods, identified in each objective below.

Objective: Support a unique hunting experience.

The Halifax GEM will support both a unique walk-in experience and an opportunity to hunt an intensively managed area for ruffed grouse and other species.

Parking areas are available at trail heads throughout the GEM (Appendix 4) on both the north and south sides of M-123. One parking area is located just north of M-123 on County Road 500 at an access point to the GEM. Hunters and others can park in a small gravel lot west of a berm or gate that blocks vehicular access east into the area, and walk the trail system behind the gate. A second parking area is located approximately one mile further north along County Road 500 at the junction of the snowmobile trail on the east side of the road. The last parking area is on the north side of M-123 and east of County Road 500 approximately 1.25 miles. Gates will be placed a short distance beyond the parking lot to ensure walk-in access.

Two parking lots exist on the south side of M-123 including the eastern most parking lot which is approximately one mile east of the Halifax Road and just before the Tahquamenon Falls State Park boundary. The GEM kiosk will be placed in this main parking area and a gravel pad will be constructed to define the parking area. The area is somewhat large and thus a gate will be installed at the trailhead. The last parking lot is a small parking lot that is approximately 0.75 miles down the Halifax Road. Gates will be installed a short distance down a forest road from which walk in access will begin.

Objective: Maintain a trail system for hunters and other users.

The existing forest roads resulting from previous logging activities provide a trail system through the GEM. These roads are not marked, generally are unimproved, and are essentially linear forest openings. Some have young forest regeneration in them, and have been kept open by previous ATV use.

Trail signs will be posted in some locations, including near parking areas, to provide a map and/or location directions. Trails will require maintenance, which may range from periodic brushing to graveling or other improvements.

Some trails may be planted with herbaceous items such as grasses or legumes or fruiting shrubs along their length. This may occur in conjunction with other management activities that require use of the roads, like logging, or as independent

projects. Partnerships with stakeholders including the Ruffed Grouse Society will be sought for some of these projects.

Objective: Establish partnerships to assist in management

Partnerships with stakeholders are desirable to conduct management here and promote the GEM. The Ruffed Grouse Society has partnered with the Department, funding gates and other infrastructure near parking areas. The Department will continue to seek partnership opportunities with various organizations to implement management activities such as trail maintenance or improvements (including plantings) and establishing or maintaining signs.

Goal 3: Public information/outreach

This GEM is being created to provide a destination for grouse hunters. Public outreach will be needed to identify and promote the area, as well as direct visitors to the site.

Objective: Identify the area

Various methods can be used to identify the area and direct people to the site. The Halifax GEM will be identified on the MI Hunt system, and it will be promoted as part of the UP GEMS. On-site, signs identifying the area will be placed on County Road 500 and Halifax Road and additional information will be available at the kiosk location. Pamphlets identifying the GEM can be handed out to local businesses to distribute to the public.

Objective: Establish the site as a destination and an asset to the local economy

Establishment of the Halifax GEM will be communicated to local stakeholders and businesses in the Newberry and Paradise area. Local businesses will be able to use the GEM as a tool to promote tourism to the area and once established on the MI Hunt system and possibly in other media, the Halifax GEM can be advertised on a wider scale to encourage local tourism. Although currently difficult to quantify, the GEM will likely be an asset to the local economy.

REFERENCES

Hammill, J., and L. Visser. Status of Aspen in Northern Michigan as Ruffed Grouse Habitat. Pages 123-136 *in* Ruffed Grouse Management: State of the Art in the Early 1980's. Proceedings of a symposium held at the 45th Midwest Fish and Wildlife Conference, St. Louis, Missouri, December 1983. Edited by William Robinson, Professor of Biology, Northern Michigan University. 1984. 181 pp.

Hamill, J. H., and R. J. Moran. 1986. A habitat model for ruffed grouse in Michigan *in* Wildlife 2000: Modeling Habitat Relationships of Terrestrial Vertebrates. Edited by J. Verner, M. L. Morrison and C. J. Ralph. pp. 15–18. University of Wisconsin Press, Madison, Wisconsin. 470 pp.

Table 1. Harvest treatment rotation, year of entry and acreage for aspen types in the Halifax GEM.

Rotation	Year of Entry	Acres
1	2020	84
2	2025	22
3	2030	77
4	2035	94
5	2040	180
6	2045	183
7	2050	169
8	2055	298
9	2060	130
10	2065	156
Total:		1393

Table 2. Compartment and stand numbers, rotation, year of entry and acres for aspen harvest treatments.

Compartment	Stand	Age in 2015	Rotation	Treatment Year of Entry	Acres
47	0	5	8	2055	14.5
47	1	0	8	2055	46.5
47	2	5	9	2060	18.4
47	3	15	6	2045	12.0
47	4	15	5	2040	29.7
47	5	5	9	2060	23.8

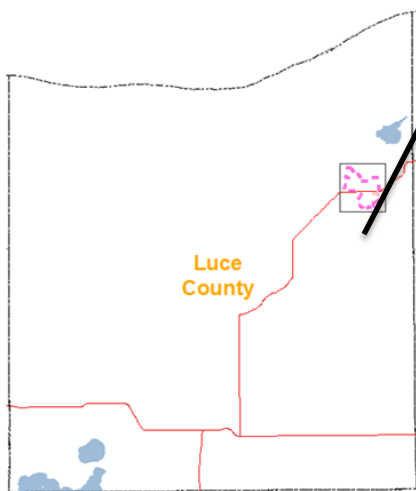
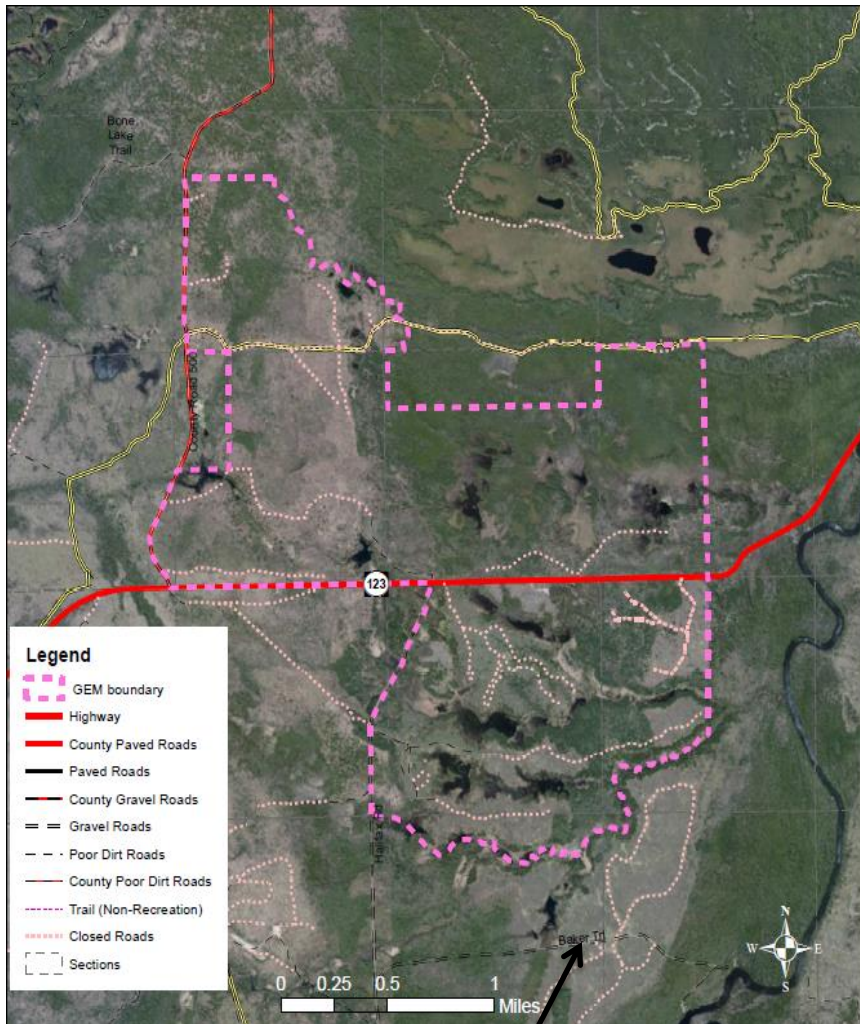
Table 2 continued. Compartment and stand numbers, rotation, year of entry and acres for aspen harvest treatments.

47	7	7	7	2050	17.0
47	8	0	8	2055	15.8
47	9	17	6	2045	36.4
47	10	7	7	2050	31.4
47	11	0	10	2065	32.2
47	12	7	9	2060	37.8
47	13	27	3	2030	29.3
47	14	17	5	2040	18.1
47	15	20	4	2035	20.9
47	16	58	1	2020	15.3
47	17	0	8	2055	28.9
47	18	18	6	2045	30.6
48	19	20	7	2050	3.6
48	20	11	7	2050	1.0
48	21	12	7	2050	2.5
49	22	3	9	2060	21.3
49	23	3	8	2055	18.1
49	24	64	2	2025	8.1
49	25	73	2	2025	10.0
49	26	73	2	2025	3.9
49	27	22	3	2030	34.0
49	28	3	10	2065	26.1
49	29	59	1	2020	4.4
49	30	2	8	2055	13.3
49	31	20	6	2045	25.2
49	32	11	7	2050	20.2
49	33	2	8	2055	29.6
49	34	11	6	2045	25.6
49	35	11	7	2050	29.1
49	36	75	1	2020	20.2
47	37	5	10	2065	14.7
47	38	5	10	2065	11.0
47	39	17	5	2040	25.4
47	40	17	7	2050	26.1
47	41	7	8	2055	12.1
47	42	75	1	2020	4.2
47	43	75	1	2020	4.7

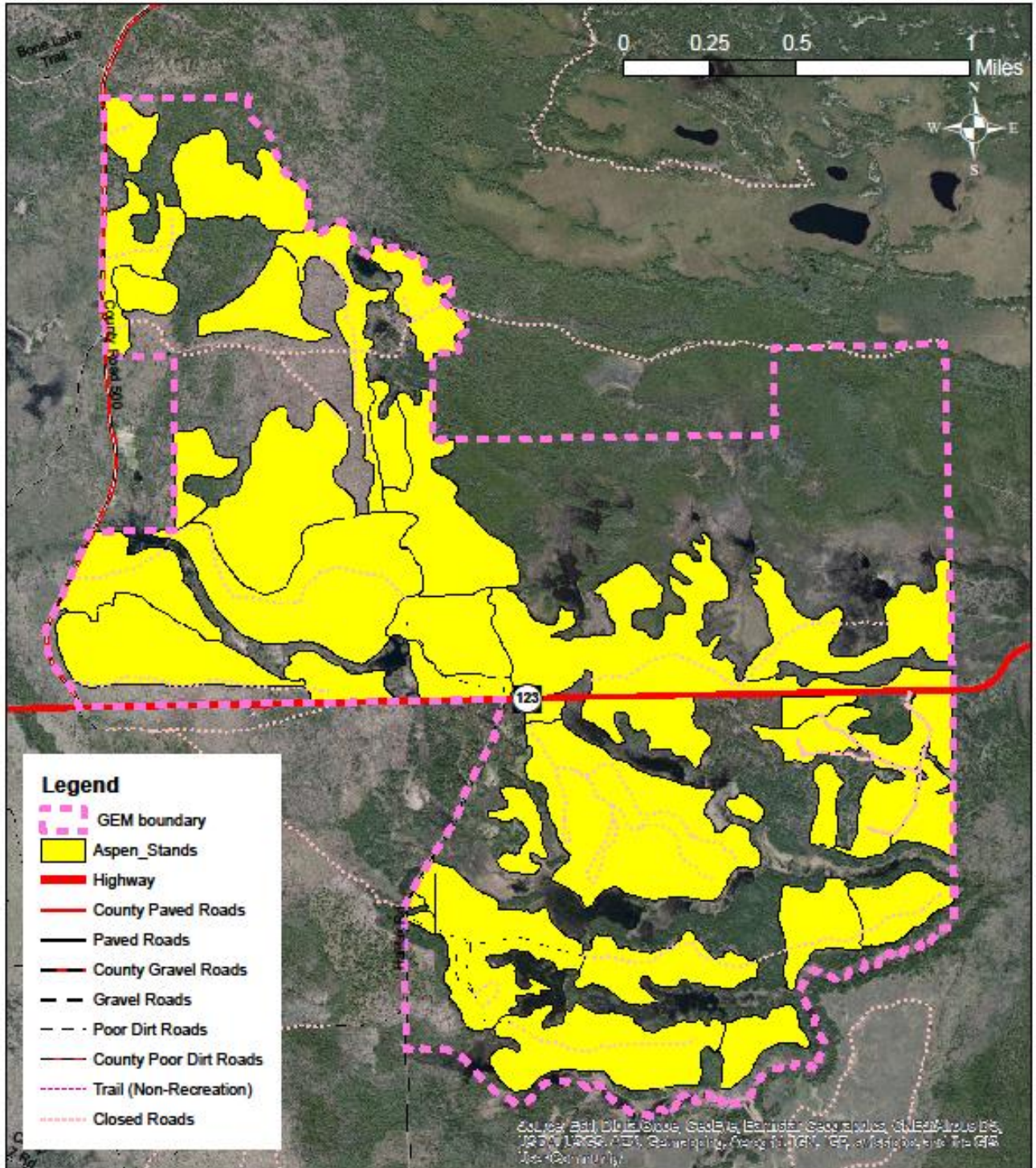
Table 2 continued. Compartment and stand numbers, rotation, year of entry and acres for aspen harvest treatments.

47	44	0	9	2060	23.0
47	45	7	8	2055	19.2
47	46	7	10	2065	28.9
47	47	7	7	2050	24.4
47	48	27	5	2040	19.4
47	49	27	4	2035	20.3
47	50	20	6	2045	17.9
47	51	0	8	2055	34.0
47	52	64	10	2020	14.1
47	53	0	9	2060	18.1
47	54	0	10	2065	19.8
47	55	64	10	2020	14.7
47	56	18	5	2040	30.1
49	57	3	10	2065	21.3
49	58	3	8	2055	17.7
49	59	22	3	2030	15.6
49	60	22	5	2040	21.7
49	61	22	4	2035	32.7
49	62	22	4	2035	27.5
49	63	20	5	2040	21.0
49	64	20	7	2050	19.5
49	65	11	6	2045	18.3
49	66	11	8	2055	21.7
49	67	11	6	2045	21.3

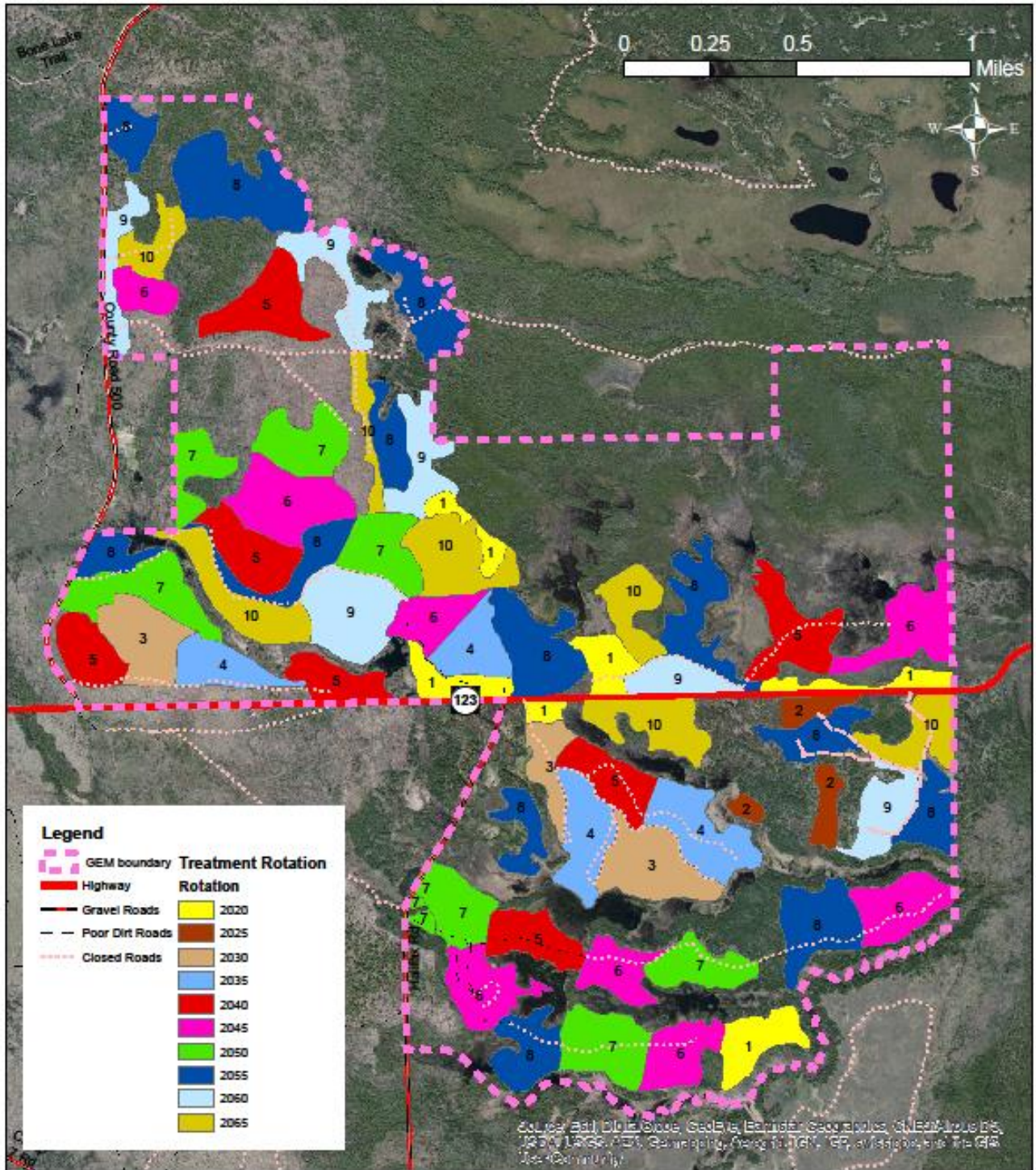
Appendix 1. Location and boundary of the Halifax Grouse Enhanced Management (GEM) area.



Appendix 2. Halifax Grouse Enhanced management Area Aspen Stands.



Appendix 3. Treatment Rotation for the Halifax GEM.



Appendix 4. Access points for the Halifax GEM.

