Habitat Management Plan
for
Utica Marsh Wildlife Management Area
2017 - 2026

Kiosk and forested area on Utica Marsh WMA.

Photo: NYSDEC

Division of Fish and Wildlife
Bureau of Wildlife

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

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SUMMARY

Utica Marsh Wildlife Management Area (WMA) was acquired in 1979, with additional parcels added in 1981 and 1990. The WMA is located on the Mohawk River floodplain adjacent to the City of Utica. The primary habitat types of the WMA are wetlands consisting of open water, emergent marshes, wet meadows, and wooded wetlands. The deep pool habitats on the WMA are a result of mining by the brick manufacturing companies that historically operated within the area. Utica Marsh WMA is a great example of productive wetland habitat in the shadow of a larger urban center. The WMA is a popular destination for birding, biking and walking. Hunting is prohibited on the WMA due to firearm ordinances within the City of Utica municipal limits, but fur trapping is allowed on the area.

Access to the WMA has changed significantly in recent years due to the loss of the Barnes Avenue Bridge that allowed the public to drive directly to the property. In 2014, the trail network within the WMA underwent a significant rehabilitation and users can now access the area from the New York State Canalway Trail. The loss of the bridge also unfortunately eliminated recreational boat launch capabilities to the Barge Canal and the Mohawk River.

Habitat management goals for Utica Marsh WMA include:

- Managing approximately 5% of the WMA (15% of the forested acres) as young forest (0-10 years old) to promote American Woodcock, white-tailed deer, and early successional songbirds;
- Maintaining approximately 27% as intermediate and mature forest to support white-tailed deer;
- Maintaining approximately 66% as non-forested wetlands to provide marsh bird and waterfowl breeding and migratory stopover habitat; and
- Maintaining accessible foot and biking trails (approximately 2% of the WMA acreage).

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, NYS Department of Environmental Conservation (DEC) Division of Fish and Wildlife (DFW) initiated a holistic planning process for wildlife habitat management projects. Habitat Management Plans (HMP) 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 (UMP), 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

Utica Marsh WMA is located in DEC Region 6, City of Utica and Town of Marcy, Oneida County (Figure 1).

Total Area

193 acres

In addition, DEC maintains 21 acres of Canal Corporation land in the immediate vicinity of the WMA boundaries.

Historical Management Focus

The Management Plan originally written in 1980 for Utica Marsh outlines a vision for an urban wildlife habitat that is accessible for the public to enjoy nature. The plan called for the development of access trails and observation towers. The property has been used for community garbage clean-ups, bio-blitz events, environmental education, college research and was even considered as a location for a nature center by Audubon New York.

Much of the 1980 plan has been developed or modified to address current fiscal and access realities. The trail system has been reduced from original designs, but the quality of that access is higher and easier to maintain annually. The public is directed to the WMA via an informational kiosk located off of North Genesee Street (Figure 1).

Utica Marsh WMA is a feature easily recognized by drivers using the State Route 12/28 highway which divides the property.

Habitat Inventory

A habitat inventory of the WMA was completed in 2016 and should be conducted 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 Utica Marsh WMA.

Habitat Type	Current Conditions (as of 2016)			Desired Conditions	
	Acres	Percent of WMA	Miles	Acres	Percent of WMA
Forest [a]	61	32%		52	Decrease to 27%
Young forest	0	0%		9	Increase to 5%
Shrubland	0	0%		0	No change
Grassland	0	0%		0	No change
Agricultural land	0	0%		0	No change
Wetland (natural) [b]	0	0%		0	No change
Wetland (impounded) [b]	128	66%		128	No change
Open water	0	0%		0	No change
Other	0	0%		0	No change
Roads	4	2%	0	4	No change
Rivers and streams			0		No change
Total Acres:	193	100%		193	

[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 species present on Utica Marsh WMA are the typical species found throughout Northern New York and the floodplains of the Mohawk Valley, such as:

- Beaver, muskrat, mink, river otter
- A variety of songbirds, migratory waterfowl, and marsh birds (Least Bittern)
- White-tailed deer, American Woodcock, Wild Turkey, grey squirrel
- Bullfrog, northern leopard frog, green frog, eastern American toad, spring peeper
- Northern water snake, garter snake

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 and 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]

[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. Species of conservation concern that may be present on Utica Marsh 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 Bittern		SC	x
	American Black Duck			HP
	American Kestrel			x
	Bay-breasted Warbler			HP
	Bald Eagle		T	HP
	Black-crowned Night-heron			x
	Black-throated Blue Warbler			x
	Black Tern		E	HP
	Blue-winged Teal			x
	Brown Thrasher			HP
	Common Goldeneye			x
	Golden Eagle		E	x
	Great Egret			x
	Greater Yellowlegs			x
	Horned Grebe			x
	Least Bittern		T	x
	Lesser Scaup			x
	Long-tailed Duck			x
	Northern Harrier		T	x
	Northern Pintail			x
	Peregrine Falcon		E	x
	Pied-billed Grebe		T	x
	Ruddy Duck			x
	Rusty Blackbird			HP
	Scarlet Tanager			x
	Sedge Wren		T	
	Vesper Sparrow		SC	HP
	Wood Thrush			x
Mammals	None known			
Amphibians and reptiles	Eastern rat snake			x
	Eastern ribbon snake			x
	Smooth green snake			x
	Snapping turtle			x
	Wood turtle		SC	HP
Fish	None known			
Invertebrates	None known			
Plants	Live-forever		E	
	Marsh valerian		E	

Table 2 cont.

Species Group	Species	Federal Status	NY Status	NY SGCN Status
Plants	Pink wintergreen		T	
	Puttyroot		E	
	Toothed rock-cress		T	
	Virginia ground-cherry		E	

Significant Ecological Communities:

There are no noteworthy natural communities located on Utica Marsh WMA as identified by the NY Natural Heritage Program (Figure 2). Additional information about significant ecological communities is available in the Utica Marsh WMA Biodiversity Inventory Final Report (1998) prepared by the NY Natural Heritage Program, and in *Ecological Communities of New York State, Second Edition.*[5]

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 Utica Marsh WMA include:

- 3 wetlands regulated by Article 24 of the Environmental Conservation Law (ECL) 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.
- 1 stream (a watercourse entirely within the WMA), the Mohawk River, or segments of streams (a stream that meanders in and out of the WMA). The highest stream classification is Class C, therefore no streams are regulated by Article 15 of the ECL. State agencies are exempt from the provisions of Article 15, but all water quality standards will be adhered to.[6]
- The Barge Canal flows near the northern boundary of the WMA but does not intersect the WMA.

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.

[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.
[7] Available online at http://www.dec.ny.gov/outdoor/104218.html.

Soils:

Soil groups on Utica Marsh WMA include Wayland silt loam, Palms muck, Hamlin silt loam, and Udorthents.[8] Except for the Hamlin silt loams and Udorthents, which can be found around the edges of the WMA and are moderately well drained, the soils are generally poorly drained and not ideal for tree growth. Construction debris and other waste, such as bricks, concrete, and tires, were deposited on parts of the WMA in the past, further limiting the productivity of the soil.

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 Utica Marsh WMA (Figures 4 and 5). The surrounding landscape within a three mile radius of the WMA is composed of the following land cover types:

- Developed (50%)
- Deciduous forest (18%)
- Wetlands (8% combining open water, emergent, and woody wetlands)
- Early successional shrubland (8%)
- Pasture/hay (5%)
- Grassland (4%)
- Cultivated crops (3%)
- Mixed forest (3%)
- Evergreen forest (1%)

Nearby conservation lands include the historical Erie and Barge Canals.

Portions of the WMA are within the city limits of Utica, so the predominant surrounding landscape is highly developed (Figures 4 and 5). The majority of the developed land is located south of the WMA. The area to the north is fragmented forest, with lighter development and portions of open field. Large forested tracts are absent from the immediate landscape.

Currently, the forested landscape on Utica Marsh WMA includes no young forest habitat, in contrast to DFW's Young Forest Initiative (YFI) goal of managing at least 10% of the forested landscape on most WMAs as young forest.[9] Considering the limited amount of young forest on both the WMA and surrounding landscape, creating additional young forest habitat is desirable, in limited scope. The created young forest will provide cover, forage, and nesting habitat for a variety of species in an area that lacks disturbance-dependent habitat. The added diversity of habitat will also increase species richness.

[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 develop management projects on Utica Marsh WMA to provide the following benefits:

- Maintain or create 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 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 hydrophytic forest or shrub vegetation accounts for greater than 50% of 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.

Forest management on Utica Marsh 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

- Increase young forest habitat from 0 acres to 9 acres (15% of the total forested area), with high stem densities to provide cover for American Woodcock.
- Reduce invasive species such as Japanese knotweed, honeysuckle, and buckthorn.

DESCRIPTION OF EXISTING FOREST HABITAT AND TARGET SPECIES

Typical forested area on Utica Marsh WMA.

Photo: NYSDEC

Utica Marsh WMA was active agricultural land in the early 1900s through the 1930s and industrial through the 1970s. The WMA exhibits small quantities of pioneer forested habitat ranging from dense patches of pole-sized aspen and European alder to open areas with sparse, large black willows and boxelder maples mixed with wetland grasses. Approximately half of the forested habitat at Utica Marsh WMA is forested wetland. All the stands contain at least a few black willow trees, with most of the willow occurring along the edges of the wetlands and Mohawk River. Patches of aspen and alder hold the potential for dense regeneration if cut. Other tree species found at the WMA include maple, ash, white oak, and even a few scattered black walnut. Regeneration on much of the WMA is limited by invasive shrubs such as Japanese knotweed and honeysuckle.

None of the forested habitat is young forest under 10 years old; and the preferred stem densities, cover, and food sources of young forest dependent species are currently not available in high quantities. As of the 2016 inventory, there are 61 forested acres on Utica Marsh WMA (Figure 6). 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 Utica Marsh WMA.

Forest Type	Acres (as of 2016)	Desired Acres	Overstory species
Natural forest (mature/intermediate)	28	19	aspen, black willow, ash
Plantation	0	0	
Forested wetland	33	33	
Young forest	0	9	
Young forest (forested wetland)	0	0	
Total Forested Acres:	61	61	

Target species for young forest include American Woodcock and other SGCN. 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:
    - Foraging – Moist, rich soils with dense overhead cover of young alders, aspen or

birch.
- Nesting – Young, open, second growth woodlands.
- Brood rearing – Similar to nesting except also including bare ground and dense ground cover.

MANAGEMENT HISTORY

There are no historical timber harvests on Utica Marsh WMA.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

The following management is proposed for the next ten years in order to reach the young forest goal of 9 acres:

- **Management planned for 2017-2021** (Table 4, Figure 6):
  - **Stand A-1 –** a 3 acre clearcut will be completed in a mixed shrub/forested stand dominated by aspen.
  - **Stand A-3** – a 3 acre clearcut will be completed in a mature hardwood stand dominated by aspen, black willow, European alder, and silver maple.
- **Management planned for 2022-2026** (Table 5, Figure 6):
  - **Stand A-3** – a 3 acre clearcut will be completed in a mature hardwood stand dominated by aspen, black willow, European alder, and silver maple.

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		
A-1	3	Small Saw Timber 12”-17” DBH	Other	Seedling-Sapling-Natural	Wildlife	Clearcut
A-3	3	Pole Timber 6”-11” DBH	Natural Forest	Seedling-Sapling-Natural	Wildlife	Clearcut

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		
A-3	3	Pole Timber 6”-11” DBH	Natural Forest	Seedling-Sapling-Natural	Wildlife	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 will include the following:

- **Management planned for 2017-2021** (Table 5, Figure 6):
  - **Stand A-1** (3 acres) – a 3 acre clearcut with reserves will be completed in a mixed shrub/forested area. Currently, aspen dominates much of the stand and scattered

black willow can be found along the wetland boundary. The thick honeysuckle and buckthorn understory may need to be treated before the trees are removed, in order to reduce competition for aspen regeneration. The eastern section of the stand is in a wetland, so management will be focused on the western portion of the stand and the residual trees will be concentrated along the wetland.

- **Stand A-3** (24 acres) – 3 acre clearcut (in the northern section of the stand) will be completed in the natural forest stand dominated by aspen, black willow, European alder, and silver maple. A few trees will be retained within the clearcut to provide seed sources for regeneration or cavity trees for wildlife. Black walnut, oak, hickory, and other mast producing trees will be favored, where possible. Aspen and European alder regeneration from root sprouting is anticipated. This will be accomplished by monitoring the site and potentially treating the site with herbicides if necessary.

- **Management planned for 2022-2026** (Table 5, Figure 6):
  - **Stand A-3** (24 acres) – a 3 acre clearcut (in the southern section of the stand) will be completed in the natural forest stand dominated by aspen, black willow, European alder, and silver maple. The same treatment outlined for the earlier cut in Stand A-3 (see above) will be applied for this cut.

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** [10]
Soils	*Rutting Guidelines for Timber Harvesting on Wildlife Management Areas*
Water quality	*NYS Forestry Best Management Practices for Water Quality*
Wildlife	*Retention Guidance on Wildlife Management Areas*
Plantations	*Plantation Management Guidance on Wildlife Management Areas*

Wildlife Considerations:

Treatments should be designed to minimize impacts to eagles and other raptors that utilize the WMA. Multiple birds that are either SGCN, threatened, or endangered use this WMA for breeding, foraging, and stop over habitat, so timeframes will be implemented to protect the birds and to prevent interference with the bird's activities. Threatened and endangered bat species are of limited concern on this WMA as the current distribution of protected bat species are not known to be within the Utica Marsh WMA.

Forest Health Considerations:

Most of the mature forest stands are in poor health. A significant number of the trees have low timber quality due to poor form and dieback. Flooding and wet conditions of the forests on the WMA tends to offer adequate nutrients to support regeneration; however, invasive species are outcompeting native species in most of the stands.

[10] All guidance documents referenced here are available online at http://www.dec.ny.gov/outdoor/104218.html.

Pre- and Post-treatment Considerations:

Pre- or post-treatment herbicide spraying may be necessary to control European alder, honeysuckle, and buckthorn to allow regeneration of other species. Aspen regeneration, in particular, will be encouraged when possible. Significant aspen regeneration is anticipated from root sprouting, as long as competition from invasive shrubs is limited.

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 responses have been achieved by the management outlined above, pre- and post-management assessments will be conducted in accord with guidelines in the *Young Forest Initiative Monitoring Plan: 2016-2025*.[11] 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 target species selected for Utica Marsh WMA, which may be assessed to determine response to management, include:

- American Woodcock

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% canopy cover of shrubs and < 25% canopy cover of trees.

DESCRIPTION OF EXISTING SHRUBLAND HABITAT AND TARGET SPECIES

There are no shrubland stands on the WMA but shrubs do border many sections of the foot trail, old Barnes Avenue road corridor, utility right-of-way (ROW), and portions of the surrounding landscape. Shrubs also make up much of the understory in the forested stands. There is no plan to create shrubland habitat on the area through the proposed forest treatments. Encroaching shrubs will be cut back to maintain access to the foot trails and to maintain open utility ROWs.

GRASSLAND

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.

DESCRIPTION OF EXISTING GRASSLAND HABITAT AND TARGET SPECIES

There is no grassland habitat on the WMA or any plan to develop such habitat.

[11] Available online at http://www.dec.ny.gov/outdoor/104218.html.

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 also including wildlife food plots.

DESCRIPTION OF EXISTING AGRICULTURAL LANDS HABITAT

There is no agricultural land habitat on the WMA or any plan to develop such habitat.

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 128 acres of emergent, scrub-shrub, and open water wetlands as they currently exist.
- Draw down the 60 acre impoundment when necessary to encourage the growth of desirable emergent aquatic vegetation, to help control the growth of purple loosestrife, and to support existing populations of wetland-dependent wildlife.
- Maintain control structure and associated dike as needed for water level management.

DESCRIPTION OF EXISTING WETLAND HABITAT AND TARGET SPECIES

Utica Marsh WMA currently has 128 acres of wetlands (66% of WMA; Figure 3). The wetlands are diverse and provide habitat for species such as:

- American Woodcock
- Beaver, muskrat, mink, river otter
- Snapping and painted turtles
- Bullfrog, green frog, American toad, spring peeper, Jefferson salamander
- Migratory waterfowl and marsh birds such as Virginia and Sora Rails

2006 wetland drawdown on Utica Marsh WMA.

Photo: NYSDEC

MANAGEMENT HISTORY

Previous wetland management has been limited to the impounded wetland, which includes dike and water control maintenance and drawdowns to prevent

the growth of purple loosestrife and to diversify wetland plant species. DEC lacks the ability to manipulate water levels anywhere other than this impoundment.

2014 water chestnut pull on Utica Marsh WMA.

Photo: NYSDEC

Purple loosestrife is present throughout the wetland areas and biological control measures have been implemented since the 1990s in an attempt to control the spread of this plant. A water control structure was installed to aid in the management of the water levels of a 60 acre pool on the WMA. Currently, the structure only allows for drawdowns, with the water supply being from rain water or Mohawk River flood events. A drawdown was completed in 2006 and again in 2012. Vegetation response to the drawdowns was exceptional, although loosestrife continues to persist throughout the open water pools. Precautions such as inspections of equipment, plant/debris removal, or equipment cleaning may be implemented to prevent the spread of invasive species.

In 2013, European water chestnut was discovered in the two larger wetlands and currently occupies about 7 acres of open water. At this writing staff are developing a treatment plan for 2017 to address the water chestnut with herbicide.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2017-2026:**
  - Assess maintenance needs of the water control structure and dike. It was noted that during the 2012 drawdown the half-pipe riser water control structure was deteriorating in a way that boards may not be able to be replaced to refill the pool. A drawdown was scheduled for 2017 but will be postponed until a course of action for repair can be developed.
  - Perform drawdowns every 5-7 years for hydrophytic vegetation growth.
  - As discussed above, management of invasive European water-chestnut will likely take several years to accomplish and will be a major component of the active management in this plan cycle.

BEST MANAGEMENT PRACTICES

Limit drawdowns of impounded wetlands after October 1st to protect hibernating amphibians.

MANAGEMENT EVALUATION

Monitor invasive species and adjust management actions to help limit the spread of invasive species.

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 is 1 stream (a watercourse entirely within the WMA) or segment of stream (a stream that meanders in and out of the WMA). Beyond this stream, 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 Utica Marsh 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 Utica Marsh WMA, 2017-2026. (Also see Figures 3 and 6.)

Habitat	Management Action	Acres	Timeframe
Forest	Clearcut a portion of Stand A-1	3	2017-2021
Forest	Patch clearcut Stand A-3	6	2017-2026
Wetland	Continue routine maintenance on dikes and control structures (i.e., mowing dikes, beaver debris removal).	< 1	Annual
Wetland	Manage water levels in impoundments.	60	As required every 5-7 years

III. FIGURES

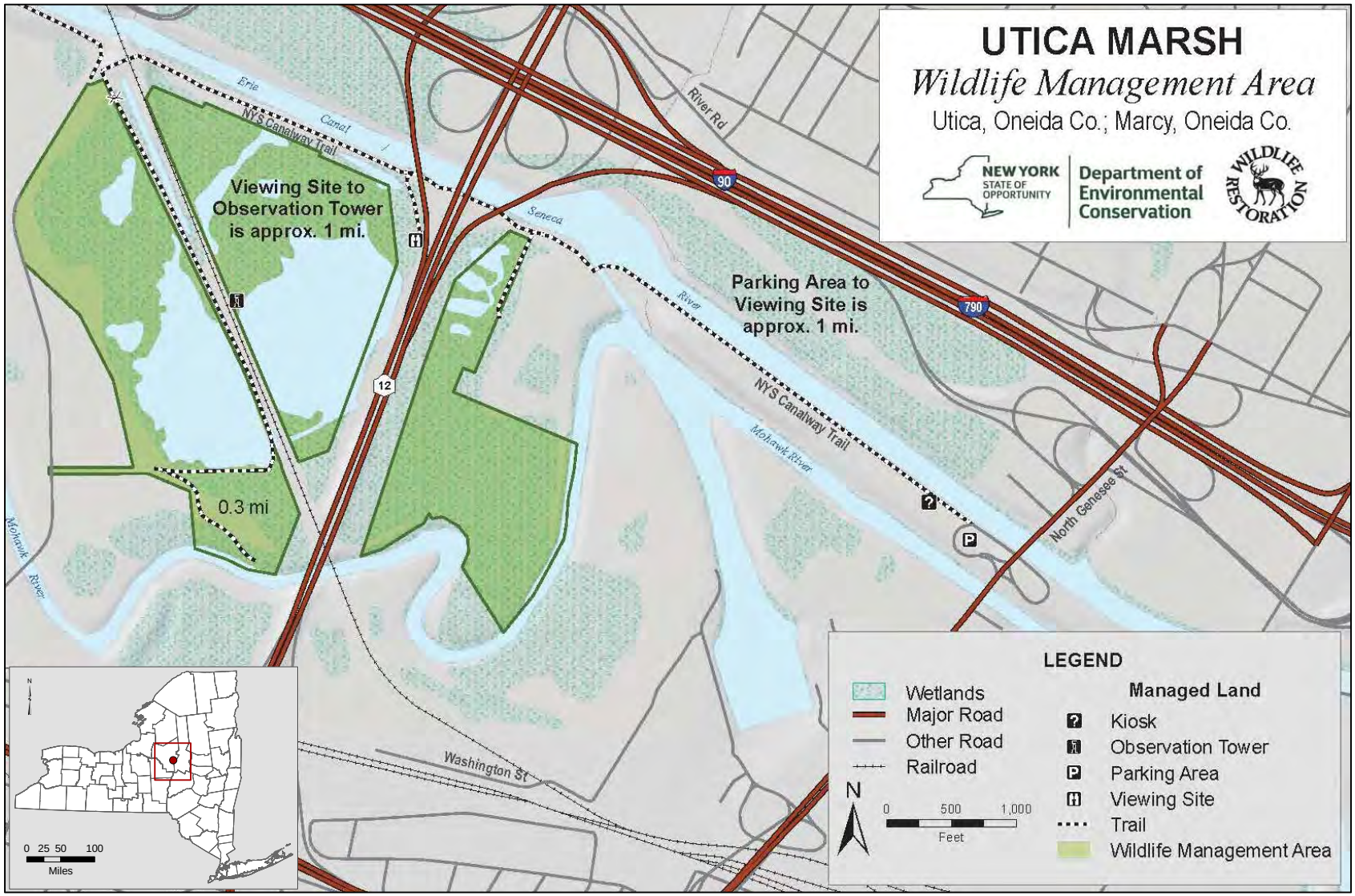

FIGURE 1. Location and access features at Utica Marsh WMA.

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

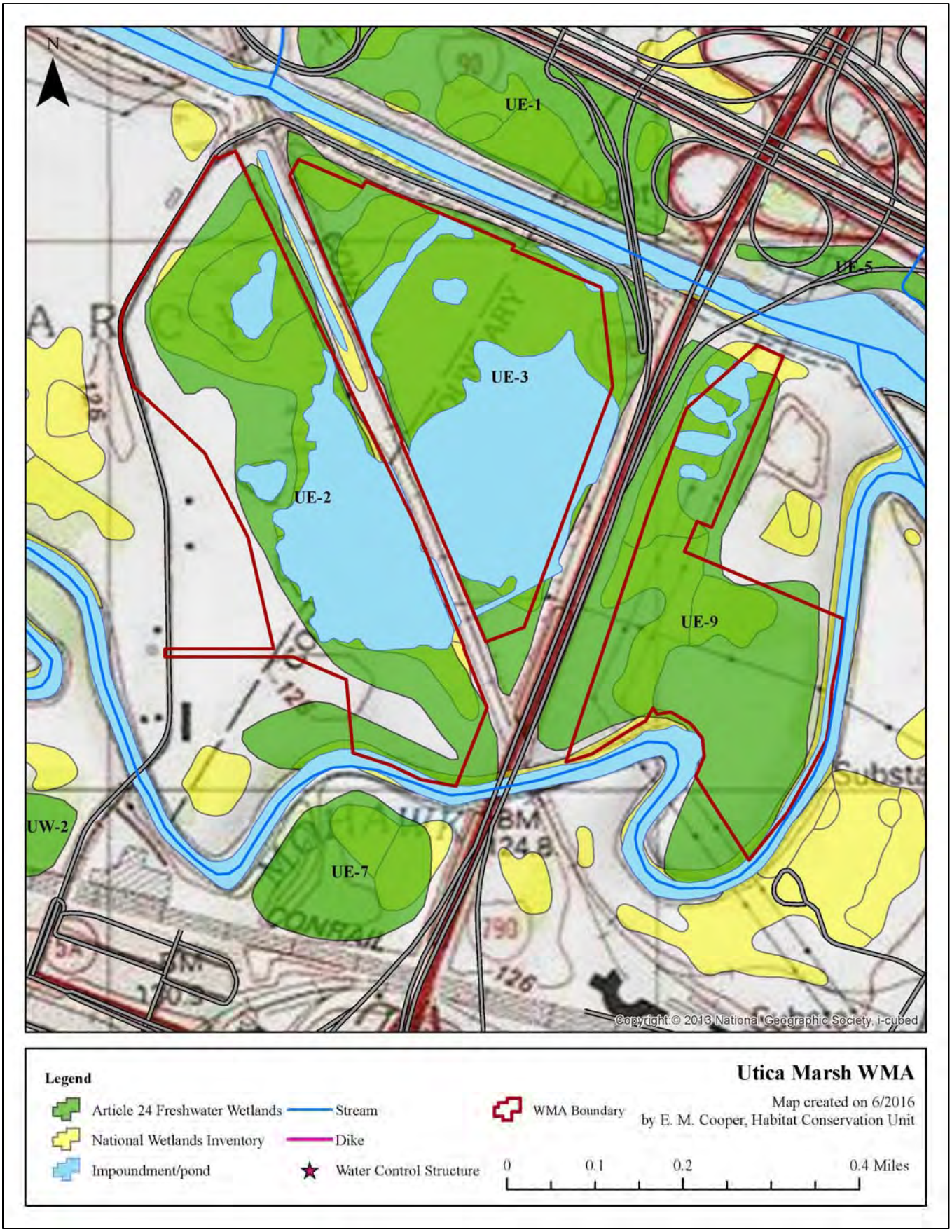

FIGURE 3. Wetlands, open water, and streams of Utica Marsh WMA. Note: Wetland boundaries are not exact and may not be used for regulatory purposes without a current delineation.

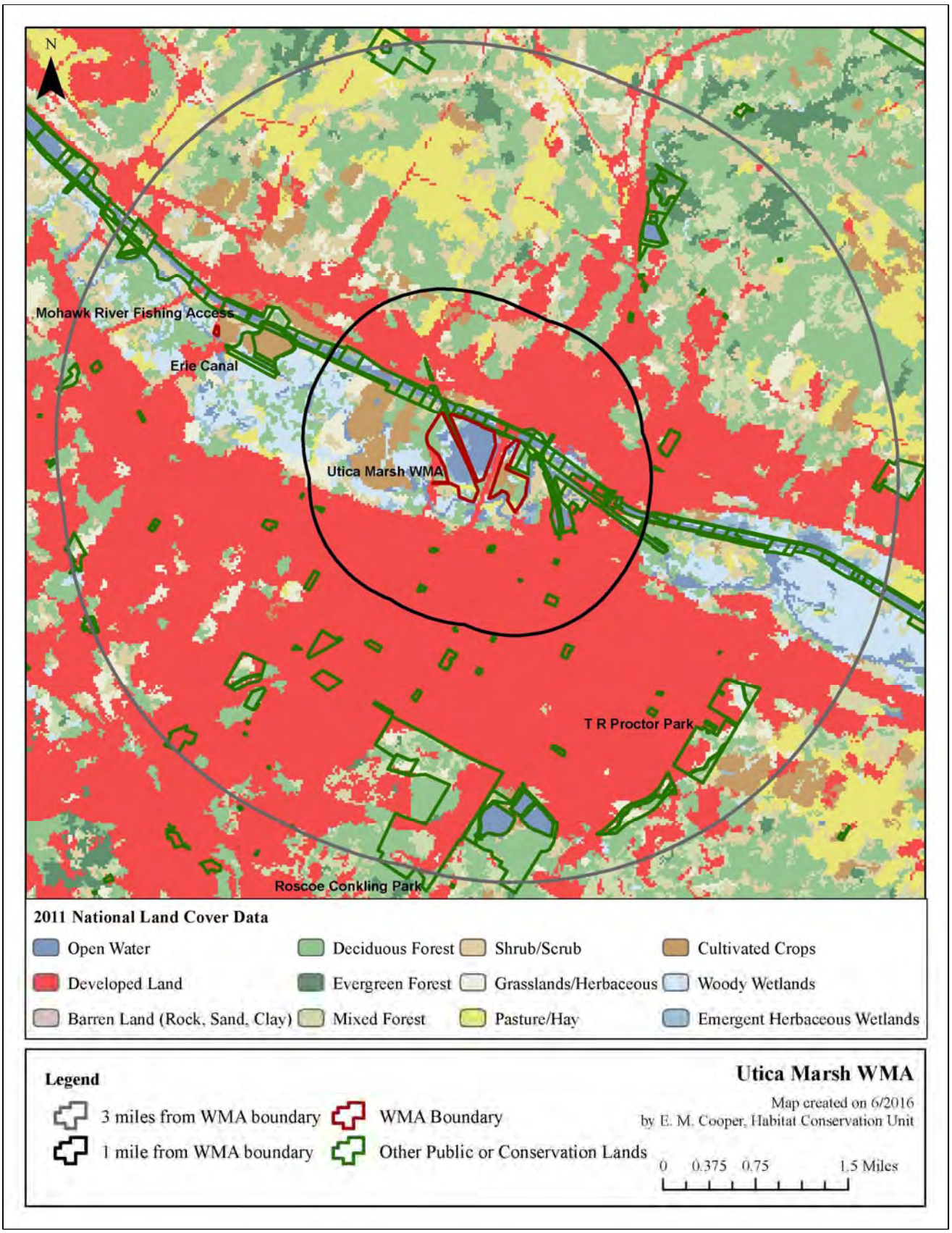

FIGURE 4. Land cover types and conservation lands in the landscape surrounding Utica Marsh WMA. Conservation lands are from the NY Protected Areas Database available online at http://www.nypad.org/. Land cover types are from the 2011 National Land Cover Data (NLCD) and differ from the habitat types used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

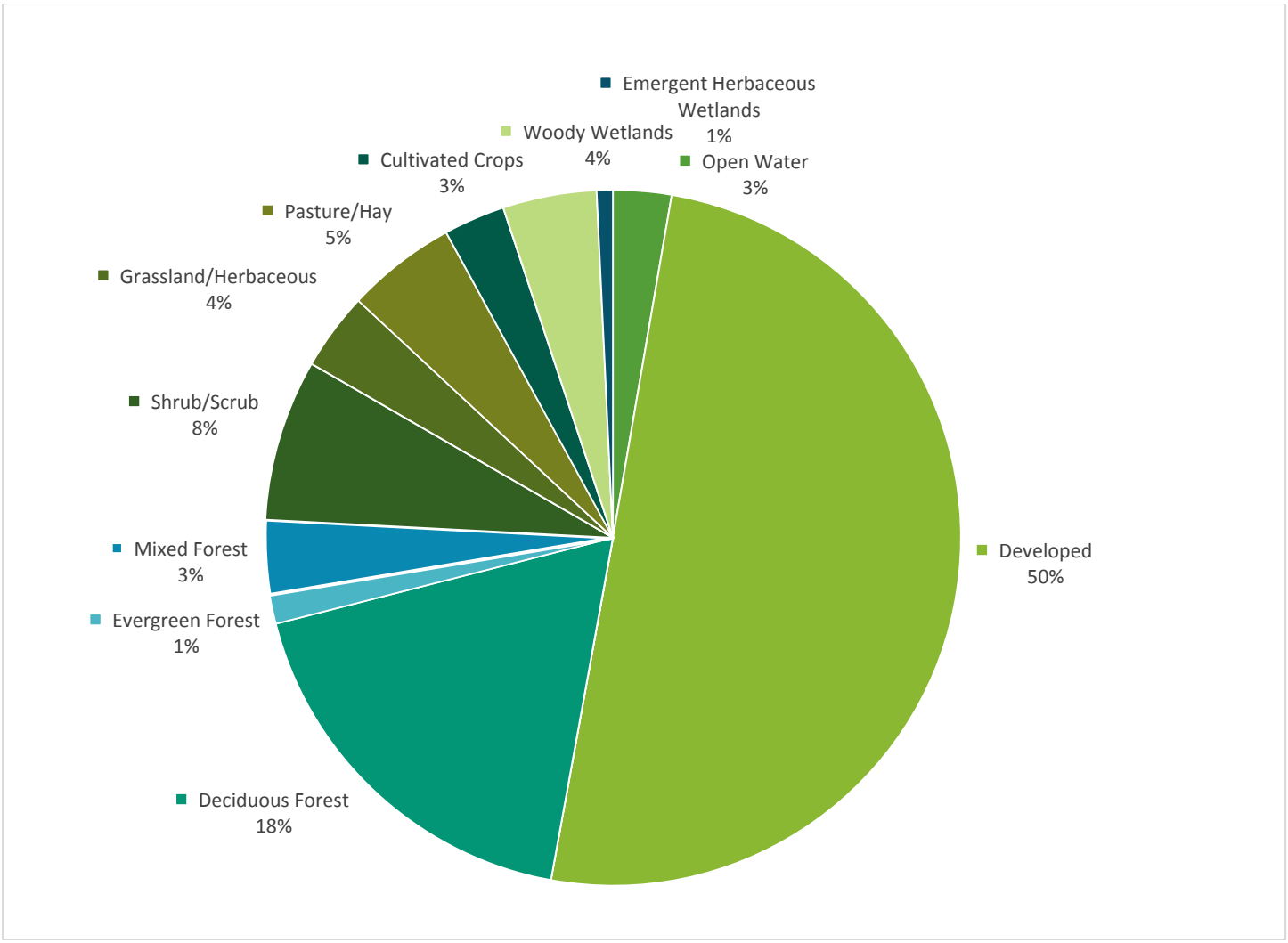

FIGURE 5. Percent cover of land cover types within three miles of Utica Marsh WMA.

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.

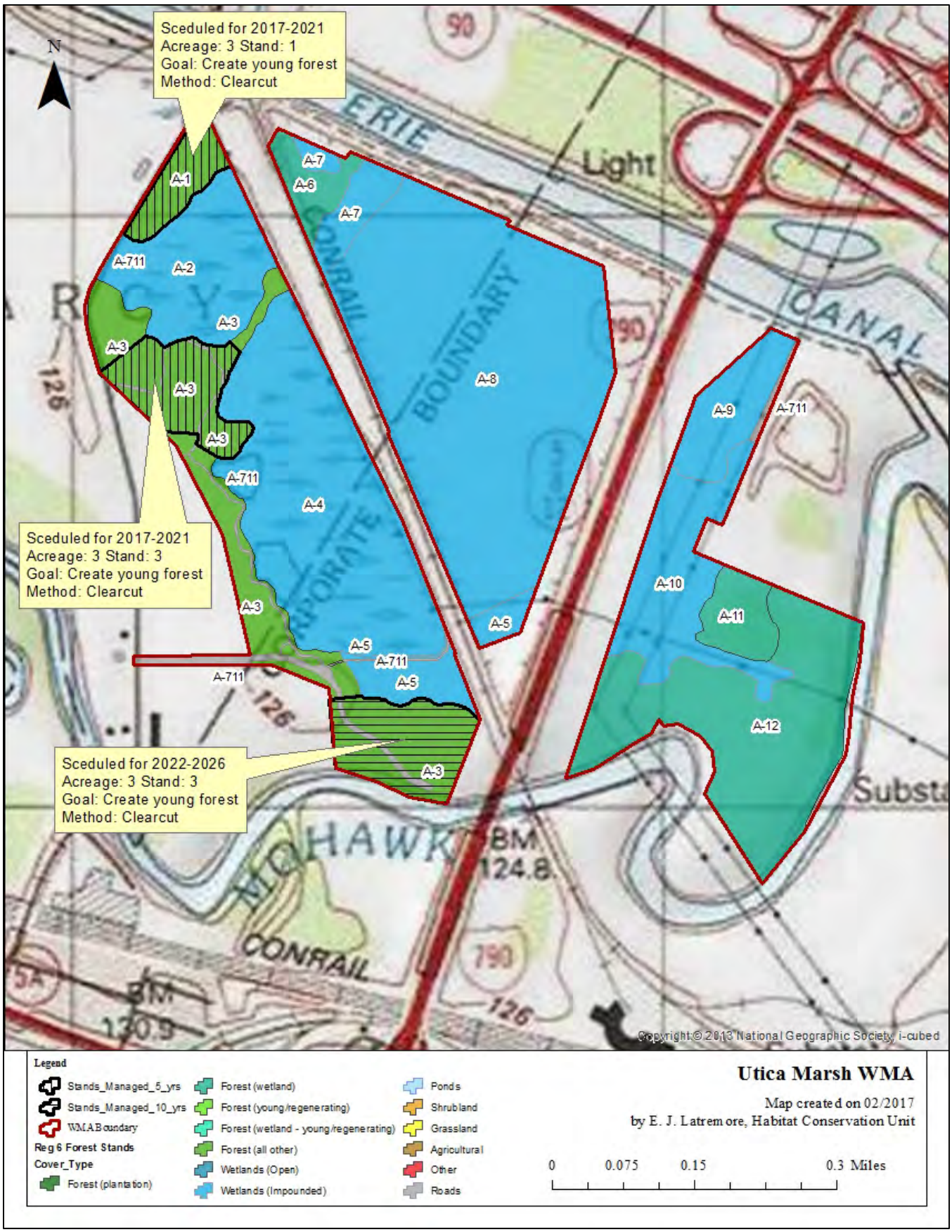

FIGURE 6. Habitat types and location(s) of proposed management on Utica Marsh WMA. Numbers indicate the stand number from habitat inventory.

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 (including technological, economical, and institutional considerations) 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 Utica Marsh WMA include: American Woodcock.

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 and by discussing further in Appendix B, Statement of Conformity with the State Environmental Quality Review Act. 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.

The overarching goal of the Young Forest Initiative (YFI) is to restore and maintain young forest habitat on DEC's Wildlife Management Areas (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 important 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.

APPENDIX C: FOREST MANAGEMENT PRESCRIPTIONS

PRESCRIPTION FOR WILDLIFE MANAGEMENT AREA TIMBER HARVEST

Region: **Wildlife Management Area:** **Stand number:** **Stand acreage:**

Species composition:

Basal area: **Trees per acre:** **Mean stand diameter:**

Stand inventory or analysis date:

Regeneration data:

Natural Heritage Element Occurrence layer review:

SMZ layer review:

PRO layer review:

Retention data:

Soil types and drainage:

Interfering vegetation:

Acres to be treated: **Target basal area:**

Technical guidance/stocking guide:

Treatment purpose:

Management Objective: Even aged or Uneven Aged

-If even aged, specify treatment (i.e. shelterwood, seed tree, clearcut)

Clearcut acreage and configuration: (if applicable)

Natural Heritage /MHDB considerations and mitigation: (if applicable)

Retention considerations and adjustments:

Treatment descriptions:

Name and Title of Preparer:

Central Office Lands and Forests Staff **Date**

Regional Wildlife Manager **Date**

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 "Hershiser-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.

FY 17-18 (4/1/17 - 3/31/18)

None.