

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
WILDLIFE DIVISION

**Draft - Management Plan for the
Ralph Grouse Enhanced Management System (GEM)**



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Introduction

The Ralph Grouse Enhanced Management System (GEM) is being developed to promote ruffed grouse habitat and hunting opportunities in the South Central Upper Peninsula (UP). The Ralph GEM is one of a growing number of GEMS located across the UP Region (Figure 7). GEMS are a collection of intensively managed lands spread across the Peninsula to provide walk-in hunting opportunities. These areas will act as destination sites for grouse hunters, while providing a unique opportunity for hunting and wildlife viewing, and ultimately supporting local economies.

The GEMS will benefit grouse and woodcock primarily but will also provide habitat for a variety of other wildlife species including bear, deer, and snowshoe hare. These areas will be utilized by local and non-resident grouse hunters. GEMS can be used as an effective tool for hunter recruitment and retention, as well as a showcase of optimal grouse habitat management for educational purposes. The UP GEMS will support our forest economy and will further tie local communities to our natural resources by capitalizing and expanding the forest tourism industry, in accordance with the Department's Land Management Strategy. MDNR Wildlife staff will build a reciprocal relationship with community leaders and local businesses by advertising GEMS throughout the UP Region. Signs will be posted at each site.

Inventory

Grouse and woodcock hunters from across the country have been traveling to Dickinson County for more than 60 years to hunt birds on state-owned lands. The Ralph GEM is centralized in this historic hunting area of Dickinson County. It is located in T43N R28W Sections 1,2,3,4,7,8,9,10,11,12,15,16,17,18,19,20,21, & 22. (Figure 1). The GEM is approximately 5,350 acres in size. Aspen forest comprises 51% (2,730 acres) of the GEM (Figure 2). Additional acreage of early successional aspen will be available as other stands of conifer and mixed hardwood (which contain an aspen component) are treated. Other cover types within the Ralph GEM include northern hardwood, northern white cedar, upland conifer, upland mixed hardwood, lowland mixed hardwood, lowland conifer, lowland and upland brush, and grasslands, all of which are important in meeting life requisites for a variety of game and non-game wildlife species.

There are two primary access points to this area, from which a network of forest roads/trails originates. Other trails may be added to the network to provide additional access for the logging activity necessary to develop the planned aspen age class mosaic.

A network of closed logging roads throughout the GEM will provide forest trails that are only available through walk-in access. The primary access points originate off of the Turner Road, between the villages of Channing and Ralph (Figure 4). Gates and/or berms will be placed at various locations throughout the GEM to block vehicular traffic and protect herbaceous plantings. The restricted access will also create many walk-in only, hunting areas in the GEM (Figure 4).

MANAGEMENT ACTIONS

Goal 1: Promote preferred habitat for ruffed grouse.

Aspen Management

Ruffed Grouse prefer young stands of aspen (<25 years old) with high stem densities for brood cover and nesting habitat. Older trees that provide sites for roosting and budding are also an important component. Grouse feed on buds, catkins, leaves, and also on the flower buds of older aspen (>25 years old) (Hammill and Visser, 1984). Thus, various age classes are important to grouse. Aspen stands also serve an important purpose for other wildlife. Woodcock prefer young aspen growth, especially when in association with moist soils where they can probe for earthworms and invertebrates with their long beak. Aspen also provides browse and cover for white-tailed deer and snowshoe hare. Edges that are created between young and old stands as well as with other cover types such as cedar, northern hardwood and grassy openings are also used by many species, including those mentioned above.

Aspen is a shade intolerant species, therefore stands are managed via clear-cutting, which allows adequate sunlight to promote growth. Cutting also tends to spur growth of these species through root sprouting or clones. White Birch, often a component of aspen stands and another important tree for ruffed grouse and other species, 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, promoting better grouse habitat. Stand age currently varies from 0 (recently harvested) to 59 years, but the majority of stands (65 % of aspen) are 21 years or older. There is ample opportunity to create varying age classes throughout the GEM. Conifer inclusions within aspen stands are an important source of escape cover for grouse so such stands will be managed to support this component (Hammill and Moran, 1986). Efforts will also be made to maintain stand diversity by retaining cedar, hemlock, and other under-represented species in the stands. Any mast producing species will generally be maintained and encouraged. The Habitat Suitability Index model developed by Hammill and Moran will be used to guide management of the GEM.

Management of decadent alder, through cutting, is planned as part of a cooperative project through a 2015 Wildlife Habitat Grant. Alder is found in lowland stands and can be found as inclusions in other forest types. Creating young, thrifty alder stands will improve habitat for woodcock.

Future management will focus on diversifying age classes of aspen with the goal of having up to 8 age classes at one time, with stands of varying age classes in close proximity to one another. To accomplish this, small stands will be carved out of large, single-aged aspen stands to improve

the age class diversity, in the project area. The treatment rotation map (Figure 3) shows blocks for treatment and the planned treatment rotation for each stand. Stands will be treated over 5 year intervals. Planned rotation allows for an average of 340 acres of aspen to be cut every 5 years, ensuring age class diversity (Table 2). The habitat created by these treatments should encourage use of the area by ruffed grouse, woodcock and other wildlife requiring a variety of age classes of the aspen.

Soft and Hard Mast Production

Grouse usually have a wide array of native foods available such as aspen, birch, hazel, ironwood, cherry, and dogwood. We will encourage these native food sources where possible. We intend to increase soft and hard mast production in the Ralph GEM by planting preferred species such as; apple, crabapple, thorn apple, high-bush cranberry and oak. Many of the above listed species will be planted along the trail systems, as well as along the edges of the many forest openings/grasslands found within the GEM.

Grassland Opening Maintenance and Road Seeding

The network of small and large grass openings (Figure 5) will be maintained as such and a portion of those grasslands, along with woods roads and skid trails, may be planted to a forage mix consisting primarily of clover or a Ruffed Grouse Society approved mixture composed of Alsike White, White Dutch, Haifa New Zealand White, Crimson, Jumbo II Ladino, and Duration Red clover species. There are 350 total acres of openings in this GEM where opening maintenance (clover planting, prescribed burns, hard and soft mast plantings and sharecropping) will be conducted (Table 1).

Goal 2: Enhance the recreational opportunities for hunting.

The primary purpose of the GEM is to enhance the hunting opportunities here, and create a destination for grouse and other hunters. Similar areas are being developed on state land throughout the UP. Although the GEMS primary emphasis is on ruffed grouse, the area is intended to be available for hunting all game species and management should encourage others such as white-tailed deer, woodcock, bear and snowshoe hare.

Support a unique hunting experience

The Ralph GEM will be able to offer hunters both a unique walk-in experience and the opportunity to hunt an intensively managed area for ruffed grouse and other species.

Parking areas will be available at 2 locations in the GEM (Figure 4). One parking area is located just north of the Turner Road at the Henderson location. The second is located midway up the Dry Lake Road. These areas access the primary trail network for the GEM. Hunters can park in these small, improved parking areas, and will then be able to walk in and hunt behind the gates or directly into timbered stands. Hunters will be able to park alongside of either of the main

access roads and at any of the gates, which also provide protection to herbaceous plantings along hunter walking trails.

Kiosks will be placed at main parking areas, to better identify the GEM, recognize our local stakeholders, and clarify the access restraints for motorized vehicles. Signs will be placed at other parking areas, helping to identify them. Ten (24) gates will be placed on existing roads and trails labeled as “Trails” that originate off of the main “Roads” (Figure 4), to prevent vehicular access into the GEM.

Maintain and create a trail system for hunters and other users.

Existing forest roads that are a result of past logging activities currently provide a trail system throughout the GEM. These are unmarked roads, generally unimproved, and are basically linear forest openings. Some have young forest regeneration in them and others have been kept open due to ATV, vehicle usage, timber harvest activities or active opening maintenance for wildlife. Other trails will also be created due to future logging activities in the GEM. Where appropriate, these will then be maintained as walking trails to better access areas of the GEM.

Trail signs or kiosks will be posted in some locations, mainly near parking areas, to provide a map and/or location directions from different starting points. Trails will require maintenance, which will include periodic brushing, graveling, planting, or other improvements.

Some trails will be planted with herbaceous vegetation such as legumes or grasses. This will occur in conjunction with other management activities that require the use of the trail system, such as logging, or as independent projects. Partnerships with stakeholders, such as the Ruffed Grouse Society, will be sought for some of the projects.

Establish partnerships to assist in management

WLD staff will submit annual budget requests over the next decade to perform the above-noted habitat work. We are in contact with the Ruffed Grouse Society and are hopeful of a long term partnership with them in each of our proposed GEMS. Other financial opportunities will be explored when available, including ongoing partnerships with the Iron and Dickinson Sportsmen’s Coalition, UP Whitetails, Wildlife Unlimited, Eastern Dickinson Sportsmen’s Club, Merriman’s Sportsmen’s Club, Sagola Sportsmen’s Club, to name a few of the local sportsmen’s groups.

Goal 3: Public Information and Outreach

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

Identify the area

Various methods can be used to identify the area and direct people to the GEM. The Ralph GEM will be identified on the MI Hunt program, and it will be promoted as a part of the UP GEMS.

Once on site, signs/kiosks identifying the area will be placed near parking areas on the Turner Road. Pamphlets identifying the GEM can be handed out to local businesses to distribute to the public.

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

Establishment of the Ralph GEM will be communicated to local stakeholders for promotion in the Crystal Falls, Iron Mountain, Sagola, Channing, Republic, Norway, Iron River areas. Local businesses will be able to use the GEM as a tool to promote tourism to the area. Once established on the MI Hunt program and other media, the Ralph GEM can be advertised or promoted by local businesses to encourage tourism. This will also allow anyone with computer internet access to plan their hunt to the GEM from anywhere in the world. Although, 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.
- Jentoft, David. 2013. Management Plan for the Drummond Grouse Enhanced Management Area. Michigan Department of Natural Resources, Wildlife Division.
- Brown, Donald. 2014 Management Plan for the Garden Grouse Enhanced Management Area. Michigan Department of Natural Resources, Wildlife Division.

Table 1. Ralph GEM Openings

Compartment	Stand Number	Acreage	Treatment
036	400	8	Open Maintenance
036	401	12	Opening Maintenance
036	402	34	O.M./Sharecropping
036	403	36	Opening Maintenance
036	404	3	Opening Maintenance
036	405	12	O.M./Hunter Walking Trail
036	406	2	Opening Maintenance
036	407	22	Opening Maintenance
036	408	64	Opening Maintenance
036	409	5	Opening Maintenance
036	410	11	Opening Maintenance
038	16	2.1	Opening Maintenance
038	20	8.2	Opening Maintenance
038	23	85.5	Opening Maintenance
038	47	4.4	Opening Maintenance
038	48	6.9	Opening Maintenance
038	52	9.1	Opening Maintenance
038	64	15.5	Opening Maintenance
038	75	9.1	Opening Maintenance
Total Acreage		349.8	

Table 2. Ralph GEM Aspen Treatment by Year

Compartment	Stand Number	Acreage	Age	Treatment Rotation
036	8	150	35	1,2,3,4,5
036	10	13	35	4
036	11	54	54	1,2,3
036	12	45	10	4,5,7
036	14	57	54	1,2,4,6
036	7	39	39	1,2,4,6
036	17	15	84	1,2
036	4	13	82	8
036	20	213	28	1,2,3,4,5,6
036	30	107	45	1,2,3,4,5
036	36	47	34	1,2,4

036	32	38	21	3,4,5,6
036	21	30	31	2,3,4
036	22	13	31	4
036	25	5	56	2
036	27	8	74	1
036	26	9	56	1
037	7	24	30	2,3
037	4	27	59	Factor Limited. 5
037	15	69	16	3,5,6,7
037	16	18	16	6,8
037	24	43	48	1,2,3
037	30	11	44	1
038	54	101	49	1,2,3,4
038	70	65	39	1,3,4
038	76	34	56/0	5,8
041	3	9	27	3
038	1	18	38	1
038	8	145	27	1,2,3,4
038	12	10	38	1
038	22	38	27	1,4
038	24	58	37	1,2,3
038	26	70	27	2,3,4,5,6
038	38	94	18	3,4,5,6
038	15	110	18	3,4,5,6
038	41	17	28	2,3
038	50	2	11	6
038	51	69	44	1,2,3,4
038	56	34	11	6,7
038	66	56	84/0	5,6,8
038	72	26	20	4,5
038	71	12	36	7
038	79	12	49	1
038	57	25	19	6,8
038	65	34	26	2,4
038	69	23	10	6,8
038	80	20	30	2,4
038	49	131	50/0	4,5,6,7,8
038	33	26	84/0	5,8
038	58	97	36	1,2,3,4
038	15	110	18	3,4,5,6
038	73	71	40	1,2,4
038	36	275	24	1,2,3,4,5,6
Total Acreage		2730		

Treatment Rotation by Year (approx.)		1=2019 2=2024 3=2029 4=2034 5=2039 6=2044 7=2049 8=2054		

Table 3: Ralph GEM Lowland Types

Compartment	Stand Number	Acreage	Treatment
038	14	36	Fecon Treatment/2015
036	2	5.3	Fecon Treatment/2015
036	1	7.3	Fecon Treatment/2015
036	23	35	Fecon Treatment/2015
Total Acreage		83.6	

Figure 1. Location and Boundary of Ralph Grouse Enhanced Management System (GEM).

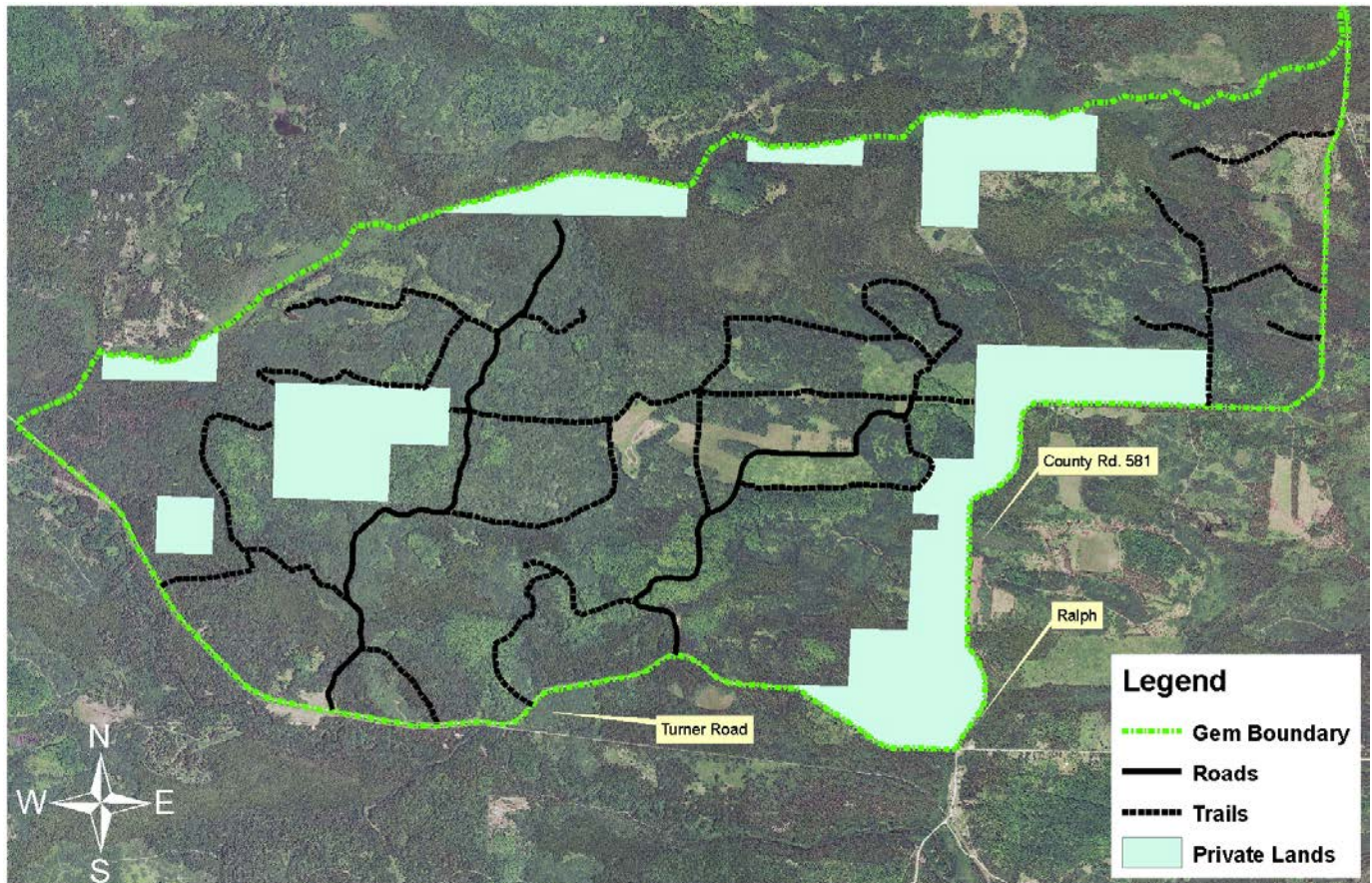


Figure 2. Ralph Grouse Enhanced Management Area Aspen Stands

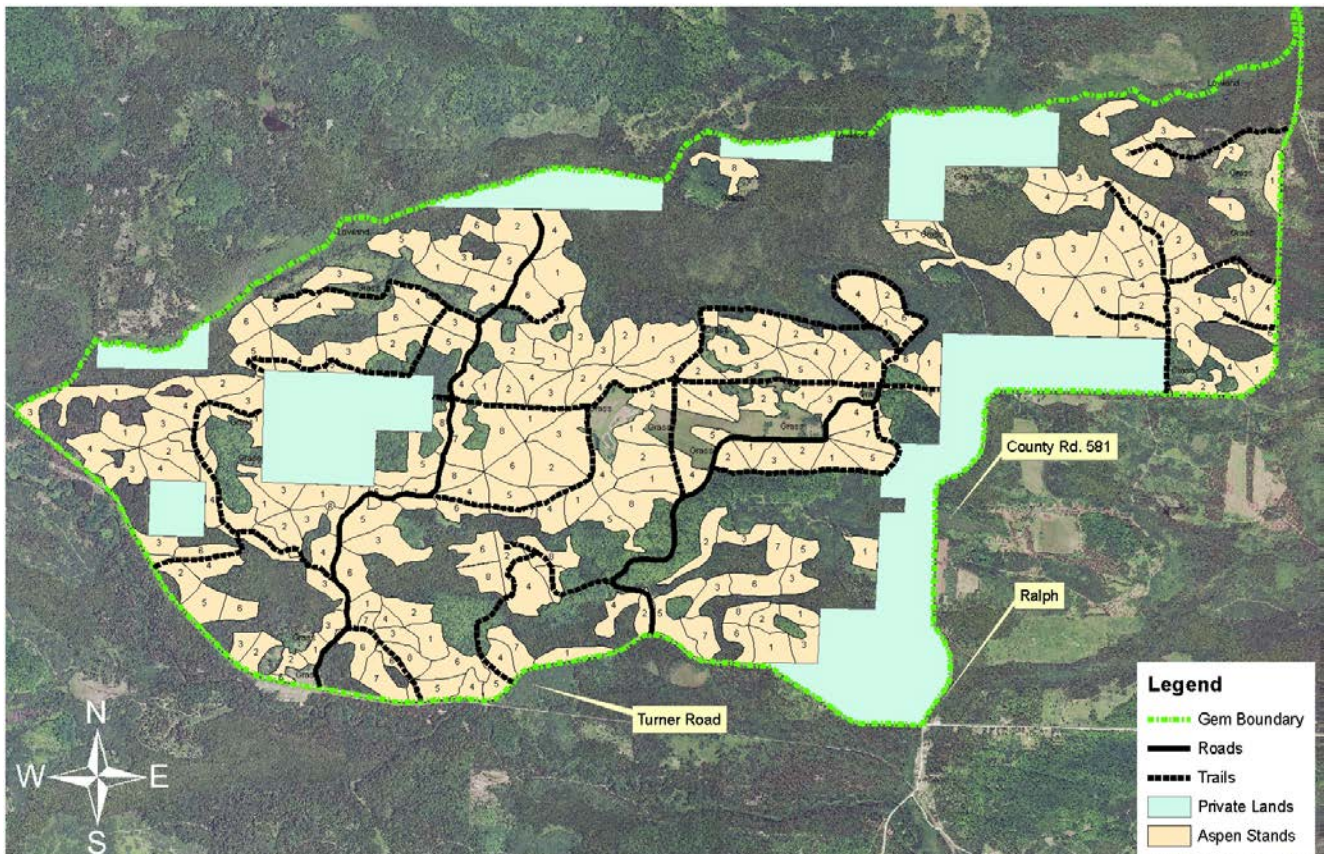


Figure 3. Treatment rotation for the Ralph GEM Figure

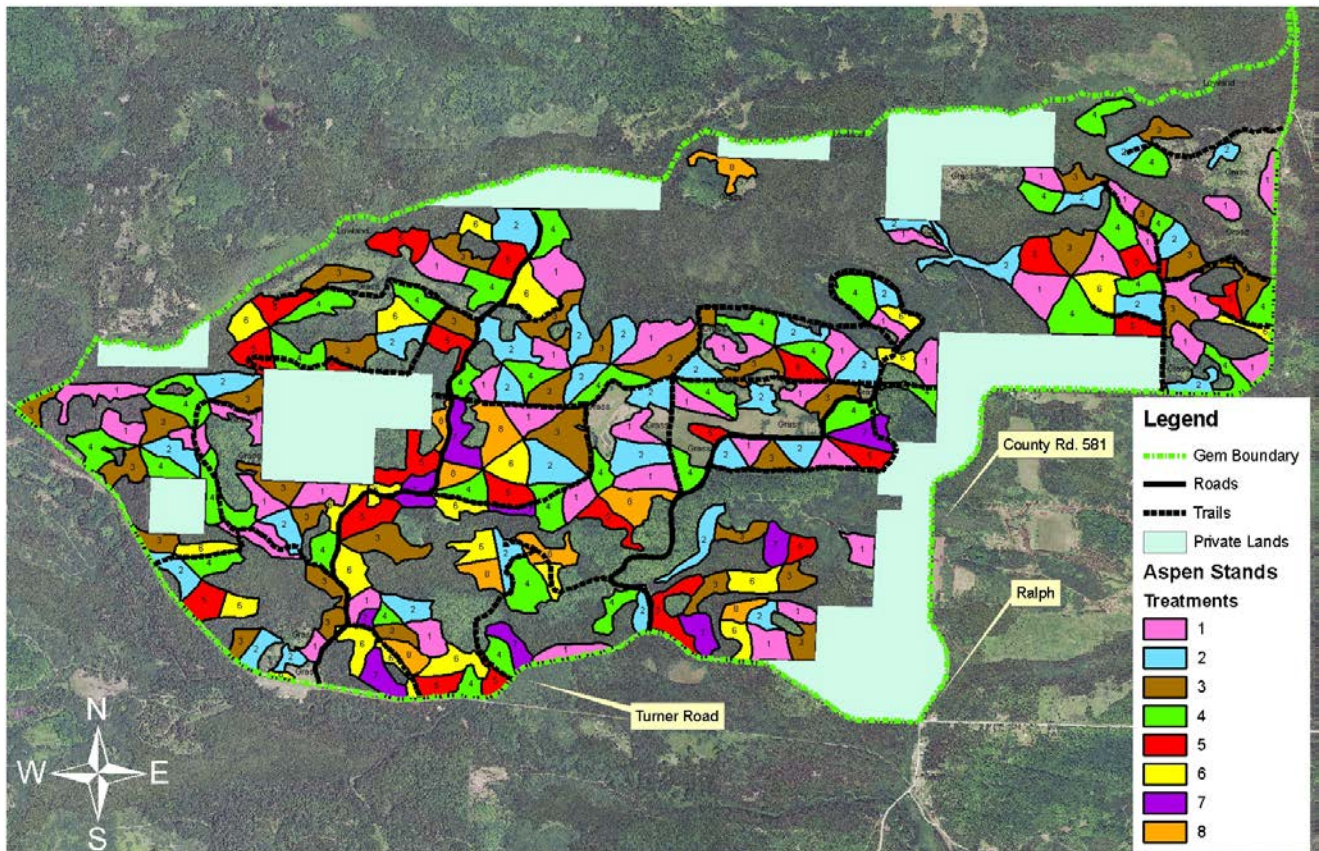


Figure 4. Access points for the Ralph GEM.

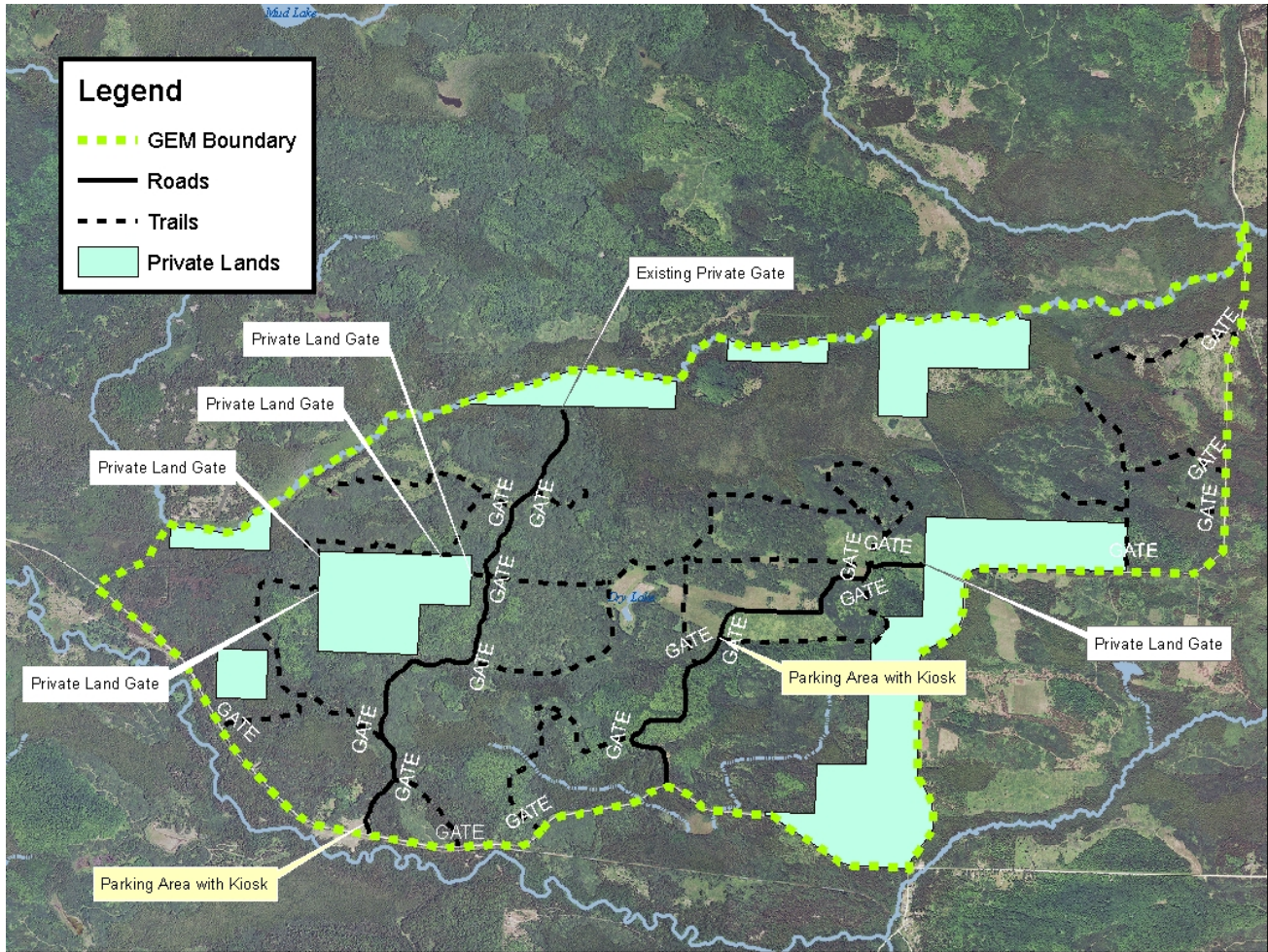


Figure 5. Ralph GEM Openings

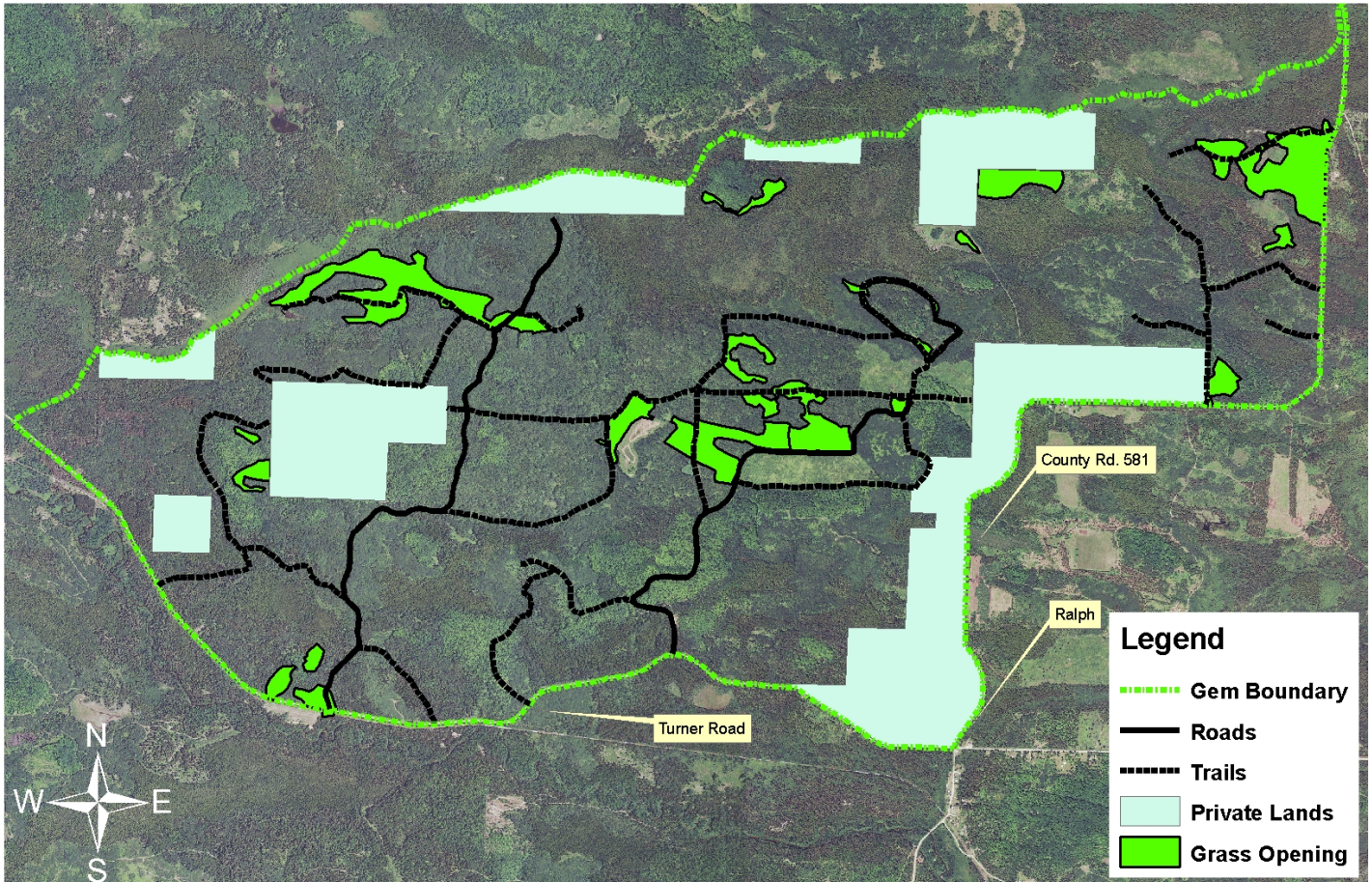


Figure 6. Ralph GEM Lowlands

