

**Habitat Management Plan
for
Rome Wildlife Management Area
2017 - 2026**



Rome WMA typical forested habitat.

Photo: NYSDEC

Division of Fish and Wildlife
Bureau of Wildlife

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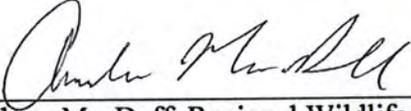
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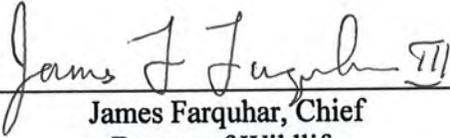
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SUMMARY

In the late 1970s, jurisdiction of the land which is now Rome Wildlife Management Area (WMA) was transferred to the Department of Environmental Conservation (DEC) from the New York State Department of Mental Hygiene. The transferred land was to be opened to the public for outdoor recreation purposes. Throughout the 1980s and '90s, Region 6 Bureau of Wildlife staff maintained the area for hunting, including a pheasant hunting cooperative on the WMA and surrounding cooperating private lands. A regulation was drafted outlining the rules for hunting the co-op, but was repealed in the early 2000s due to restructuring of the pheasant program.

Rome WMA and surrounding private lands consist of a vast area of forested wetland adjacent to the 1913 Barge Canal corridor. This large palustrine wetland complex is important to water quality and flood control for the city of Rome. Historically, much of the WMA and surrounding area was cleared and ditched for agricultural purposes. Agriculture was and continues to be an important aspect of the surrounding landscape.

The wetlands of Rome WMA provide large areas of forested wetland habitat for a variety of wildlife and plants. Management objectives of the WMA include the maintenance of habitat diversity to benefit a wide variety of both game and non-game wildlife species. The WMA is a stocking area for the DEC's adult pheasant release program and continues to be a popular destination for hunters.

A portion of the WMA property also houses a field lab utilized for Chronic Wasting Disease (CWD) surveillance. In 2005, CWD was discovered in close proximity to the WMA. A small lab was built to facilitate collecting and processing samples from hunter harvested deer. The lab continues to be used seasonally as part of DEC's CWD surveillance program.

Habitat management goals for Rome WMA include:

- Managing approximately 9% of the WMA as young forest (0-10 years, 13% of forested landscape) to promote American Woodcock, Ruffed Grouse, Wild Turkey, and white-tailed deer;
- Maintaining approximately 63% as intermediate and mature forest;
- Managing 5% as old-field habitat to provide high-quality foraging, nesting, and raptor habitat;
- Managing approximately 6% as early successional shrublands;
- Continuing agricultural agreements on approximately 5% of the WMA; and
- Retaining approximately 11% as wetlands to provide prime waterfowl breeding and migratory stopover habitat and sustainable hunting/trapping opportunities.

I. BACKGROUND AND INTRODUCTION

PURPOSE OF HABITAT MANAGEMENT PLANS

BACKGROUND

Active management of habitats to benefit wildlife populations is a fundamental concept of wildlife biology, and has been an important component of wildlife management in New York for decades. Beginning in 2015, DEC Division of Fish and Wildlife (DFW) initiated a holistic planning process for wildlife habitat management projects. Habitat Management Plans (HMPs) are being developed for WMAs and other properties administered by DFW Bureau of Wildlife, including select Multiple Use and Unique Areas. The goal of HMPs is to guide habitat management decision-making on those areas to benefit wildlife and facilitate wildlife-dependent recreation. HMPs guide management for a ten year time period, after which the plans and progress on implementation will be assessed and HMPs will be modified as needed.

HMPs serve as the overarching guidance for habitat management on WMAs. These plans incorporate management recommendations from Unit Management Plans (UMPs), existing WMA habitat management guidelines, NY Natural Heritage Program's WMA Biodiversity Inventory Reports, Bird Conservation Area guidelines, and other documents available for individual WMAs.

SCOPE AND INTENT

Primary purposes of this document:

- Provide the overall context of the habitat on the WMA and identify the target species for management;
- Identify habitat goals for WMA-specific target species, contemplating juxtaposition of all habitat types to guide the conservation and management of sensitive or unique species or ecological communities;
- Identify acreage-specific habitat goals for the WMA to guide management actions;
- Provide specific habitat management prescriptions that incorporate accepted best management practices;
- Establish a forest management plan to meet and maintain acreage goals for various forest successional stages;
- Address management limitations such as access challenges (e.g., topography); and
- Provide the foundation for evaluating the effectiveness of habitat management.

Within the next five years, this HMP will be integrated into a comprehensive WMA Management Plan that will include management provisions for facilitating compatible wildlife-dependent recreation, access, and facility development and maintenance.

Definitions are provided in Appendix A.

The effects of climate change and the need to facilitate wildlife adaptation under expected future conditions will be incorporated into the habitat management planning process and will be included in any actions that are recommended in the HMPs. For example, these may include concerns about invasive species, anticipated changes in stream hydrology, and the desirability for maintaining connectedness on and permeability of the landscape for species range adjustments.

This plan and the habitat management it recommends will be in compliance with the State Environmental Quality Review Act (SEQRA), 6NYCRR Part 617. See Appendix B. The recommended habitat management also requires review and authorization under the Endangered Species Act (ESA), National Environmental Policy Act (NEPA), and State Historic Preservation Act (SHPA), prior to implementation.

WMA OVERVIEW

LOCATION

Rome WMA is located in DEC Region 6, City of Rome, Oneida County (Figure 1).

TOTAL AREA

1,204 acres

HABITAT INVENTORY

A habitat inventory of the WMA was conducted in 2014 and is proposed to be updated every ten to fifteen years to document the existing acreage of each habitat type and to help determine the location and extent of future management actions. Table 1 summarizes the current acreage by habitat type and the desired acreage after management. Desired conditions were determined with consideration of habitat requirements of targeted wildlife, current conditions on the WMA, and conditions in the surrounding landscape (see Landscape Context section below).

Table 1. Summary of current and desired habitat acreage on Rome WMA.

Habitat Type	Current Conditions (as of 2014)			Desired Conditions	
	Acres	Percent of WMA	Miles	Acres	Percent of WMA
Forest ^a	854	71%		757	Decrease to 63%
Young forest	17	1%		114	Increase to 9%
Shrubland	78	6%		78	No change
Grassland/open habitat	60	5%		60	No change
Agricultural land	57	5%		57	No change
Wetland (natural) ^b	133	11%		133	No change
Wetland (impounded) ^b	0	0%		0	No change
Open water	0	0%		0	No change
Other (DEC CWD station)	2	< 1%		2	No change

Table 1 cont.

Habitat Type	Current Conditions (as of 2014)			Desired Conditions	
	Acres	Percent of WMA	Miles	Acres	Percent of WMA
Roads	3	< 1%	0.5	3	No change
Rivers and streams			2.4		No change
Total Acres:	1,204	100%		1,204	

^a Forest acreage includes all mature and intermediate age classes of natural forest, plantations, and forested wetlands. Young forest is reported separately. Definitions are provided in the Forest section of this plan.

^b Wetland acreage does not include forested wetlands, since they are included in the Forest category.

ECOLOGICAL RESOURCES

Wildlife Overview:

Wildlife present on Rome WMA includes many species commonly found throughout northern New York and the Mohawk Valley, such as:

- Beaver, muskrat
- White-tailed deer, Wild Turkey, fisher
- Bullfrog, northern leopard frog, green frog, eastern American toad, spring peeper
- Northern water snake, garter snake
- Blue spotted salamander

Wildlife and Plant Species of Conservation Concern:

The following federal or state listed Endangered (E), Threatened (T), or Special Concern (SC) species and/or Species of Greatest Conservation Need (SGCN) may occur on the WMA (Table 2).¹ SGCN listed below include species that have been documented on or within the vicinity of the WMA or that are likely to occur in suitable habitat on the WMA. Other SGCN may also be present on the WMA. Data sources include: the NY Natural Heritage Program, NY Breeding Bird Atlases,² NY Reptile and Amphibian Atlas,³ DEC wildlife surveys and monitoring, and eBird.⁴

Table 2. Species of conservation concern that may be present on Rome WMA, including state and federal Endangered (E) and Threatened (T) species, state Species of Special Concern (SC), High Priority SGCN (HP), and SGCN (x).

Species Group	Species	Federal Status	NY Status	NY SGCN Status
Birds	American Black Duck			HP
	American Woodcock			x
	Black-billed Cuckoo			x

¹ The 2015 New York State Wildlife Action Plan identifies 366 Species of Greatest Conservation Need (SGCN) including 167 High Priority SGCN. Available online at <http://www.dec.ny.gov/animals/7179.html>.

² Available online at <http://www.dec.ny.gov/animals/7312.html>.

³ Available online at <http://www.dec.ny.gov/animals/7140.html>.

⁴ Available online at <http://ebird.org/content/ebird/about/>. © Audubon and Cornell Lab of Ornithology.

Table 2 cont.				
Species Group	Species	Federal Status	NY Status	NY SGCN Status
	Ruffed Grouse			x
Mammals	Indiana myotis	E	E	HP
	Little brown myotis (little brown bat)			HP
	Northern myotis (long-eared bat)	T	T	HP
Amphibians and reptiles	Smooth green snake			x
	Snapping turtle			x
	Spotted turtle			HP
	Western chorus frog			x
	Wood turtle			HP
Fish	None known			
Invertebrates	None known			
Plants	None known			

Significant Ecological Communities:

There are no rare and significant natural communities located on Rome WMA as identified by the NY Natural Heritage Program (Figure 2). Additional information about significant ecological communities is available in *Ecological Communities of New York State, Second Edition*⁵ and in the Rome WMA Biodiversity Inventory Final Report (1997) prepared by the NY Natural Heritage Program.

Special Management Zones:

Special Management Zones (SMZs) are areas adjacent to wetlands, perennial and intermittent streams, vernal pool depressions, spring seeps, ponds and lakes, recreational trails, and other land features requiring special consideration. SMZs on Rome WMA include:

- Three wetlands regulated by Article 24 of the Environmental Conservation Law and several additional wetlands shown on the National Wetlands Inventory (NWI; Figure 3). Each state-regulated wetland is protected by a buffer zone of 100 feet from the delineated wetland boundary, known as the adjacent area. There may be forestry prescriptions associated with forested wetlands and adjacent areas, and each management prescription will be reviewed individually for determination of impacts.
- Three streams (a watercourse entirely within the WMA) or segments of streams (a stream that meanders in and out of the WMA). The highest stream classification is Class D therefore no streams are regulated by Article 15 of the Environmental Conservation Law, but water quality standards will be adhered to.⁶

⁵ Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero. 2014. *Ecological Communities of New York State, Second Edition*. New York Natural Heritage Program, NYS Department of Environmental Conservation, Albany, NY. Available online at <http://www.dec.ny.gov/animals/97703.html>.

⁶ Information about stream classification is available online at <http://www.dec.ny.gov/permits/6042.html>.

Guidelines for habitat management projects within these areas are outlined in the Division of Lands and Forests *Rules for Establishment of Special Management Zones on State Forests and Wildlife Management Areas*.⁷ Some habitat management activities may either be prohibited or restricted in order to protect these features. Any deviations from these guidelines will be addressed in the individual stand prescriptions.

Soils:

Soil groups on Rome WMA include Rhinebeck, Canandaigua, Conesus, Lams, and Wallkill silt loam and Palms muck on the majority of the WMA.⁸ Essentially, the soils are poorly drained across much of the WMA. The only moderately well drained soils are found in the sections of the WMA closest to Hoag Road.

LANDSCAPE CONTEXT

The goals of this HMP have been developed with consideration of surrounding landscape features and the availability of habitats and other conservation lands adjacent to Rome WMA (Figures 4 and 5). The landscape within a three mile radius of the WMA is primarily privately-owned land including:

- Deciduous forest (23%)
- Pasture/hay and grassland (19%)
- Wetlands (14% combining open water, emergent, and woody wetlands)
- Development (12%)
- Early successional shrubland (11%)
- Cultivated crops (10%)
- Evergreen forest (7%)
- Grassland/herbaceous (3%)
- Mixed forest (1%)

Currently, the forested landscape on Rome WMA includes 1% young forest, well under DFW's Young Forest Initiative (YFI) goal of managing at least 10% of the forested landscape on most WMAs as young forest.⁹ The WMA is located within a predominantly fragmented forested/open area/developed landscape, and the current forest age structure in the region provides only limited benefits to species requiring young forest habitat. The amount of mature forest, and the lack of young forest on both the WMA and surrounding landscape, makes the goal of creating additional young forest habitat desirable.

Nearby historical sites and conservation lands include the Barge Canal, Fort Stanwix National Monument, and the Rome Sand Plains Preserve/Unique Area.

⁷ Available online at <http://www.dec.ny.gov/outdoor/104218.html>.

⁸ Soil classification information available from: US Department of Agriculture, Natural Resources Conservation Service. Available online at <http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=NY>.

⁹ Additional information about DEC's Young Forest Initiative and the YFI Strategic Plan is available online at <http://www.dec.ny.gov/outdoor/104218.html>.

II. MANAGEMENT STRATEGIES BY HABITAT TYPE

DEC will continue active management of wildlife habitats on Rome WMA to provide the following benefits:

- Maintain habitat characteristics that will benefit wildlife abundance and diversity within the New York landscape.
- Promote Best Management Practices for targeted wildlife and habitats.
- Provide opportunities for wildlife-dependent recreation such as trapping, hunting, and bird watching compatible with the ongoing habitat management practices and species management considerations.
- Improve habitat quality by reducing invasive species, if present and identified for treatment.

FOREST

Forested acreage includes the following forest types:

Natural forest: naturally forested acres, including hardwoods and softwoods. Includes any upland forested acreage that is not young forest, i.e., pole stands, other intermediate forest age classes, mature forest, and old growth forest.

Plantation: planted forested acres, generally planted in rows dominated by one or two species.

Forested wetland: wetland acres where forest or shrub vegetation accounts for greater than 50% of hydrophytic vegetative cover and the soil or substrate is periodically saturated or covered with water.

Young forest: young or regenerating forested acres, which are typically 0-10 years since a disturbance or regeneration cut, depending upon the site conditions. May include both natural forest and plantations.

Young forest (forested wetland): young, regenerating forested wetland acres.



Rome WMA typical forested habitat.

Photo: NYSDEC

Forest management on Rome WMA incorporates an approach to create and/or maintain the diversity of forest age classes that are required to support a diversity of wildlife. In 2015, DEC

launched the YFI to increase the amount of young forest on WMAs to benefit wildlife that require this transitional, disturbance-dependent habitat.

MANAGEMENT OBJECTIVES

- Retain 242 acres of the existing mature forest and 515 acres of the existing forested wetlands.
- Increase young forest from 17 to 114 acres (13% of the total forested area) to improve habitat for young forest-dependent wildlife, targeting American Woodcock and Ruffed Grouse.
 - Conduct multiple patch clearcuts (69 acres) to provide hardwood regeneration.
 - Complete seed tree harvests (28 acres) to release mast producing trees.
- Soften the transitions between young and mature forest (i.e., create feathered edges).
- Encourage dispersal of native hardwoods (aspen, white oak) to promote regeneration and increase availability of hard mast and high stem densities for wildlife.
- Plant patches of native softwoods (white pine, white spruce, etc.) to add species diversity and to provide winter shelter for wildlife.

DESCRIPTION OF EXISTING FOREST HABITAT AND TARGET SPECIES

There are 871 forested acres on Rome WMA, ranging from young forest to small sawtimber. Over 60% of the forested acreage is forested wetlands. The limited upland forest habitat contains numerous vernal pools, both natural and from ruts caused by past forest management. Very little of the forested habitat (17 acres, or roughly 2% of the total forested acres) is young forest under ten years old. The surrounding landscape does not offer sufficient habitat for the targeted species as the majority of the area within three miles of the WMA is urbanized or developed habitat. Increasing the amount of young forest to 114 acres on Rome WMA will create suitable habitat for the targeted species by increasing food resources, cover habitat, nesting areas, and white-tailed deer winter yard habitat. Table 3 provides a summary of the forested areas, including the most common species found in each.

Table 3. Summary of the acreage and dominant overstory species for each forest type present on Rome WMA.

Forest Type	Acres (as of 2014)	Desired Acres	Overstory species
Natural forest (mature/intermediate)	320	242	northern hardwoods (ash, maple)
Plantation	0	0	-
Forested wetland	534	515	red maple, hemlock, black ash
Young forest	17	95	aspen, white ash
Young forest (forested wetland)	0	19	-
Total Forested Acres:	871	871	

Target species for young forest include American Woodcock, Ruffed Grouse, Wild Turkey, and white-tailed deer. These species rely on forest and young forest areas for nesting, foraging, and cover and will benefit from management that creates the following habitat requirements:

- American Woodcock:

- Singing/peenting ground – Open areas from 1 acre to over 100 acres usually in an abandoned field.
- Daytime areas – Moist, rich soils w/ dense overhead cover of young alders, aspen, or birch.
- Nesting – Young open, second growth woodlands.
- Brood rearing – Similar to nesting except there needs to be bare ground and dense ground cover.
- Roosting – Open fields (min. of 5 acres) or blueberry fields and reverting farm fields.¹⁰
- Ruffed Grouse:
 - Drumming areas – Downed trees surrounded by small diameter woody cover.
 - Foraging – Open areas with dense overhead cover of young forest with good mast production.
 - Nesting – Young open forest stands or second growth woodlands.
 - Brood rearing – Herbaceous ground cover with a high midstory stem density.¹¹
- Wild Turkey (in northern hardwood forests):
 - Strutting areas – Open fields with short vegetation, <12 inches preferred, and mature hardwoods.
 - Nesting cover – Blowdowns and the bases of trees and stumps in open hardwoods and brushy cover in early successional habitats and field edges.
 - Brood rearing – Best brooding cover are fields with herbaceous vegetation from 12-18 inches preferred.
 - Foraging – The habitat required ranges from open old-field areas to mature forests.
 - Winter cover – Mature conifer stands.
 - Roosting – Mature hardwoods and softwoods. Adults with poults tend to roost on the ground under large trees with a dense understory of young trees, shrubs, downed trees, rock outcrops, or brushy fields.^{12, 13}
- White-tailed Deer (in northern hardwood forests):
 - Fawning areas – Vary from open forest to hay fields to brushy cover.
 - Foraging – Primarily herbaceous vegetation (clover, *Rubus* sp., forbs, etc.), hardwood foliage, soft mast, and agricultural crops where available.
 - Bedding cover – Varies from open hardwoods with blowdowns to dense thickets of early succession shrublands or hard and softwood regeneration.¹⁴

MANAGEMENT HISTORY

Several of the forested stands were harvested by prior owners, but no forest management has occurred since DEC acquired the property.

¹⁰ Sepik, G. F. et al. 1981. A Landowner's Guide to Woodcock Management in the Northeast, Moosehorn National Wildlife Refuge, USFWS. 25 pp.

¹¹ Jones, B. C. et al. Habitat Management for Pennsylvania Ruffed Grouse, Pennsylvania Game Commission. 10 pp.

¹² USDA – NRCS. 1999. Wild Turkey (*Meleagris gallopavo*) Fish and Wildlife Habitat Management Leaflet. 12 pp.

¹³ Dickson, J. G. 1992. The Wild Turkey: Biology and Management. National Wild Turkey Federation and USDA Forest Service. Stackpole Books, PA. 480 pp.

¹⁴ Halls, L. K., ed. 1984. White-tailed Deer: Ecology and Management. The Wildlife Management Institute. Stackpole Books, PA. 864 pp.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

The following management is proposed for the next 10 years with a young forest acreage goal of reaching approximately 114 acres by increasing young forest habitat by 97 acres:

- **Management planned for 2017-2021** (Table 4, Figure 6):
 - Patch clearcut - 50 acres in parts of Stands 3, 4, and 9.
 - Seed tree harvest – 28 acres in Stands 6 and 46.
- **Management planned for 2022-2026** (Table 5, Figure 6):
 - Patch clearcut - 19 acres in Stand 18.

Table 4. Forest management schedule for the first five-year period of this HMP (2017-2021).

Stand	Acres	Size Class	Forest Type		Management Direction	Treatment Type
			Current	Future		
3	30	Pole Timber 6"-11" DBH	Northern Hardwoods	Seedling-Sapling-Natural	Wildlife	Patch Clearcut
4	10	Small Saw Timber 12"-17" DBH	Other Natural Stands	Seedling-Sapling-Natural	Wildlife	Patch Clearcut
6	5	Small Saw Timber 12"-17" DBH	Other Natural Stands	Seedling-Sapling-Natural	Wildlife	Seed Tree
9	10	Pole Timber 6"-11" DBH	Other Natural Stands	Seedling-Sapling-Natural	Wildlife	Patch Clearcut
46	23	Pole Timber 6"-11" DBH	Natural Forest	Seedling-Sapling-Natural	Wildlife	Seed Tree

Table 5. Forest management schedule for the second five-year period of this HMP (2022-2026).

Stand	Acres	Size Class	Forest Type		Management Direction	Treatment Type
			Current	Future		
18	19	-	Forested Wetland	Forested Wetland Seedling-Sapling-Natural	Wildlife	Patch Clearcut

Stand locations and planned management actions are also summarized in Figure 6. Specific forest stand descriptions and detailed management prescriptions will be prepared for each proposed forest management area prior to implementation (see template, Appendix C). Briefly, habitat management for each of these stands will include the following:

- **Management planned for 2017-2021** (Table 4, Figure 6):
 - **Stands 3, 4, and 9** (85, 27, and 11 acres, respectively): northern hardwoods with scattered softwoods. The understory has patches of honeysuckle and buckthorn. Patch clearcuts will range in size from 2-10 acres, will be irregularly shaped to mimic

- natural disturbances, and will total roughly 50 acres. Where possible, softwoods such as white pine and hemlock, which provide important winter cover for deer, will not be cut. Harvesting will most likely only occur in the winter, when the ground is frozen, in order to limit rutting from heavy equipment. The only practical access to these stands is by a New York State Canal Corporation owned ROW (dirt road) that follows the Barge Canal and enters the northwestern corner of the WMA. This was the route used to manage the stand by previous owners. The ability to manage these stands will be determined by whether permission can be obtained to use this ROW and whether funding is available for road improvement necessary to access the area.
- **Stand 6** (25 acres): white ash/red maple with scattered hickory and thornapple. A five acre seed tree harvest with reserves will be conducted in the northwestern part of the stand. Management will focus on removing ash and invasive buckthorn and honeysuckle and leaving thornapple and hickory as seed sources and to provide mast for wildlife. If the ROW along the canal can be used, then the northern half of the stand can be harvested using heavy equipment in frozen conditions.
 - **Stand 46** (23 acres): primarily ash and maple, with sparse aspen, oak, black cherry, and hemlock. A seed tree harvest with reserves will be conducted to regenerate aspen and mast producing trees (oak, hickory, etc.). The stand has a dense honeysuckle understory which will need to be treated before the overstory is removed. Access is available from State Route 365.
 - **Management planned for 2022-2026** (Table 5, Figure 6):
 - **Stand 18** (45 acres): poorly drained with small ash, red maple, elm, and apple trees. The dense understory consists of dogwood, viburnum, honeysuckle, and buckthorn. Large patches of the stand will be clearcut, both tree and shrub layers, primarily along the southern and eastern parts of the stand. Part of the northwestern section of the stand may be cut if conditions allow. The patches will be irregularly shaped to mimic natural disturbances and will total roughly 19 acres. After cutting, small patches (<1 acre each) will be planted with white pine or spruce to provide conifer cover for wildlife.

BEST MANAGEMENT PRACTICES

Forest management on all WMAs follows Best Management Practices to protect soil and water resources, promote quality wildlife habitat, and establish healthy forests (Table 6).

Table 6. Best Management Practices for forest management on WMAs.

Resource	Guidance Document ¹⁵
Soils	<i>Rutting Guidance on Wildlife Management Areas</i>
Water quality	<i>NYS Forestry Best Management Practices for Water Quality</i>
Wildlife	<i>Retention Guidance on Wildlife Management Areas</i>
Plantations	<i>Plantation Management Guidance on Wildlife Management Areas</i>

¹⁵ All guidance documents referenced here are available online at <http://www.dec.ny.gov/outdoor/104218.html>.

Wildlife Considerations:

The northwest section of Rome WMA is a historical deer wintering yard. Thus, heavy deer browse can be expected in this part of the WMA and will limit regeneration unless the young trees are protected. If access allows the trees to be removed after being cut, it will be necessary to leave tree tops in the stand to protect the regeneration from deer browse. There are pockets of white pine and eastern hemlock within the mentioned stands and these trees should be left to provide cover for white-tailed deer. There is potential that blowdown events may occur in areas with moist soils where the larger white pine and eastern hemlock trees are located, so if feasible small pockets of trees will remain to protect reserve trees from wind events. However, blowdown events that may occur do create valuable habitat for frogs and salamanders while protecting regeneration from deer browse impacts.

Forest Health Considerations:

In general, trees in this area grow faster than other parts of New York, due to soil and climate conditions. However, the rich floodplain that allows the trees to grow well will also make it difficult to access and manage the forest. Rome WMA is situated between the Barge Canal to the north and the CSX railroad system to the south with private lands along the eastern and western borders. Wetlands cover much of the area and Mud Creek travels through the property, limiting access to the northern part of the WMA. Access to the northern stands from the south is not recommended due to the distance from Hoag Road and due to Mud Creek and the wetlands which would need to be crossed to reach the stands. The only reasonable access to the northern part of the WMA would be via the Canal Corporation ROW along the Barge Canal.

Emerald ash borer (EAB) has been found near the WMA. While no beetles have been confirmed on the WMA at this time, it is expected that they are there or will be soon. The presence of EAB in the area was taken into consideration when preparing this management plan. If EAB is found on the WMA, additional timber harvests may be considered in order to salvage the ash lumber.

Pre- and Post-treatment Considerations:

Monitoring regeneration is key to stopping the spread of invasive or undesirable species within Rome WMA. Most of the stands contain some level of invasive species including honeysuckle, buckthorn, multiflora rose, and phragmites. These stands would benefit from selective herbicide application and removal of invasive species. Care should be taken to limit the spread of invasive species while managing the stands.

Small patches of white pine and white spruce may be planted in select stands after cutting is completed. The plantings will increase the softwood component on the WMA, which will provide cover and winter shelter for wildlife.

Pre- and post-treatment actions to promote the desired forest regeneration will be addressed in detail in the silvicultural prescriptions.

MANAGEMENT EVALUATION

In order to determine whether the desired forest regeneration and wildlife response(s) have been achieved by the management outlined above, pre- and post-management assessments will be conducted in accord with the guidelines established in the *Young Forest Initiative Monitoring*

*Plan: 2016-2025.*¹⁶ The Monitoring Plan establishes statewide standards for evaluating vegetation and target wildlife responses to forest management to determine if the outcome is as prescribed. Regeneration assessments will be conducted within one year of harvest completion, three, and five years after the harvest or until the forester determines adequate natural or artificial (i.e., planting) regeneration has been securely established. YFI wildlife target species selected for Rome WMA, which may be assessed to determine response to management, include:

- American Woodcock
- Ruffed Grouse
- White-tailed deer
- Wild Turkey

SHRUBLAND

Shrublands are early successional habitats dominated by woody plants typically less than ten feet tall with scattered open patches of grasses and forbs that provide floristic diversity. Shrublands are typically characterized by >50% cover of shrubs and <25% canopy cover of trees.

MANAGEMENT OBJECTIVES

- Provide 78 acres of shrubland habitat for shrubland obligate species and other wildlife, including several YFI target species.
- Regenerate 25 acres of over-mature shrublands to improve habitat for targeted species.

DESCRIPTION OF EXISTING SHRUBLAND HABITAT AND TARGET SPECIES

Shrublands on the WMA range from overgrown fields with a mix of brush and small grassy openings, to dense over-mature brushy fields with scattered trees. Shrublands benefit a suite of wildlife including Blue-winged Warbler, Brown Thrasher, Yellow Warbler, as well as, several of the YFI target species:

- Ruffed Grouse
- White-tailed deer
- Wild Turkey
- Other old-field species

MANAGEMENT HISTORY

Shrubland management has been focused on the accessible upland portions of the WMA which consist of shrublands, old field/grassland, and agricultural fields. Past management has involved mowing and brush hogging in several stands. A project was started in 2016 to mow a roughly 25 acre section in Stand 25 on a rotation for American Woodcock and Ruffed Grouse management. Each mowing is approximately 70 feet wide and 1,000 feet long to resemble a strip clearcut within the shrubland. Strips are scheduled to be mowed every other year over the next ten years. See the following stand description for details on this project.

¹⁶ New York State Department of Environmental Conservation (NYSDEC). 2016. Young Forest Initiative Monitoring Plan 2016-2025. Albany, NY. Available online at: <http://www.dec.ny.gov/outdoor/104218.html>

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2017-2021** (Figure 6, Table 7):
 - Continue shrub regeneration cuts in Stand 25, which were started in 2016.
- **Management planned for 2022-2026** (Figure 6, Table 7):
 - Continue shrub regeneration cuts in Stand 25.
 - Remove thick brush and control invasive species as identified by the YFI Team, land manager, or regional wildlife manager.

Stand 25 (38 acres): dense, over-mature brushy field with dogwood, viburnum, honeysuckle, buckthorn, and sparse trees. Approximately 25 acres in the stand will be cut using a forestry cutter, retaining conifers or apple trees to serve as a seed source. The cutting design (where practicable) will use 70' x 1000' strips cut at intervals so that 25 acres are treated within 10 years. After each strip is cut, most remaining hardwood trees or large buckthorn and honeysuckle shrubs in that strip will be cut and dropped to create coarse woody debris for wildlife.

BEST MANAGEMENT PRACTICES

Brush hogging, hydro-axing, or the use of a forestry cutter will be conducted from mid-August through early October when dry conditions normally persist and there is minimal interference with nesting activities of wildlife.

MANAGEMENT EVALUATION

Future surveys may include monitoring for invasive species.

GRASSLAND AND OTHER OPEN AREAS

Grasslands are open, grassy areas with a minimal amount of shrub and tree cover (<35%) that are maintained, or could be maintained, without significant brush cutting. Grassland management will maintain habitat that will be used by migratory birds and upland wildlife as well as contribute to the goal of maintaining open space for wildlife-dependent recreational use.

MANAGEMENT OBJECTIVES

- Maintain and enhance the existing 60 acres of old-field habitat for breeding, nesting, and wintering upland gamebird species.
- Continue to enhance the quality of fields by removing shrubs or dense vegetation from the fields (e.g., brush hogging, disking and seeding, and/or hydro-axing), depending on the species the habitat is being managed to support.
- Monitor fields for invasive species and eradicate where feasible.

DESCRIPTION OF EXISTING OPEN HABITAT AND TARGET SPECIES

Current emphasis is placed on the maintenance of old-field/grassland habitat through cooperative agreements and mechanical mowing/brush hogging. An area of approximately 60 acres is currently targeted for management through annual mowing (Figure 6). The habitat is generally open with small patches of brush and trees. This is a stocking area for the DEC's adult pheasant release program and is a popular destination for hunters. Old-field habitat will benefit a suite of

wildlife including many of the shrub bird species such as Common Yellowthroat, Gray Catbird, Northern Cardinal, and Brown Thrasher. Old-field habitat also provides courtship display and foraging habitat for several of the YFI target species:

- Ruffed Grouse
- American Woodcock
- White-tailed deer
- Wild Turkey

MANAGEMENT HISTORY

The grassland/old-field habitat is managed by mowing Stands 21, 26, 43, 45 and a small portion of 38.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2017-2026** (Figure 6):
 - Continue mowing fields (Stand 21, 26, 43, and 45) on an annual, biennial, or triennial basis depending on vegetation growth to prevent woody growth while also allowing for thatch.
 - Mow 4.2 acres of Stand 38 to maintain open areas for establishment of a small wild apple orchard.
 - Utilize cooperative agreements to achieve the desired acres to be mowed annually.

BEST MANAGEMENT PRACTICES

For information and recommendations regarding guidelines for grassland habitat management see *A Plan for Conserving Grassland Birds in New York*.¹⁷ In particular, refer to the plan for species-specific habitat requirements and detailed recommendations regarding grassland management and restoration techniques.

MANAGEMENT EVALUATION

Open area surveys on a biennial or triennial basis to determine species response to management, including Ruffed Grouse and American Woodcock.

AGRICULTURAL LAND

Agricultural lands on WMAs include any acreage on which crops are grown, primarily areas that are under cooperative agreements or farming contracts, but can also include wildlife food plots.

MANAGEMENT OBJECTIVES

- Maintain agricultural habitat (57 acres) through cooperative agreements.

¹⁷ Morgan, M. and M. Burger. 2008. *A Plan for Conserving Grassland Birds in New York: Final Report to the New York State Department of Environmental Conservation under Contract #C005137*. Audubon New York, Ithaca, NY.



Rome WMA agricultural land habitat.

Photo: NYSDEC

DESCRIPTION OF EXISTING AGRICULTURAL LANDS HABITAT

47 acres of the Rome WMA (Stands 22, 30, and 35; Figure 6) are in cooperative agreements for row crops. 10 acres are in a cooperative agreement for hay (Stand 51). Maintaining these agreements will provide forage, cover, and other important habitat for Wild Turkey, white-tailed deer, Ruffed Grouse, Northern Harrier, and other raptors.

MANAGEMENT HISTORY

Cooperative agreements on Rome have been utilized to provide multiple benefits to both wildlife and the public.

The majority of the row cropped parcels are on marginal ground at the outer edges of the state owned property and provide open space diversity for a WMA otherwise dominated by mature forest cover and shrub habitat. The fields in row crop rotations provide foraging opportunities for popular game species such as deer and turkeys. In addition, after the waste grain is consumed, the open habitat allows access for species such as Mourning Dove and other small bird species that need open ground to forage for small seeds.

Stand 51 is heavily utilized by pheasant hunters and provides good cover and access to stocked pheasants in the fall. This 10 acre field is also the only field on the property that has nesting Bobolinks.

The agreements enhance public access as the parcels are situated near popular parking areas and afford easy walking onto the WMA. The agreements also assist with habitat management in keeping marginal ground in an open condition which provides flexibility for future management opportunities. Agreements will continue in the future as they historically have until deemed necessary to change by the WMA land manager, YFI team, or regional wildlife manger.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2017-2026** (Figure 6):
 - Continue with historical management practices through leases and cooperators. Adjust agreements as necessary and according to the YFI team, land manager, or regional wildlife manager.

BEST MANAGEMENT PRACTICES

None.

MANAGEMENT EVALUATION

Monitor the effectiveness of the cooperative agreements by inspecting the locations and verifying compliance with conditions of those agreements.

WETLANDS (NATURAL AND IMPOUNDED)

Natural wetlands are areas where the soil or substrate is periodically saturated or covered with water, including emergent (perennial herbaceous vegetation accounts for >50% of hydrophytic vegetative cover) and scrub-shrub wetlands (woody vegetation under 20 feet tall accounts for >50% of hydrophytic vegetative cover). Impounded wetlands are areas similar to natural wetlands, but where water is held back by a berm, road, or other structure. Forested wetlands are addressed in the Forest section above.

MANAGEMENT OBJECTIVES

- Retain 133 acres of natural wetlands as they currently exist.
- Retain 515 acres of forested wetlands as they currently exist and create 19 acres of young forested wetlands.

DESCRIPTION OF EXISTING WETLAND HABITAT AND TARGET SPECIES

Rome WMA and surrounding private lands consist of a vast area of forested wetland adjacent to the 1913 Barge Canal corridor. This large palustrine wetland complex is important to water quality

and flood control for the city of Rome. The wetlands of the Rome WMA provide large areas of forested wetland habitat for a variety of wildlife and plants. In particular, beaver are often found on the WMA and provide impounded habitats when active.

There are 133 acres of natural wetlands on Rome WMA. The wetlands consist of scrub-shrub, emergent, and open water wetlands. There are also 534 acres of forested wetlands; see the Forest section. The wetlands are diverse and provide habitat for species such as:

- American Woodcock
- Beaver, muskrat
- Painted turtle



Rome WMA typical wetland habitat.

Photo: NYSDEC

- Bullfrog, northern leopard frog, green frog, eastern American toad, spring peeper
- Migratory waterfowl

MANAGEMENT HISTORY

Historically, much of the WMA and surrounding area was cleared and ditched for agricultural purposes. Agriculture was and continues to be an important aspect of the surrounding landscape. No management activity has occurred in the WMA's wetlands since acquisition.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2017-2026:**
 - None planned at this time.

BEST MANAGEMENT PRACTICES

Limit activities in wetlands other than forested wetlands after October 1st to protect hibernating amphibians.

MANAGEMENT EVALUATION

None.

OPEN WATER (WATERBODIES AND WATERCOURSES)

Open water is defined as any area of open water, generally with less than 25% cover of vegetation or soil and typically named (e.g., Perch Lake, South Colwell Pond).

DESCRIPTION OF EXISTING OPEN WATER HABITAT

There are 3 streams, segments of streams, and old agricultural ditches on the WMA totaling about 2.4 miles. Beyond these streams, there is no other open water (no named lakes or ponds) or any plan to develop such habitat.

HABITAT MANAGEMENT SUMMARY

In summary, Table 7 lists the habitat management actions planned for Rome WMA over the next ten years. Any substantive changes will be appended to this HMP annually or as needed (Appendix D).

Table 7. Summary of habitat management actions recommended for Rome WMA, 2017-2026. (Also see Figures 3 and 6.)

Habitat	Stand	Management Action and Goals	Acres	Timeframe
Forest	3, 4, and 9	Patch clearcut 2-10 acre areas to create young forest.	50	2017-2021
Forest	6	Seed tree harvest to create young forest.	5	2017-2021
Forest	46	Seed tree harvest to create young forest.	23	2017-2021
Forest	Part of 18	Patch clearcut to create young forest.	19	2022-2026
Shrubland	Part of 25	Regenerate overmature shrubland habitat.	25	2017-2026
Grassland/ Open Areas	21, 26, 43, 45, and part of 38	Mow on an annual, biennial, or triennial basis to maintain existing open habitat.	60	Annual, biennial, or triennial
Agricultural Lands	22, 30, 35, and 51	Maintain cooperative agreements.	57	Annual

III. FIGURES

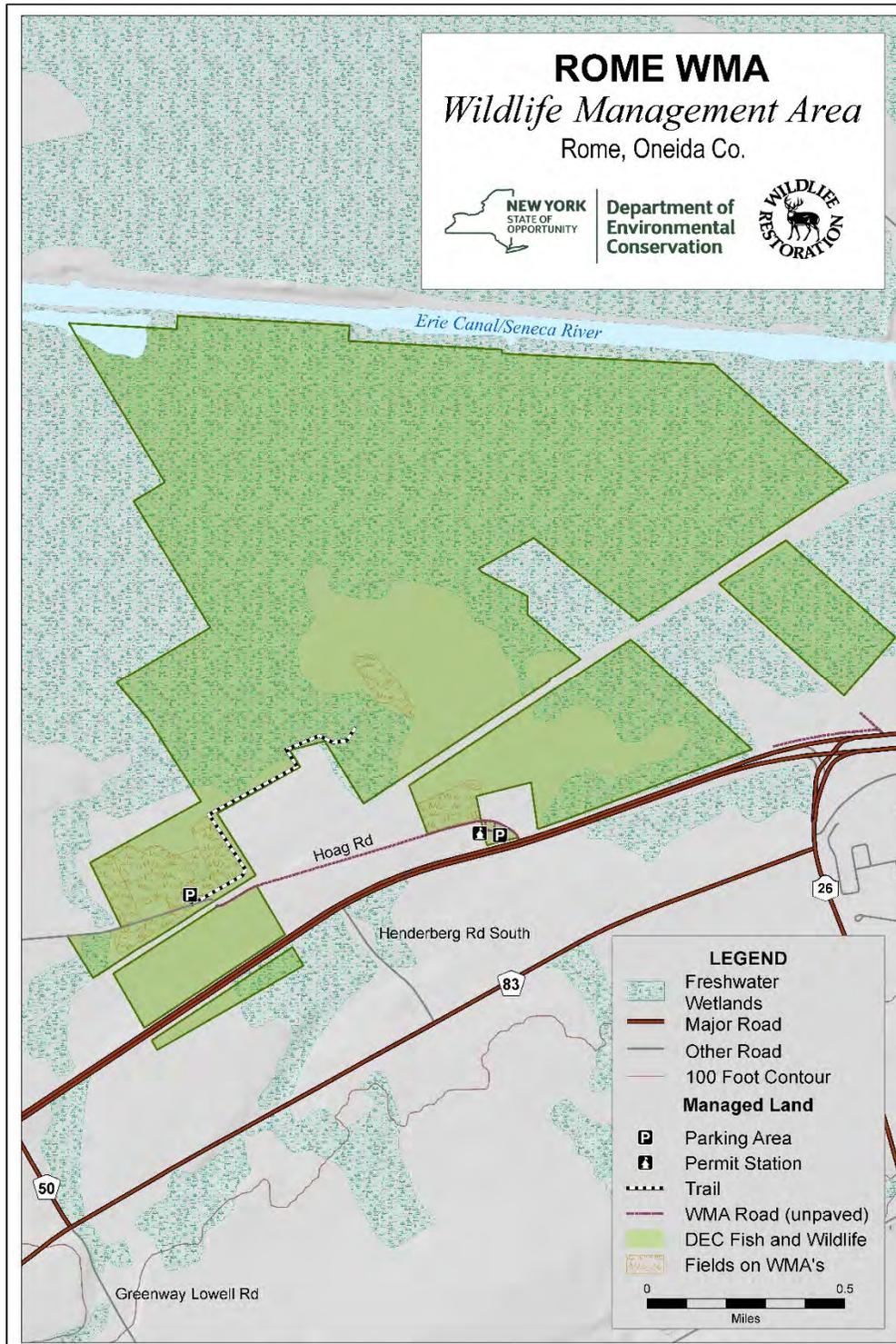


FIGURE 1. Location and access features at Rome WMA.

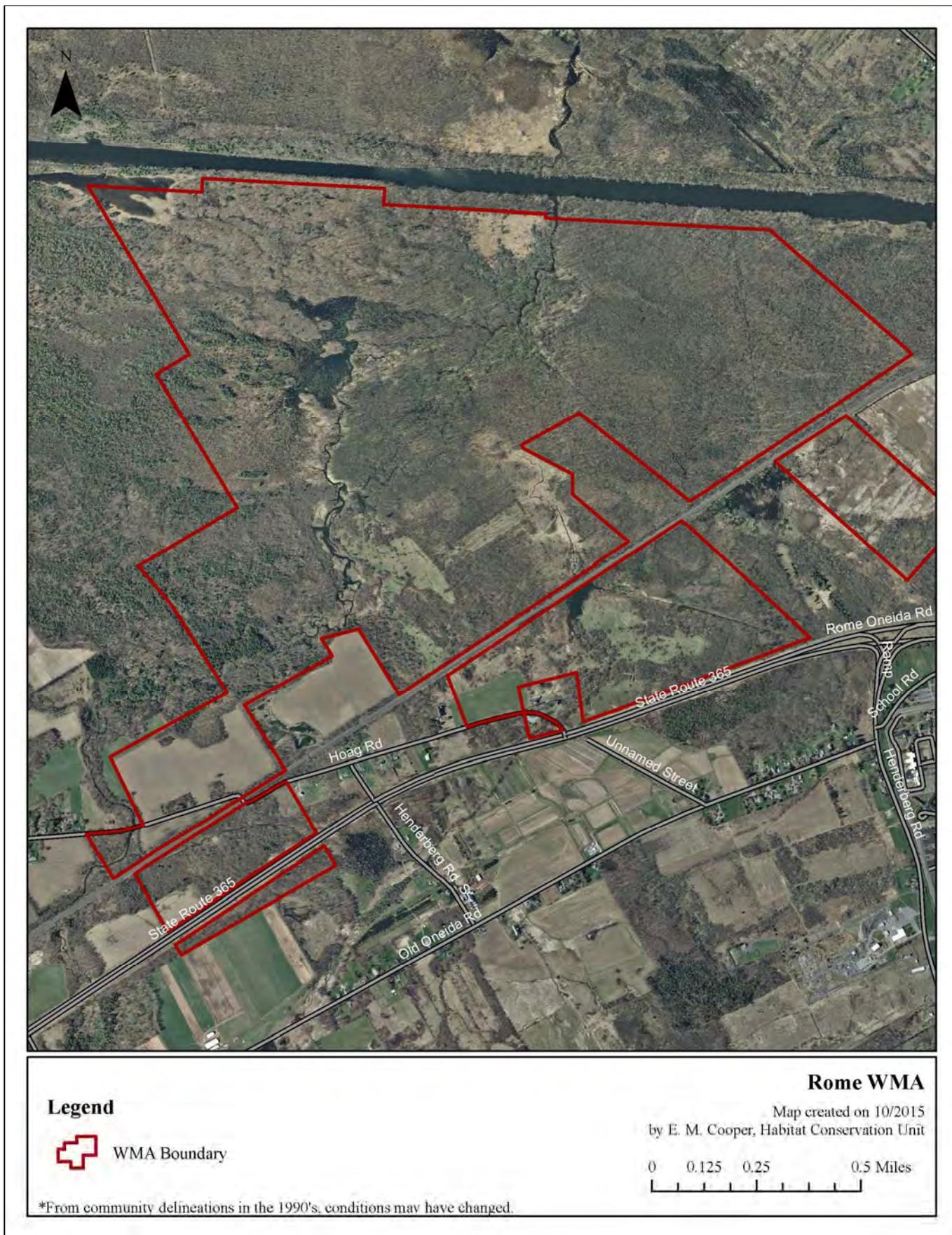


FIGURE 2. Significant ecological communities on Rome WMA. Data from the NY Natural Heritage Program.

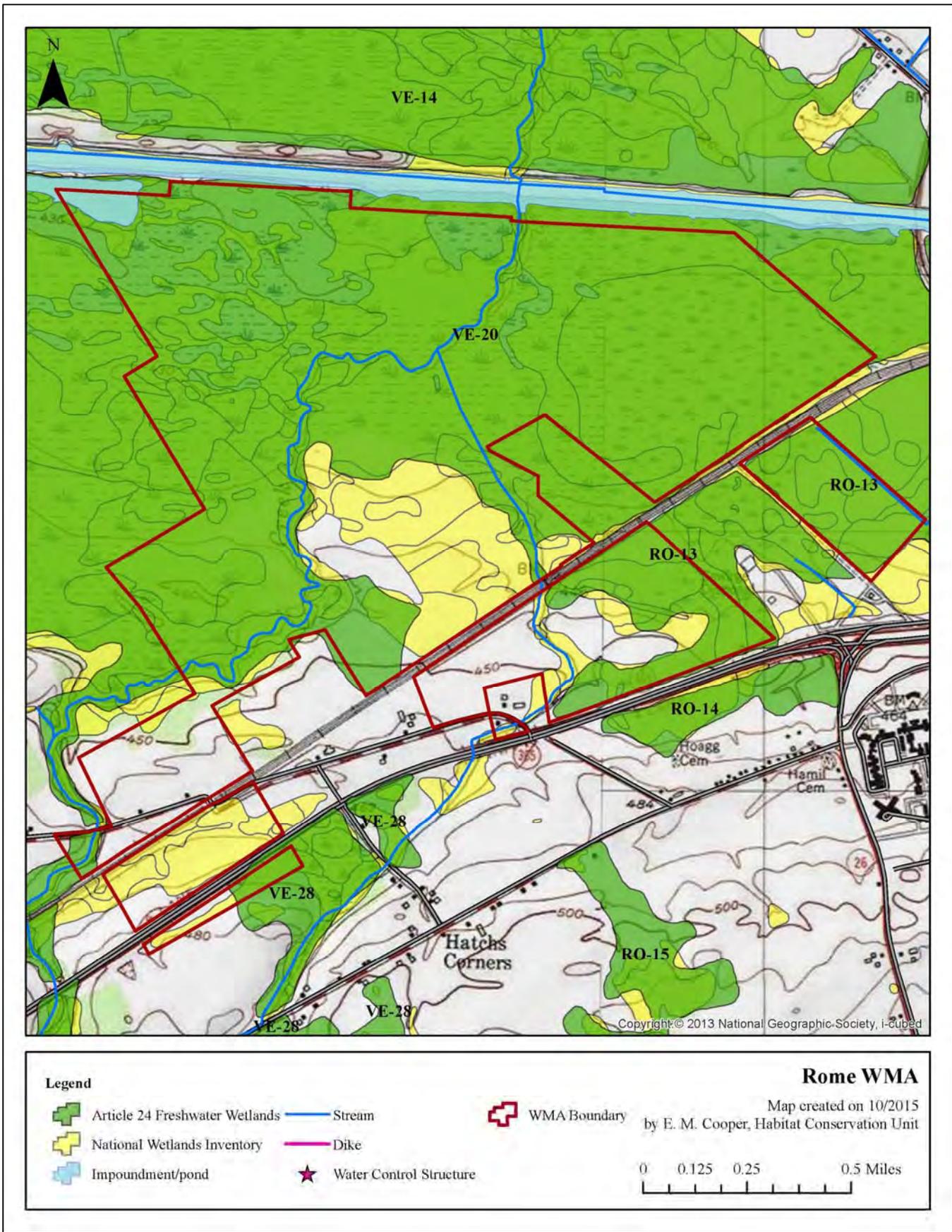


FIGURE 3. Wetlands, open water, and streams of Rome WMA. Note: Wetland boundaries are not exact and may not be used for regulatory purposes without a current delineation.

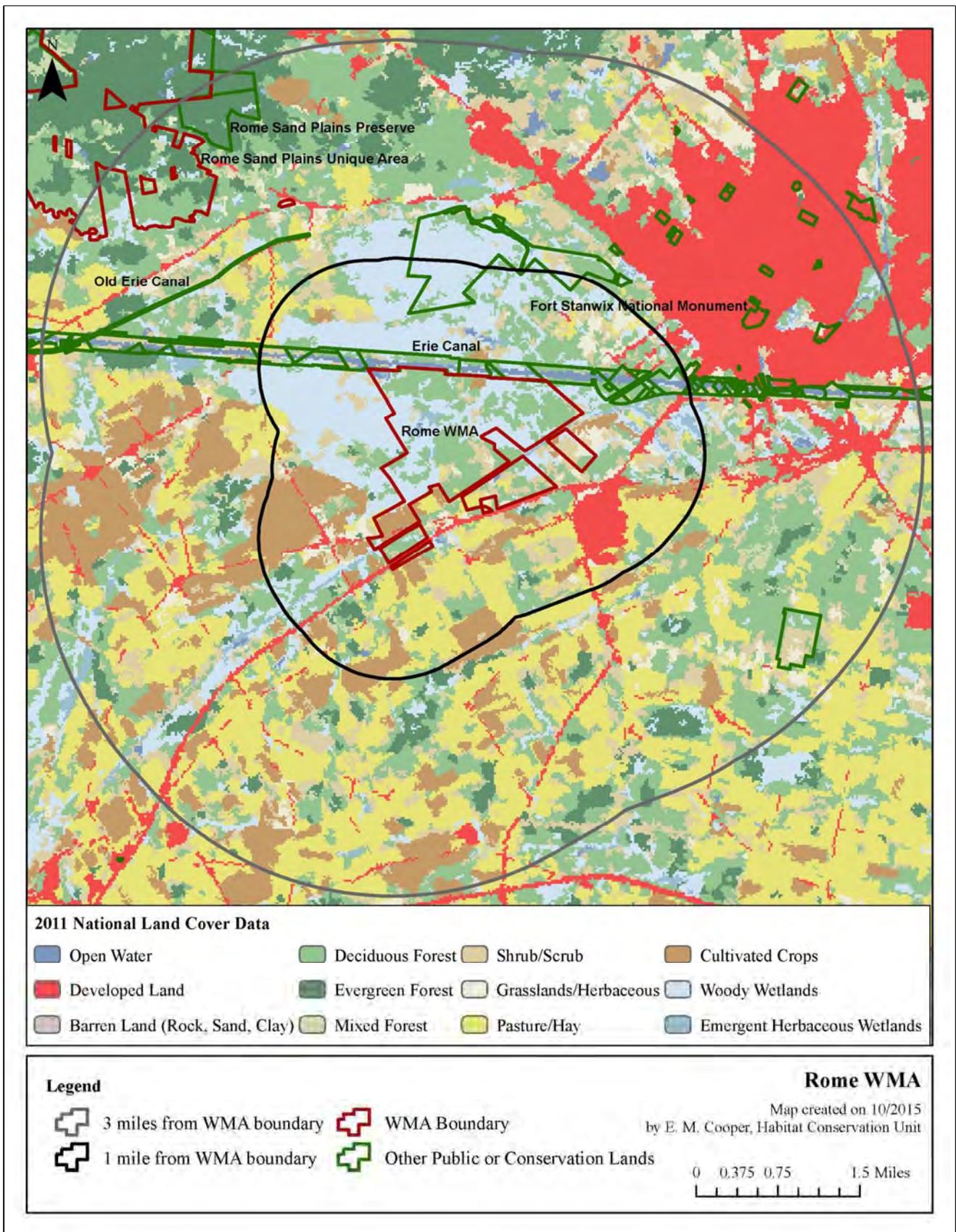


FIGURE 4. Land cover types and conservation lands in the landscape surrounding Rome WMA. Conservation lands are from the NY Protected Areas Database available online at <http://www.nypad.org/>. Land cover types are from the 2011 National Land Cover Data (NLCD) and differ from the habitat types used in the WMA habitat inventory. NLCD definitions are available online at <http://www.mrlc.gov/nlcd2011.php>.

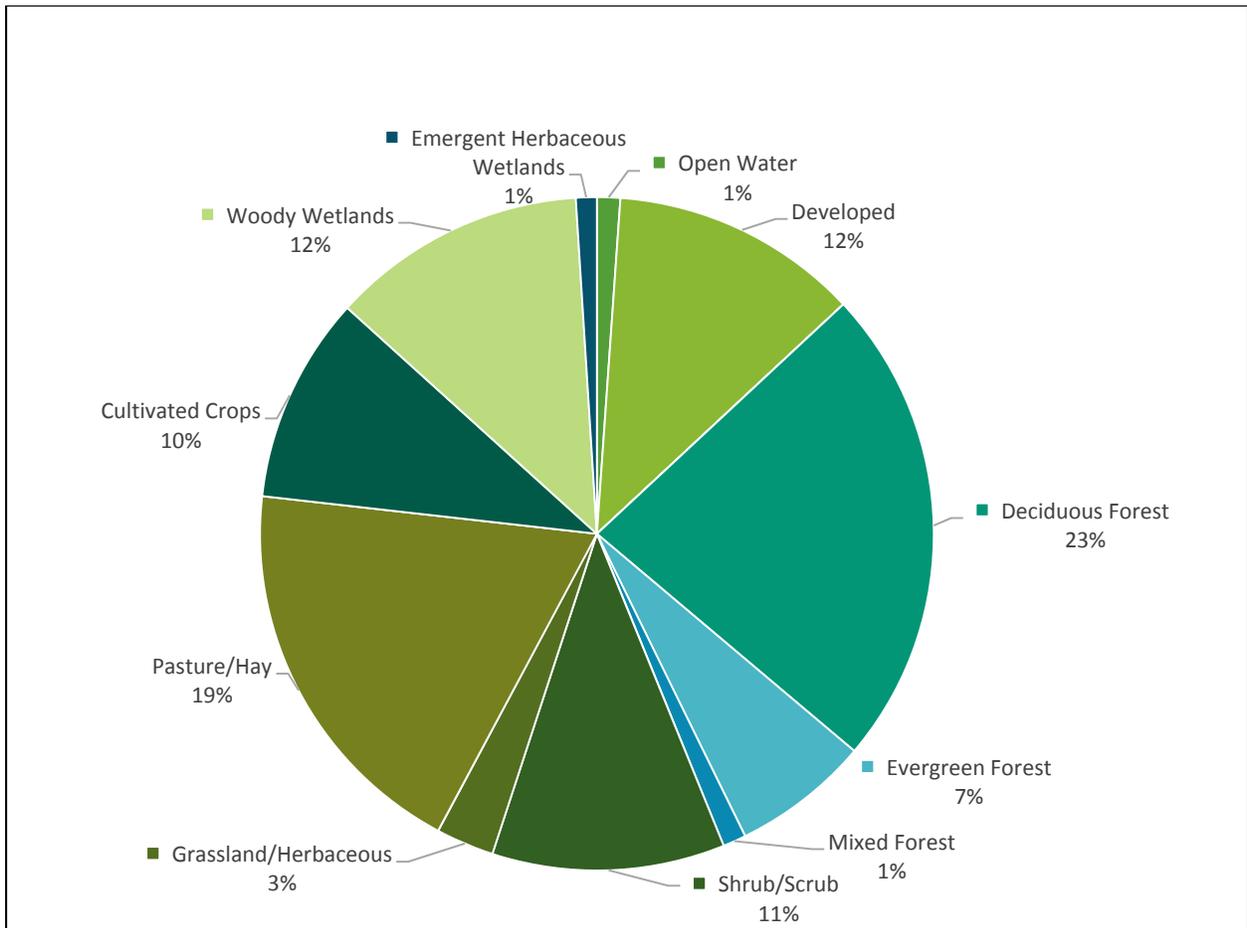


FIGURE 5. Percent cover of land cover types within three miles of Rome WMA.

Land cover types are from the 2011 National Land Cover Data (NLCD) and differ from the habitat types used in the WMA habitat inventory. NLCD definitions are available online at <http://www.mrlc.gov/nlcd2011.php>.

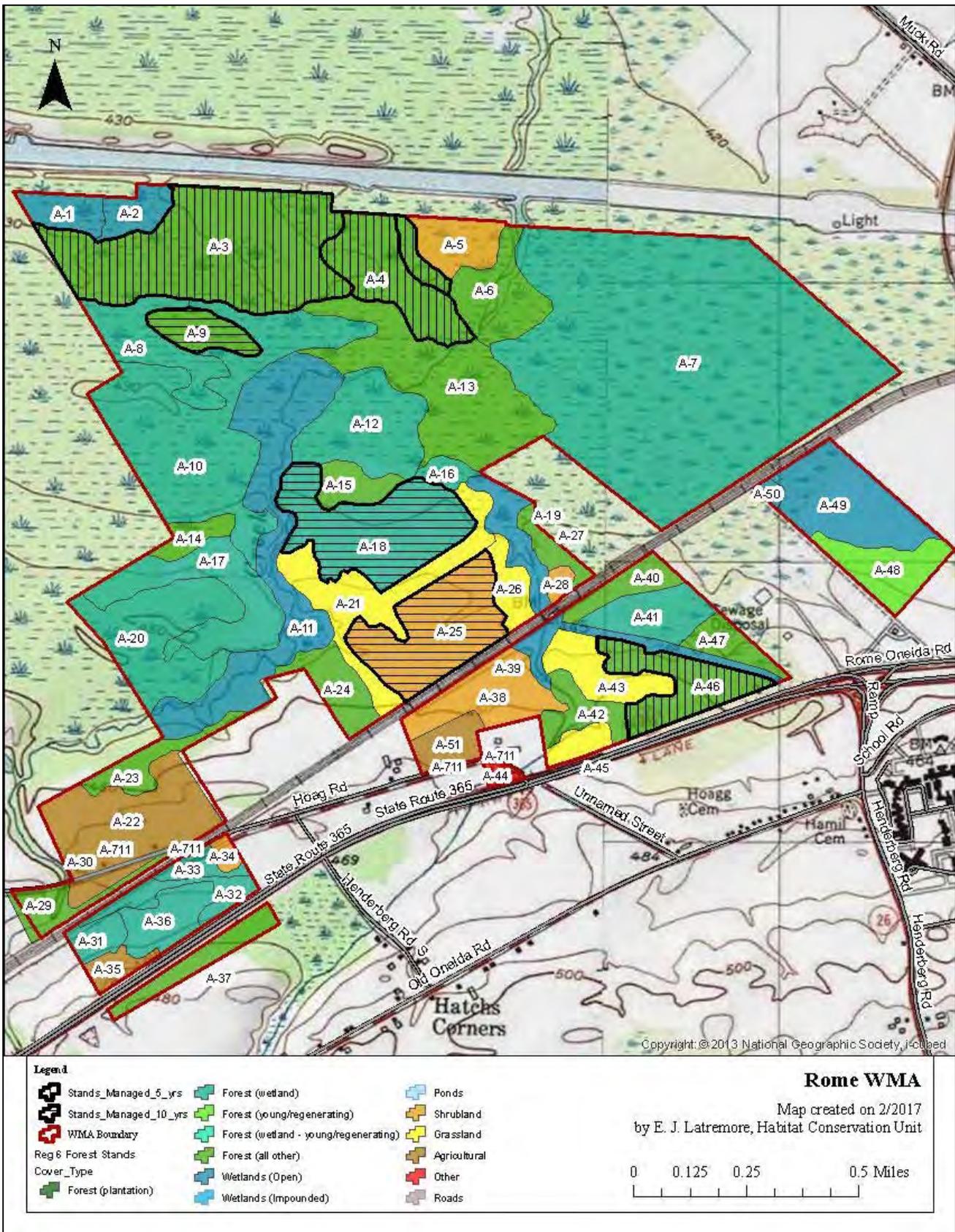


FIGURE 6. Habitat types and location(s) of proposed management on Rome WMA. Numbers indicate the stand number from habitat inventory. Please refer to Habitat Management Summary, Table 7, for management highlights.

IV. APPENDICES

APPENDIX A: DEFINITIONS

The following key words were used in the development of this Habitat Management Plan. Definitions are from The Dictionary of Forestry, Society of American Foresters, J. A. Helms, Editor, unless otherwise noted.

Best Management Practices: (BMP) A practice or combination of practices that are determined to be the most effective and practicable means of avoiding negative impacts of habitat management.

Biodiversity: The variety and abundance of life forms, processes, functions, and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at multiple spatial scales.

Clearcut: A forest regeneration or harvest method that entails the cutting of essentially all trees, producing a fully exposed microclimate for the development of a new age class. Depending on management objectives, a clearcut may or may not have reserve trees left to attain goals other than regeneration.

Community: An assemblage of plants and animals interacting with one another, occupying a habitat, and often modifying the habitat; a variable assemblage of plant and animal populations sharing a common environment and occurring repeatedly in the landscape. (NY Natural Heritage Program)

Endangered Species: Any species listed on the current state or federal endangered species list as being in danger of extinction throughout all or a significant portion of its range.

Forb: Any broad-leafed, herbaceous plant other than those in the Poaceae (Gramineae), Cyperaceae, and Juncaceae families (i.e., not grass-like).

Forest: An ecosystem characterized by a dense and extensive tree cover, often consisting of stands varying in characteristics such as species composition, structure, age class, and associated processes, and commonly including meadows, streams, fish, and wildlife.

Forest Health: The condition of a forest derived from concerns about such factors as its age, structure, composition, function, vigor, presence of unusual levels of insects or disease, and resilience to disturbance.

Grassland Focus Area: Regions of NY that support key, residual populations of grassland birds. There are currently eight focus areas, within which there is a concentrated conservation effort for these species. (A Plan for Conserving Grassland Birds in New York, Audubon NY.)

Habitat: A place that provides seasonal or year round food, water, shelter, or other environmental conditions for an organism, community, or population of plants or animals.

Hardwood: A broad leaved, flowering tree belonging to the botanical group Angiospermae, such as red maple, yellow birch, American beech, black cherry, etc.

Impoundment: A pond caused by a dam across a stream and used for purposes such as water supply, water power, or wildlife habitat. (Edinger et al. 2002. Ecological Communities of New York State, Appendix B)

Landscape: A spatial mosaic of several ecosystems, landforms, and plant communities across a defined area irrespective of ownership or other artificial boundaries and repeated in similar form throughout.

Mast: The fruit of trees considered as food for wildlife. Hard mast is the fruits or nuts of trees such as oak, beech, walnut, and hickories. Soft mast is the fruits and berries from plants such as dogwood, viburnum, elderberry, huckleberry, hawthorn, grape, raspberry, and blackberry.

Multiple Use Area: Lands that were acquired by DEC to provide outdoor recreation and wherever possible the conservation and development of natural resources. As their name suggests, they are to be managed for a broader range of public use. (Public Use of Lands Managed by the Bureau of Wildlife)

Native: A plant or animal indigenous to a particular locality.

Old Growth Forest: Forest with an abundance of late successional tree species, at least 180 - 200 years of age in a contiguous forested landscape that has evolved and reproduced itself naturally, with the capacity for self-perpetuation, arranged in a stratified forest structure consisting of multiple growth layers throughout the canopy and forest floor, featuring canopy gaps formed by natural disturbances creating an uneven canopy, and a conspicuous absence of multiple stemmed trees. (Adapted from the NYS Strategic Plan for State Forest Management)

Pole: A tree of a size between a sapling (1" to 5" diameter at breast height) and a mature tree.

Regeneration Cut: A cutting procedure by which a new forest age class is created; the major methods are clearcutting, seed tree, shelterwood, selection, and coppice. The Young Forest Initiative includes these silvicultural treatments: clearcuts, seed tree cuts, and shelterwood cuts. Salvage (following a natural disturbance) will be considered based on the size and scope of the disturbance.

Seed Tree Method: A forest regeneration or harvest method that entails cutting of all trees except for a small number of widely dispersed trees retained for seed production and to produce a new age class in fully exposed microenvironment.

Shelterwood Method: A forest regeneration or harvest method that entails the cutting of most trees, leaving those needed to produce sufficient shade to produce a new age class in a moderated microenvironment.

Shrubland: A community dominated by woody plants typically less than ten feet tall with scattered open patches of grasses and forbs that provide floristic diversity. Typically characterized by >50% cover of shrubs and <25% canopy cover of trees. (Adapted from Edinger et al. 2002. Ecological Communities of New York State, Appendix B)

Softwood: A coniferous tree belonging to the botanical group Gymnospermae, such as white pine, Eastern hemlock, balsam fir, red spruce, etc.

Special Management Zone: A vegetation strip or management zone extending from wetland boundaries, high-water marks on perennial and intermittent streams, vernal pool depression, spring seeps, ponds and lakes, and other land features requiring special consideration. (Adapted from DEC Division of Lands and Forests Management Rules for Establishment of Special Management Zones on State Forests)

State Rank of Significant Ecological Communities:

S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.

S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.

S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

S4 = Apparently secure in New York State.

S5 = Demonstrably secure in New York State.

SH = Historically known from New York State, but not seen in the past 15 years.

SX = Apparently extirpated from New York State.

SE = Exotic, not native to New York State.

SR = State report only, no verified specimens known from New York State.

SU = Status unknown.

(Edinger et al. 2002. Ecological Communities of New York State, Appendix A)

Stand: In forestry, a contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable and manageable unit. In this HMP, the term “stand” is also applied to other habitat types (e.g., grassland, shrubland) to describe an area composed of similar vegetation composition and structure, as delineated during the habitat inventory.

Stand Prescription: A planned series of treatments designed to change current stand structure to one that meets management goals. Note: the prescription normally considers ecological, economic, and societal constraints.

Target Species: A suite of high priority wildlife species of conservation interest that are being targeted to benefit from management of a particular habitat type. For example, young forest target species at Rome WMA include: American Woodcock, white-tailed deer, Wild Turkey, and Ruffed Grouse.

Unique Area: Lands that were acquired by DEC for their special natural beauty, wilderness character, geological, ecological, or historical significance for inclusion in the state nature and historical preserve. The primary purpose of these lands is to protect the feature of significance that led to the land being acquired by the state. (Public Use of Lands Managed by the Bureau of Wildlife)

Upland: Sites with well-drained soils that are dry to mesic (never hydric). (Edinger et al. 2002. Ecological Communities of New York State, Appendix B)

Wetland: “Freshwater wetlands means lands and waters of the state as shown on the freshwater wetlands map which contain any or all of the following:

- (a) lands and submerged lands commonly called marshes, swamps, sloughs, bogs, and flats supporting aquatic or semi-aquatic vegetation of the following types: wetland trees, wetland shrubs, emergent vegetation, rooted, floating-leaved vegetation, free-floating vegetation, wet meadow vegetation, bog mat vegetation, and submergent vegetation;
 - (b) lands and submerged lands containing remnants of any vegetation that is not aquatic or semi-aquatic that has died because of wet conditions over a sufficiently long period, provided that such wet conditions do not exceed a maximum seasonal water depth of six feet and provided further that such conditions can be expected to persist indefinitely, barring human intervention;
 - (c) lands and waters substantially enclosed by aquatic or semi-aquatic vegetation as set forth in paragraph (a) or by dead vegetation as set forth in paragraph (b) the regulation of which is necessary to protect and preserve the aquatic and semi-aquatic vegetation as set forth in paragraph (a) or by dead vegetation as set forth in paragraph (b) the regulation of which is necessary to protect and preserve the aquatic and semi-aquatic vegetation; and
 - (d) the waters overlying the areas set forth in (a) and (b) and the lands underlying.”
- (Refer to NYS Environmental Conservation Law, Article 24 § 24-0107 for full definition.)

Wildlife Management Area: Lands that were acquired by DEC primarily for the production and use of wildlife, including hunting and trapping. These areas provide and protect wildlife habitats that are particularly significant in their capacity to harbor rare, threatened or endangered species, host unusual concentrations of one or more wildlife species, provide an important resting and feeding area for migratory birds, provide important nesting or breeding area for one or more species of wildlife, or provide significant value for wildlife or human enjoyment of wildlife. (Public Use of Lands Managed by the Bureau of Wildlife)

Young Forest: Forests that result from a regeneration cut, typically having a dense understory where tree seedlings, saplings, woody vines, shrubs, and herbaceous vegetation grow together. Young forests are typically 0-10 years old. (Adapted from www.youngforest.org). It is acknowledged that “young forests” will differ in their character in different ecological areas of the state and that 0-10 years is a continuum into more mature forest types. (Refer to: A DEC Strategic Plan for Implementing the Young Forest Initiative on Wildlife Management Areas 2015-2020)

APPENDIX B. STATEMENT OF CONFORMITY WITH SEQRA

Habitat Management Plans will be in compliance with the 1979 *Programmatic Environmental Impact Statement on Habitat Management Activities of the Department of Environmental Conservation; Division of Fish and Wildlife* by following the criteria for site specific assessments included in this Programmatic Environmental Impact Statement (EIS) and by discussing further in Appendix B, Statement of Conformity with the State Environmental Quality Review Act (SEQRA). Appendix B will be included in each plan, thereby satisfying overall compliance with 6 NYCRR Part 617, the State Environmental Quality Review. If any of these criteria are exceeded an additional site specific environmental review will be required.

Most activities recommended in this HMP are a continuation of habitat management that DEC routinely conducts under the Programmatic EIS. Beginning in 2015, DEC's Young Forest Initiative (YFI) will considerably increase forest management on Wildlife Management Areas (WMA); YFI's conformity with SEQRA is specifically addressed below. The overarching goal of the YFI is to restore and maintain young forest habitat on WMAs in order to address the declining amount of young forest habitat in the state and provide habitat for key species of conservation interest, including both at-risk and game species. The habitat management activities to be carried out under the YFI are in compliance with the above referenced document and these management activities:

- Will not adversely affect threatened or endangered plants or animals or their habitat.
 - Careful review of the NY Natural Heritage Program's "Natural Heritage Element Occurrence" database in conjunction with a field survey when necessary prior to management activities taking place allows field staff to assess the presence or absence of threatened and endangered species. Appropriate actions will be taken if a threatened or endangered plant or animal is encountered in the project area including, but not limited to: establishing adequate buffer zones around known occurrences, moving the project area, or aborting the project altogether.
- Will not induce or accelerate significant change in land use.
 - The forestland affected by the YFI will be regenerated and remain forested land, therefore no land use change will take place.
- Will not induce significant change in ambient air, soil, or water quality.
 - All projects carried out under the YFI will protect air, soil and water quality through careful project planning, use of appropriate NYS Best Management Practices for Water Quality, and establishment of Special Management Zones around sensitive land and water features requiring special consideration.
- Will not conflict with established plans or policies of other state or federal agencies.
 - YFI projects will follow established plans or policies of other state and federal agencies. Additionally, all YFI projects will be in compliance with all relevant US Fish and Wildlife Service rules and regulations.
- Will not induce significant change in public attraction or use.
 - The WMA program is part of a long term effort to establish permanent access to lands in New York State for the protection and promotion of its fish and wildlife resources. Projects carried out under the YFI will continue to protect, promote and maintain public access to WMAs and their wildlife resources.
- Will not significantly deviate from effects of natural processes which formed or maintain area.
 - Habitat management projects under the YFI will be carried out primarily through even-aged forest management. Even-aged silvicultural systems are designed to mimic natural disturbances, such as flooding, wildfire, insect and disease outbreaks and storm damage often found in nature.
- Will not result in areas of significantly different character or ecological processes.
 - The even-aged silvicultural techniques that will be employed for habitat management projects under the YFI intentionally result in areas of different character and ecological processes. However, they are not considered significant as they are ephemeral or transitional and will not permanently alter the landscape.
- Will not affect important known historical or archeological sites.
 - Each YFI project will be reviewed by DEC's State Historic Preservation Officer (SHPO) as well as the Office of Parks, Recreation and Historic Preservation (OPRHP) to determine whether

project sites may potentially affect any historical or archeological sites. In addition, thorough field review prior to management activities taking place allows field staff to assess the presence or absence of any apparent historical or archeological sites that may not be found during the review process. Should known important historical or archeological sites present themselves necessary actions will be taken to protect these resources under the direction of DEC's SHPO and the OPRHP Archaeology Unit staff.

- Will not involve the application of herbicides, pesticides or other such chemicals.
 - YFI projects may involve the judicious use of pesticides which may be necessary to control invasive species, to protect rare and endangered plants from competition, or to control vegetation interfering with forest regeneration. If projects do require the use of herbicides or pesticides an additional site-specific environmental review will be required.
- Will not stimulate significant public controversy.
 - It is not anticipated that YFI projects will stimulate significant public controversy. A significant amount of public outreach and notification will be conducted on an on-going basis as well as prior to projects being implemented on the ground including, but not limited to: public information sessions regarding the Habitat Management Plans for each WMA, signage installation at project sites informing the public of the scope and purpose of the project, establishment of one demonstration area in each region to showcase YFI management techniques to the public, periodic informational articles published in local media outlets and the development of a public YFI website. The YFI has one full time position dedicated to facilitating the program's public outreach and communication efforts.

PRESCRIPTION NOTES

Species Composition: At a minimum, the three most common species found in the overstory should be included, assuming at least three species comprise the stand. Species that individually constitute less than 5% of the stand may be lumped together as “Other” or “Miscellaneous.” For instance, if beech, hemlock and yellow birch each make up 3% of the stand, they may be lumped together as “Other – 9%.”

Natural Heritage Element Occurrence layer review: List those species that the Natural Heritage Element Occurrence (EO) data layer indicates are or were known to be present in the stand, or could be affected by treatments to the stand. For instance, if a rare fish was indicated in a water body that is a short distance downstream of a creek that flows through the stand, it should be listed in the prescription.

SMZ layer review: The SMZ data layer includes Special Management Zones around all streams and wetlands, as well as vernal pools, spring seeps and recreation areas that staff have mapped and digitized. If any of these features are mapped incorrectly or are missing from current data layers, staff can correct their locations by editing their office layers.

Retention data: Include numbers of existing snags, cavity trees, Coarse Woody Material, Fine Woody Material, and legacy trees. Ocular estimates are acceptable.

Soil types and drainage: Specifically named soil types are useful, but not necessarily required. “Flat, sandy, well-drained hilltop” or “Steep, gravelly, moderately well-drained mid-slope” may be just as useful as “Hershisier-Koufax Sandy Silt Loam” in describing the soil conditions as they relate to management decisions. The important point is to note those characteristics that may limit equipment operation or establishment of regeneration. Soil type data is available for some counties on the Data Selector.

Interfering vegetation: Indicate the existing amount of interfering vegetation such as beech, striped maple, fern, etc. This may be quantified using mil-acre plots or by ocular estimate.

Technical guidance used: This may include stocking guides, articles found in technical journals, textbooks or other silviculture-related publications. Other sources of guidance may be acceptable as well.

Treatment purpose: As used here, “treatment purpose” and “management objective” (see below) are two different things. Also, “treatment purpose” is not what is to be done (i.e., “reduce basal area by 25%” or “remove every third row”), but rather is an explanation of why it is being done (i.e., “stimulate regeneration and increase growth of residual stand” or “regenerate current stand and convert to young forest”).

Management objective: As used here, the term “management objective” is somewhat general. At a minimum, the prescription should indicate the desired future age structure and stand type. An entry as general as “Even aged hardwood” is acceptable, but regional staff may be more specific if they so choose. The management objective for a stand may be specified in the Habitat Management Plan (HMP) for the Wildlife Management Area in question. If the existing HMP does not specify the management objective regional staff should choose the management objective when the prescription is written.

Clearcut acreage and configuration: If the harvest involves one single clearcut, indicate the total contiguous area, in acres. If the harvest comprises more than one clearcut, indicate the total combined area of clearcuts, as well as the area of the largest clearcut.

Natural Heritage/MHDB considerations: Indicate what measures will be taken to protect those elements or features that were found in the review of the Natural Heritage Element Occurrence and Special Management Zone (not applicable yet) layers.

Retention considerations: Indicate whether or not existing levels meet the standards set forth in the Division’s policy on Retention on State Forests, or whether they are expected to do so as a result of the proposed treatment. Also indicate if or how the treatment was adjusted in order to improve compliance with the policy standards.

Treatment description: The intended treatment should be clearly described. The amount of information necessary to accomplish this will vary greatly. For instance, in a row thinning of a pole timber sized plantation that had no SMZs or other special features, it may be sufficient to simply indicate “Remove two out of every six rows, taking two adjacent rows and leaving four rows between successive pairs being removed.” An intermediate thinning in a sawtimber sized hardwood stand with a recreational trail, two streams and a known occurrence of an endangered plant community would require significantly more detail. One rule of thumb that could be used is to describe the treatment so that a qualified forestry professional could use it to assist in marking the harvest.

Additionally, since we are focused on creating young forests you should also address the presence/absence of advanced regeneration. If you are planning on clearcutting without advanced regeneration, address how you are going to mitigate that. For example, “This aspen stand will be clearcut and it is anticipated that future regeneration will be established through aspen root sprouting”. Or, “This stand will be clearcut and replanted with Norway spruce to establish conifer cover.”

Furthermore, if you are planning on conducting a shelterwood or seed tree cut, please indicate when you are planning on returning to the stand to conduct the final harvest (overstory removal).

APPENDIX D: AMENDMENTS

Any substantive changes to the habitat management described in this plan will be amended to the plan annually or as needed. Such changes may include: land acquisition, unforeseen natural disturbance, or any other change that alters the need for or the scope, method, or timing of management.

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None.