

Habitat Management Plan for Dexter Marsh Wildlife Management Area 2023 – 2032



Division of Fish and Wildlife
Bureau of Wildlife

317 Washington Street, Watertown, New York 13601

November 21, 2022



Department of
Environmental
Conservation

Prepared by:

Erik Latremore, Biologist 1 (Wildlife), and
Elizabeth Truskowski, Fish and Wildlife Technician
Young Forest Initiative/Land Management

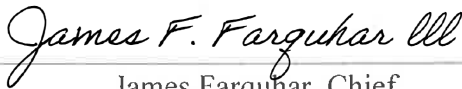
Reviewed and approved by:



Andrew MacDuff, Regional Wildlife
Manager
Bureau of Wildlife

12/21/2022

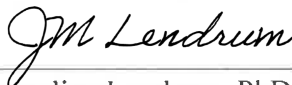
Date



James Farquhar, Chief
Bureau of Wildlife

12/22/2022

Date



Jacqueline Lendrum, PhD., Director
Division of Fish and Wildlife

12/22/2022

Date



Financial support for development of this Habitat Management Plan was provided by the Federal Aid in Wildlife and Sport Fish Restoration Program and non-federal funds administered by the New York State Department of Environmental Conservation including Habitat & Access Stamp funds.

TABLE OF CONTENTS

<i>SUMMARY</i>	3
<i>I. BACKGROUND AND INTRODUCTION</i>	3
PURPOSE OF HABITAT MANAGEMENT PLANS	3
WMA OVERVIEW	5
LANDSCAPE CONTEXT	8
<i>II. MANAGEMENT STRATEGIES BY HABITAT TYPE</i>	9
FOREST	9
SHRUBLAND.....	12
GRASSLAND AND OTHER OPEN SPACE.....	12
AGRICULTURAL LAND	13
WETLANDS (NATURAL AND IMPOUNDED)	13
OPEN WATER (WATERBODIES AND WATERCOURSES)	14
HABITAT MANAGEMENT SUMMARY	16
<i>III. FIGURES</i>	17
<i>IV. APPENDICES</i>	23
APPENDIX A: DEFINITIONS	23
APPENDIX B. COMPLIANCE WITH STATE ENVIRONMENTAL QUALITY REVIEW	26
APPENDIX C: FOREST MANAGEMENT PRESCRIPTIONS	27
APPENDIX D: AMENDMENTS.....	30

LIST OF FIGURES

FIGURE 1. Location and access features at Dexter Marsh WMA.....	17
FIGURE 2. Significant ecological communities on Dexter Marsh WMA.....	18
FIGURE 3. Wetlands, open water, and streams of Dexter Marsh WMA.....	19
FIGURE 4. Land cover types and conservation lands in the landscape surrounding Dexter Marsh WMA.	20
FIGURE 5. Percent cover of land cover types within three miles of Dexter Marsh WMA.....	21
FIGURE 6. Habitat types and location(s) of proposed management on Dexter Marsh WMA.	22

SUMMARY

The primary purposes of Dexter Marsh Wildlife Management Area (WMA) are for wildlife management and wildlife-dependent recreation. Dexter Marsh was acquired around 1969 and by 1970 was formally labeled a wildlife management area. The WMA is strictly a wetland area consisting of lands primarily underwater. The 1,191 acres of marsh found on the WMA is a popular fish and waterfowl area. Northern pike, bass, and panfish are found in the shallow to deep water, and a variety of ducks, black terns, shore birds, and marsh waders utilize the sparse cattail marsh which characterizes this Lake Ontario bay. This large freshwater estuary provides all types of habitat for fish and wildlife from nesting/spawning areas to migration stopover areas for adult species. Dexter Marsh WMA is a relatively undisturbed marsh complex with water depths of four to eight feet in channels and exposed mud flats during low water conditions which promotes wild rice growth along with other macrophytes. This helps describe why Dexter Marsh WMA is considered a Waterfowl Winter Concentration Area which many other wildlife species also use during migrations.

In 1972 Dexter Marsh WMA was proposed to be included as a National Natural Landmark through the National Park Service. In 1973 the final proposal was submitted and Dexter Marsh was approved as a National Natural Landmark, which was later revised in 1987. This designation allows the DEC to preserve the area and prevent any future developments within the marsh area.

Habitat management goals for Dexter Marsh WMA include:

- There are no plans to manage the habitat on this WMA other than to provide access for wildlife related recreation and fishing access.

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 (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 10 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 habitat adaptability and resilience under projected future conditions will be considered during the habitat management planning process and in any actions that are recommended in HMPs. Changing conditions that may affect habitat composition include warmer temperatures, milder winters, longer growing seasons, increased pressure from invasive species, more frequent intense storms, and moisture stress. It is also important to consider landscape-level effects to maintain the connectedness of habitats to allow range adjustments of both plant and wildlife species.

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

Dexter Marsh WMA is located along the eastern shoreline of Lake Ontario within Black River Bay in DEC Region 6, Towns of Brownville and Hounsfield, Jefferson County (Figure 1).

TOTAL AREA

1,241 acres

HABITAT INVENTORY

A habitat inventory of the WMA was conducted in 2015 and is proposed to be updated every fifteen to twenty 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 Dexter Marsh WMA.

Habitat Type	Current Conditions (as of 2015)			Desired Conditions	
	Acres	Percent of WMA	Miles	Acres	Percent of WMA
Forest ^a	46	4 %		46	No change ^b
Young forest	0	0 %		0	No change
Shrubland	0	0 %		0	No change
Grassland	0	0 %		0	No change
Agricultural land	0	0 %		0	No change
Wetland (natural) ^c	77	6 %		77	No change
Wetland (impounded) ^c	0	0 %		0	No change
Open water	1,114	90 %		1,114	No change
Other (Hand Launches)	4	<1 %		4	No change
Roads	0	0 %		0	No change
Rivers and streams					
Total Acres:	1,241	100%		1,241	

^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 The forest management proposed in this plan aims to replace poor quality forest, promote regeneration of native species, and establish a healthy mature forest for the future. See Landscape Context and Forest sections.

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

ECOLOGICAL RESOURCES

Wildlife Overview:

Wildlife present on Dexter Marsh WMA includes many species commonly found throughout northern New York and the eastern Lake Ontario plains area, such as:

- Beaver, muskrat, mink
- Red-winged Blackbird, Pileated Woodpecker
- Eastern coyote, white-tailed deer, Wild Turkey, gray fox, red fox
- Painted turtle, snapping turtle
- Bullfrog, green frog, American toad, spring peeper, wood frog
- Garter snake, northern water snake, eastern milk snake
- Spotted salamander and blue spotted/Jefferson's complex 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 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 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 Dexter 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 Black Duck			HP
	Bald Eagle		T	x
	Black Tern		E	HP
	Bonaparte's Gull			x
	Common Goldeneye			x
	Eastern Meadowlark			HP
	Forster's Tern			x
	Lesser Scaup			x
	Northern Harrier			x
	Northern Pintail			x
	Pied-billed Grebe		T	x
	Scarlet Tanager			x
	Short-eared Owl		E	HP
	Wood Thrush			x
Mammals	Indiana myotis	E	E	HP
	Little brown myotis (little brown bat)			HP
	Northern myotis (long-eared bat)	E	T	HP

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 <https://www.dec.ny.gov/animals/7179.html>.

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

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

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

Table 2. Continued

Species Group	Species	Federal Status	NY Status	NY SGCN
Amphibians and reptiles	Eastern musk turtle			HP
	Eastern ribbonsnake			x
	Smooth greensnake			x
	Snapping turtle			x
Fish	Bridle shiner			x
	Iowa darter			x
	Lake sturgeon		T	x
Plants	Slender bullrush		E	x

Significant Ecological Communities:

There are no reported rare and significant natural communities located on Dexter Marsh WMA as identified by the NY Natural Heritage Program. However, the marsh area of the WMA is an area of importance for waterfowl, shore birds, marsh birds, and furbearers. The marsh area is listed as a Waterfowl Winter Concentration Area through the NY Natural Heritage Program. The state rank reflects the rarity within NY, ranging from S1, considered the rarest, to S5, considered stable; definitions are provided in Appendix A. The following significant ecological communities occur on the WMA; community descriptions are from *Ecological Communities of New York State, Second Edition*⁵ (Figure 2):

- None listed

Additional information about significant ecological communities is available in the Dexter Marsh WMA Biodiversity Inventory Final Report 1996 prepared by the NY Natural Heritage Program.

Soils:

Soil areas on Dexter Marsh WMA are limited due to the majority (90%) of the WMA being a marsh/open water area. The upland areas of the WMA consist of Wilpoint-Guffin-Galoo-Chaumont soils ranging from moderately drained to poorly drained. The topography is generally flat with exceptions near the shoreline/water interface.⁶

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 Dexter Marsh WMA include:

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 <https://www.nynhp.org/ecological-communities/>.

⁶ Soil classification information available from: US Department of Agriculture, Natural Resources Conservation Service. Available online at <https://www.nrcs.usda.gov/resources/guides-and-instructions/soil-classification>.

- One wetland regulated by Article 24 of the Environmental Conservation Law and a few 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.
- There are no streams (a watercourse entirely within the WMA) or segments of streams (a stream that meanders in and out of the WMA), however the WMA consists primarily as a portion of Lake Ontario. Three rivers do feed Lake Ontario in this area are named Muskellunge Creek, Black River, and Perch River. The highest water classification is C.⁷

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*.⁸ 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.

LANDSCAPE CONTEXT

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

- Grassland (36%)
- Forest (18%)
- Wetlands (15%)
- Open Water (14%)
- Agricultural (10%)
- Developed (8%)

Dexter Marsh WMA is different than its surrounding landscape in that the majority of the WMA (90%) is considered open water habitat. The wetland habitat consists of multiple islands of emergent marsh vegetation (6%) protruding through the waters surface which provides significant habitat for multiple bird species. The remaining WMA habitat consist of forest habitat (4%) associated with upland areas around the developed boat hand launches. Considering the surrounding habitat of Dexter Marsh WMA, no management is planned at this time. The water level of the marsh is dictated by the water levels of Lake Ontario.

Nearby public lands include Brownville WMA, which is mostly closed to public use except for a small sliver west of Game Farm Road. Further north and east of Dexter Marsh WMA is Ashland Flats WMA. The Sacketts Harbor Battlefield is a 20 minute drive to the south and offers historic accounts of the War of 1812.

⁷ Information about stream classification is available online at <https://www.dec.ny.gov/permits/6042.html>.

⁸ Available online at <https://www.dec.ny.gov/outdoor/104218.html>.

II. MANAGEMENT STRATEGIES BY HABITAT TYPE

DEC will continue passive management of wildlife habitats on Dexter Marsh WMA to provide the following benefits:

- Maintain habitat characteristics that will benefit wildlife abundance and diversity within the New York landscape.
- 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, typically 0-20 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.



Northern hardwood – white pine forest at Dexter Marsh WMA.

Photo: NYSDEC

Forest management on Dexter Marsh WMA incorporates an approach to passively monitor and manage invasive species to support a better diversity of wildlife. In 2015, DEC launched the Young Forest Initiative (YFI) to increase the amount of young forest on WMAs to benefit wildlife that require this transitional,

disturbance-dependent habitat.⁹ There will be no active forest management or young forest creation on Dexter Marsh WMA.

MANAGEMENT OBJECTIVES

- Treat invasive buckthorn and honeysuckle around the boat launch sites when necessary and as time permits.

DESCRIPTION OF EXISTING FOREST HABITAT

Dexter Marsh WMA has limited forest habitat, however the forests here include eastern red cedar, aspen, red oak, sugar and red maple, white pine, black cherry, and white ash as an overstory (Table 3 and Figure 6). The understory of these forests is primarily common buckthorn with a little bit of honeysuckle. The forests lack northern hardwood regeneration.

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

Forest Type	Acres (as of 2015)	Desired Acres	Overstory species
Natural forest (mature/intermediate)	46	46	eastern red cedar, aspen, red oak, sugar and red maple, white pine, black cherry, and white ash
Plantation	0	0	
Forested wetland	0	0	
Young forest	0	0	
Young forest (forested wetland)	0	0	
Total Forested Acres:	46	46	

MANAGEMENT HISTORY

None. (Figure 6).

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

There currently is no plan to manage the forests on Dexter Marsh WMA at this time, however invasive common buckthorn and honeysuckle may be treated as necessary.

- **Management planned for 2023-2032** (Table 4, Figure 6):
 - Treat common buckthorn and honeysuckle as needed

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

Table 4. Forest management schedule for the first five-year period of this HMP (2023-2032).

Stand	Acres	Size Class	Forest Type		Management Direction	Treatment Type
			Current	Future		
All	46	Small Saw Timber 12”-17” DBH	Northern Hardwood	Northern Hardwood	Wildlife	Invasive control

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:

- **All Stands:** Treat invasive common buckthorn and honey suckle where necessary. Monitor for emerald ash borer (EAB) and remove hazard trees as necessary.

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 5).

Table 5. Best Management Practices for forest management on WMAs.

Resource	Guidance Document ¹⁰
Soils	<i>Rutting Guidelines for Timber Harvesting 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>

Wildlife Considerations:

Dexter Marsh WMA supports a handful of state listed threatened and endangered bird, insect, and plant species. Many of the threatened or endangered bird species on the WMA are associated with the wetlands and/or open water. To protect these species, forest management immediately adjacent to wetland and water areas will be limited or avoided during the respective breeding seasons of these species. Due to the occurrence of Indiana bats and northern long-eared bats within Jefferson County, tree selection for cuts and the timing of cuts will be evaluated and BMPs will be implemented to protect the bats.

Forest Health Considerations:

The most significant invasive insect to watch for is emerald ash borer (EAB). While EAB has not been recorded on the WMA, it is gradually spreading throughout the state and has been confirmed in Watertown, less than 10 miles from the WMA. EAB is an invasive beetle that feeds on and kills all species of ash trees and significant ash mortality is expected when the beetle reaches the WMA. At that time, dead or dying ash trees may be removed from the WMA if deemed a hazard to infrastructure or adjacent private property.

¹⁰ All guidance documents referenced here are available online at <https://www.dec.ny.gov/outdoor/104218.html>.

As noted throughout this document, invasive buckthorn and honeysuckle are well established on Dexter Marsh WMA. Buckthorn and honeysuckle dominate the understory in most of the shrublands and forest stands, often preventing desirable regeneration. While these invasive plants do provide the dense, shrubby habitat that many wildlife species depend on, this habitat is of much lower quality than native shrublands and forests. The understory lacks diversity and the forage is less nutritious for the wildlife species that forage on it. As outlined in this HMP, most forest and shrubland management on the WMA will focus on controlling invasive plant species and establishing regeneration that will provide better wildlife habitat. This will be accomplished through brush clearing, herbicide treatments, and planting. All treatment areas will be monitored, and additional treatments will occur as needed until desirable regeneration has been established.

Pre- and Post-treatment Considerations:

Although there are no plans for forest management, herbicide applications will be considered in areas where forest habitat can be improved.

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

MANAGEMENT EVALUATION

None

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. Typically characterized by >50% cover of shrubs and <25% canopy cover of trees.

DESCRIPTION OF EXISTING SHRUBLAND HABITAT AND TARGET SPECIES

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

GRASSLAND AND OTHER OPEN SPACE

Grasslands are open areas dominated by grasses and forbs, with less than 25% woody vegetation. Ideally, the forb component should not exceed 25% by area. Grasslands may contain shrubs and other woody vegetation, but not to the point beyond which maintenance would require significant brush cutting (i.e., not suitable for brush-hogging). Grasslands may include areas where hay is harvested by late season mowing once per year.

MANAGEMENT OBJECTIVES

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



Cattail marsh in the marsh at Dexter Marsh WMA.

Photo: NYSDEC

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.

MANAGEMENT OBJECTIVES

- There is no agricultural 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 77 acres of natural wetlands as they currently exist.
- Provide recreational opportunities related to the area's wildlife resources, compatible with the ongoing habitat management practices. This includes muskrat and beaver trapping, waterfowl hunting, and bird watching.
- Retain habitat for wetland dependent wildlife such as waterfowl, muskrats, and northern pike by preserving existing habitat.

DESCRIPTION OF EXISTING WETLAND HABITAT AND TARGET SPECIES

There are 77 acres of inventoried natural wetlands on Dexter Marsh WMA (Figure 3). Between the open water and wetlands, this area is an important Waterfowl Winter Concentration Area as listed by the NY Natural Heritage Program. The wetlands are islands within the open water and consist of scrub-shrub and emergent wetlands. The wetlands are diverse and provide habitat for species such as:

- Beaver, muskrat
- Bald Eagle, migratory waterfowl and marsh birds
- Northern pike, muskellunge, yellow perch, sunfish, and bass
- Bullfrog, northern leopard frog, green frog, eastern American toad, spring peeper
- Musk turtle, snapping turtle, smooth green snake, eastern ribbonsnake



Cattail marsh on Muskellunge Creek at Dexter Marsh WMA.

Photo: NYSDEC

MANAGEMENT HISTORY

None – The water levels of the wetlands within Dexter Marsh WMA are controlled by the lake levels of Lake Ontario through the operations of the Robert-Moses Hydroelectric Dam located downstream on the St. Lawrence River and the amount of precipitation.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2023-2032 (Figure 6):**
 - None

BEST MANAGEMENT PRACTICES

None – No management is planned at this time.

MANAGEMENT EVALUATION

None – No management is planned at this time.

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., Lake Ontario).

MANAGEMENT OBJECTIVES

- Maintain three boat launches.

DESCRIPTION OF EXISTING OPEN WATER HABITAT AND TARGET SPECIES

Dexter Marsh consists primarily of open water, 1,114 acres along with 77 acres of emergent type wetlands throughout the open water as described in the previous wetland section. Wildlife observation, waterfowl hunting, and fishing are the primary activities on this WMA. Most visitors access the WMA through one of the three boat launches on the WMA, however some do access the area directly from Lake Ontario or the Black River. The water is relatively shallow throughout the WMA so caution is advised with larger boats.

Migratory waterfowl are often hunted here with a variety of ducks harvested which include American Black Duck, Mallard Duck, American Wigeon, Canada and Snow Goose, Common Goldeneye, Common Merganser, Scaup, Northern Pintail, Northern Shoveler, Ring-necked Duck, and Wood Duck. There are trapping opportunities available for many furbearers that include muskrat, mink, and beaver. Considering the overall size of the marsh, wildlife viewing is common at Dexter Marsh WMA. Many species of shore birds and marshbirds are visible via a boat once on the WMA.

Northern pike and muskellunge are often found spawning on the edges of the wetland marshes protruding through the open water. Lake sturgeon are also known to be observed at Dexter Marsh WMA spawning in the deeper water where rocky bottoms are found. Perch fishing here is typically average through the ice and right after ice out. Sunfish and black bass fishing on Dexter Marsh WMA is also known to occur and offer some excitement for beginning anglers.

MANAGEMENT HISTORY

None

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2023-2032** (Figure 6):
 - None

BEST MANAGEMENT PRACTICES

None – No management is planned at this time.

MANAGEMENT EVALUATION

None – No management is planned at this time.

HABITAT MANAGEMENT SUMMARY

In summary, Table 6 lists the habitat management actions planned for Dexter Marsh WMA over the next ten years. Any substantive changes will be appended to this HMP annually or as needed (Appendix D).

Table 6. Summary of habitat management actions recommended for Dexter Marsh WMA, 2023-2032. (Also see Figures 3 and 6.)

Habitat	Management Action	Acres	Timeframe
Forest	Monitor, and potentially treat, invasive species	46	Every 5 to 10 years
Open Water	Maintain three boat launches	4	Annual

III. FIGURES

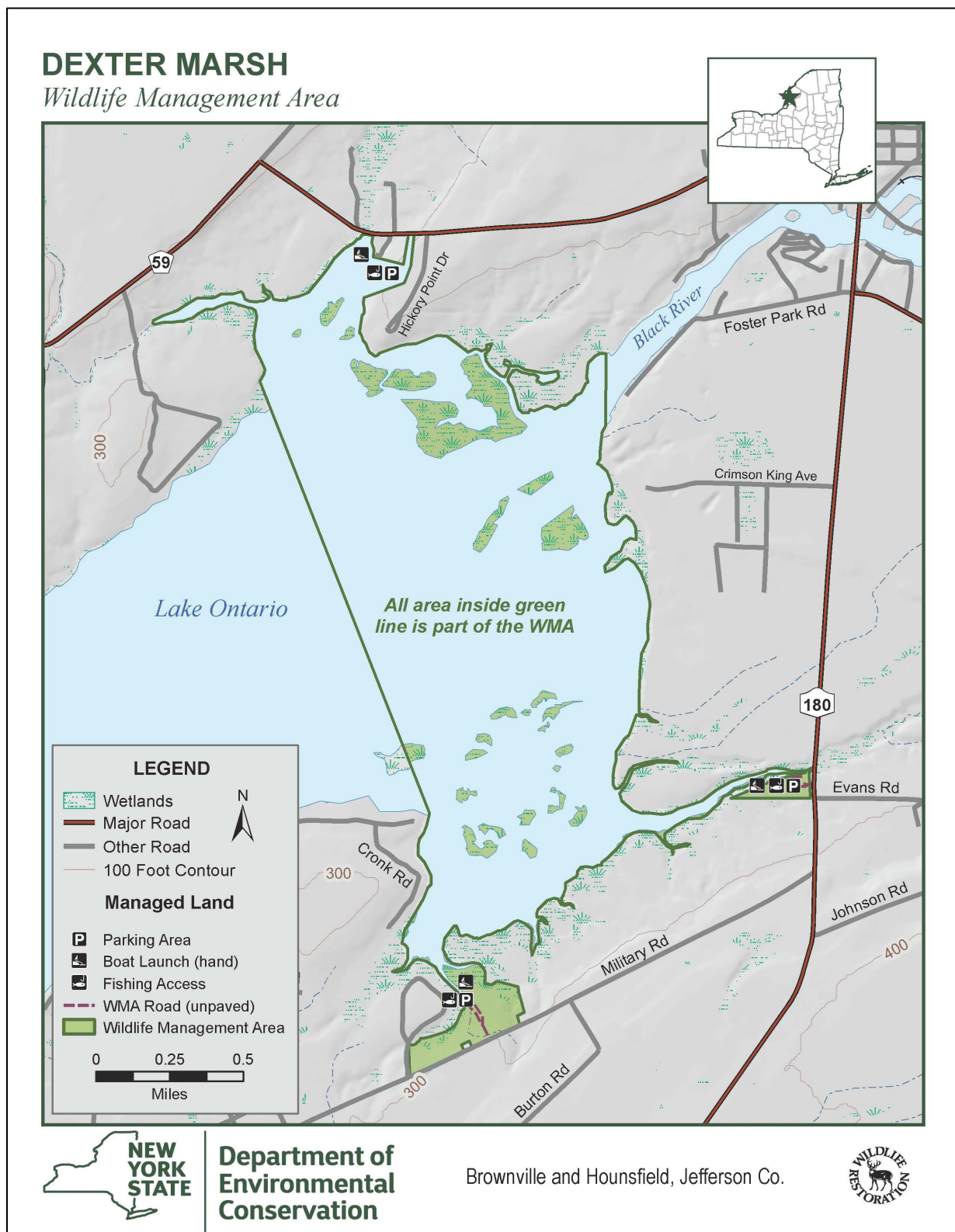


FIGURE 1. Location and access features at Dexter Marsh WMA.

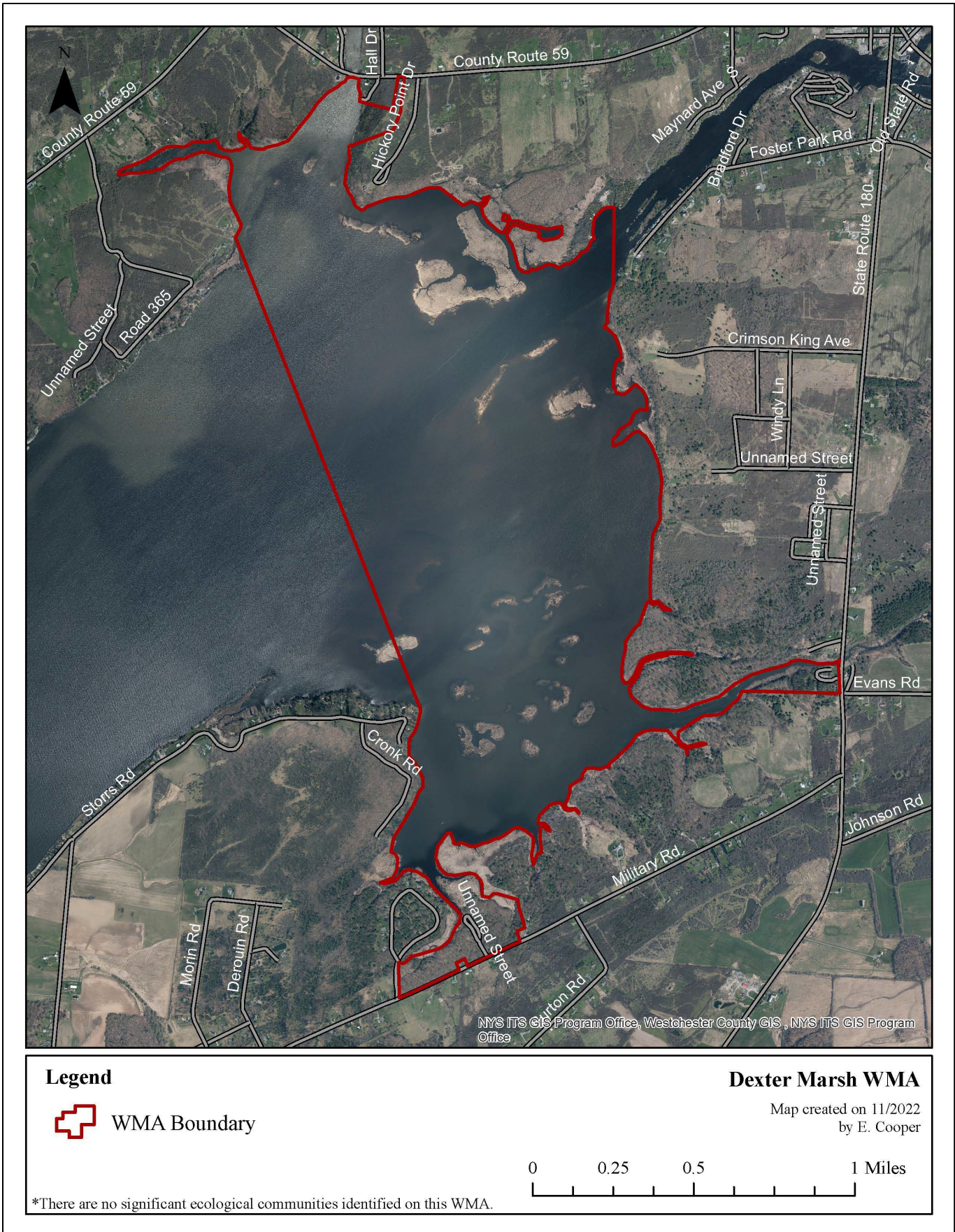
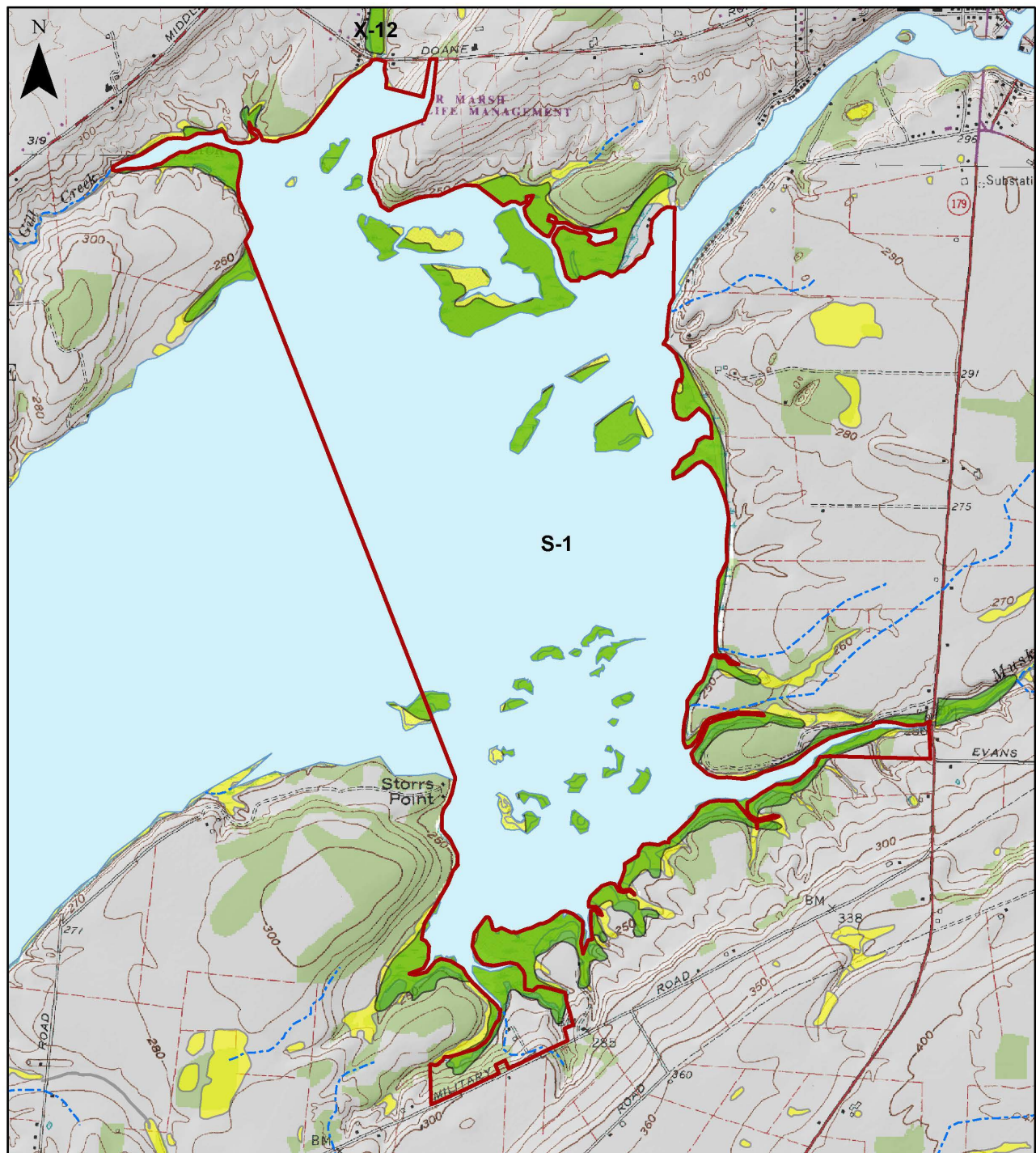


FIGURE 2. Significant ecological communities on Dexter Marsh WMA. Data from the NY Natural Heritage Program.



Legend

- Article 24 Freshwater Wetlands
- Open water
- WMA Boundary
- National Wetlands Inventory
- Stream

Dexter Marsh WMA

Map created on 11/2022
by E. Cooper

0 0.25 0.5 1 Miles

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

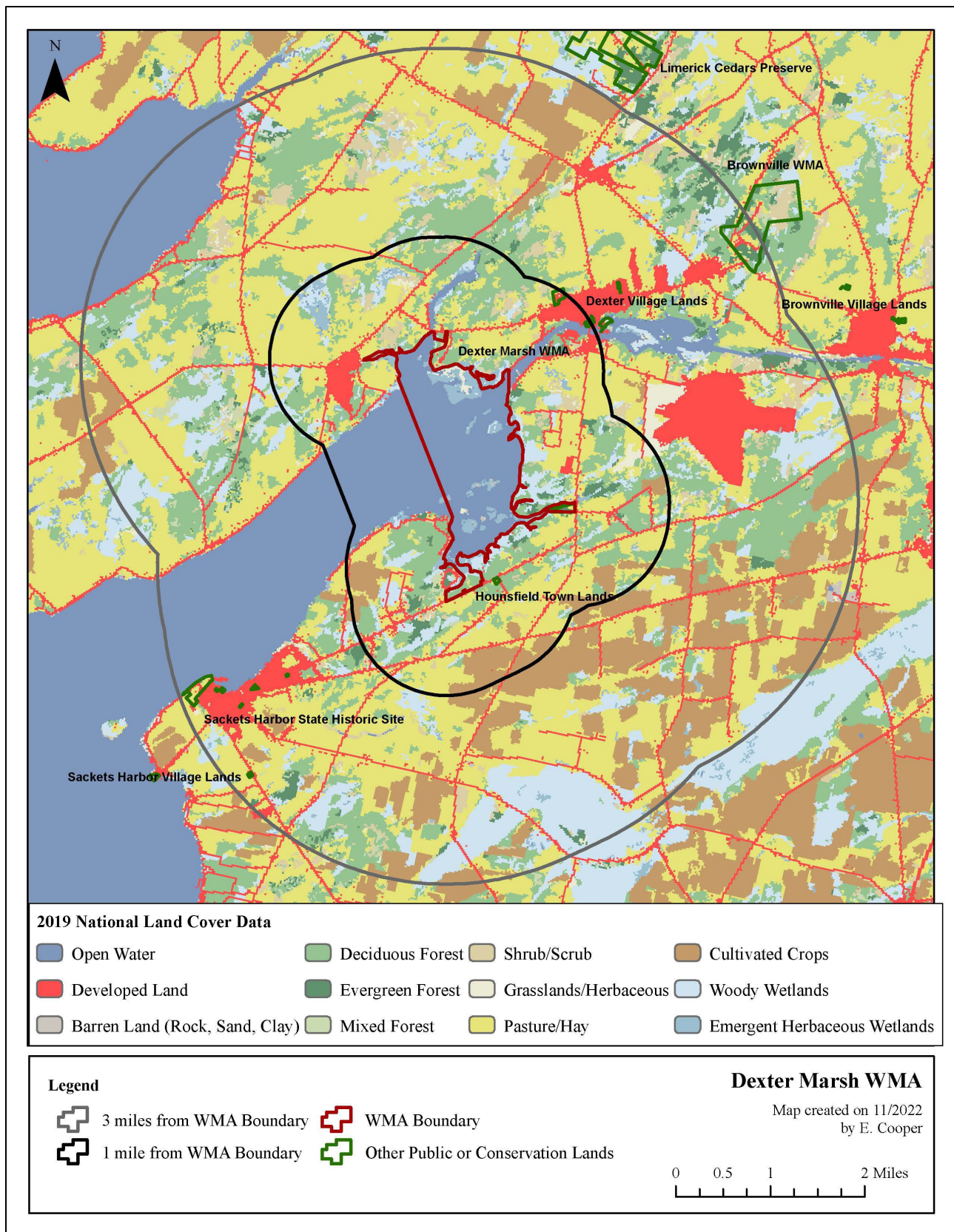


FIGURE 4. Land cover types and conservation lands in the landscape surrounding Dexter Marsh WMA. Conservation lands are from the NY Protected Areas Database available online at <https://www.nypad.org/>. Land cover types are from the 2016 National Land Cover Data (NLCD) and differ from the habitat types used in the WMA habitat inventory. NLCD definitions are available online at <https://www.mrlc.gov/data/legends/national-land-cover-database-2019-nlcd2019-legend>.

Dexter Marsh WMA Percent Coverage of 2016 NLCD - 3 Mile Radius

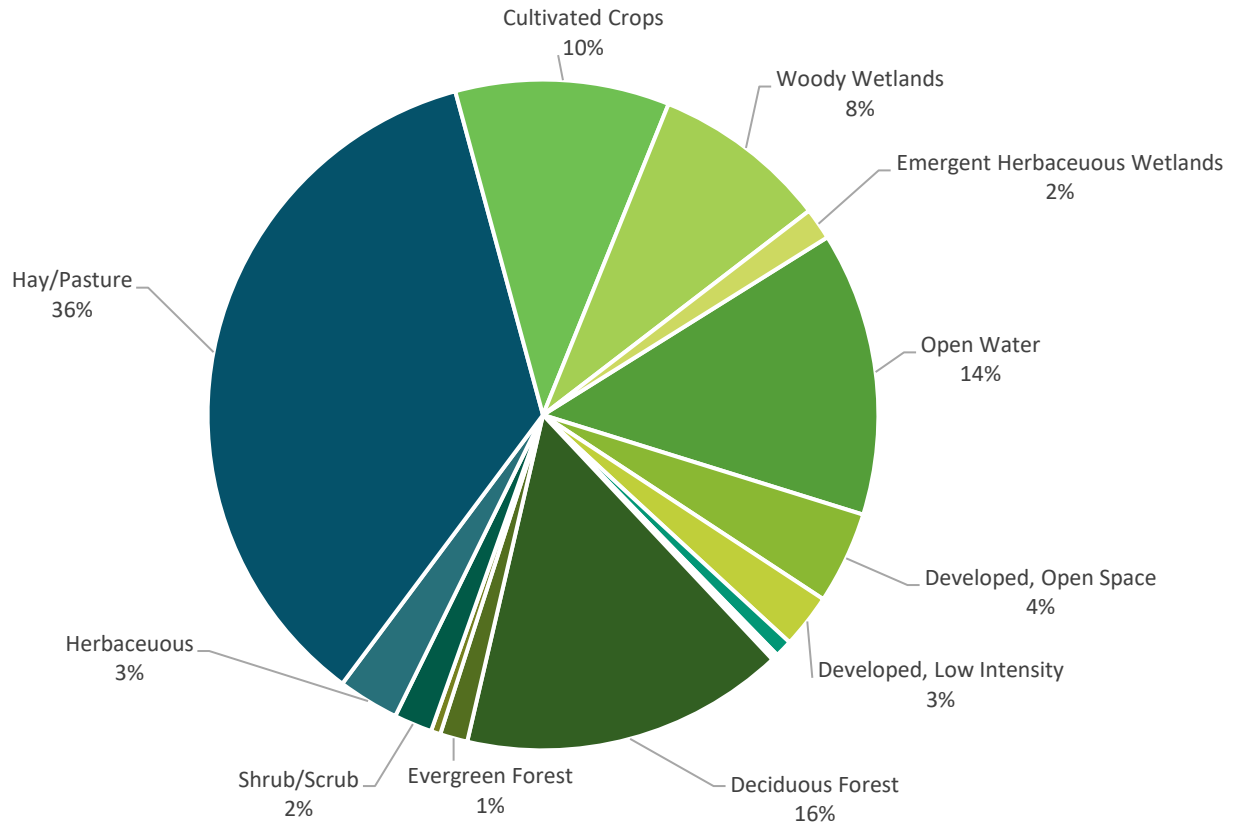


FIGURE 5. Percent cover of land cover types within three miles of Dexter Marsh WMA.

Land cover types are from the 2016 National Land Cover Data (NLCD) and differ from the habitat types used in the WMA habitat inventory. NLCD definitions are available online at <https://www.mrlc.gov/data/legends/national-land-cover-database-2019-nlcd2019-legend>.

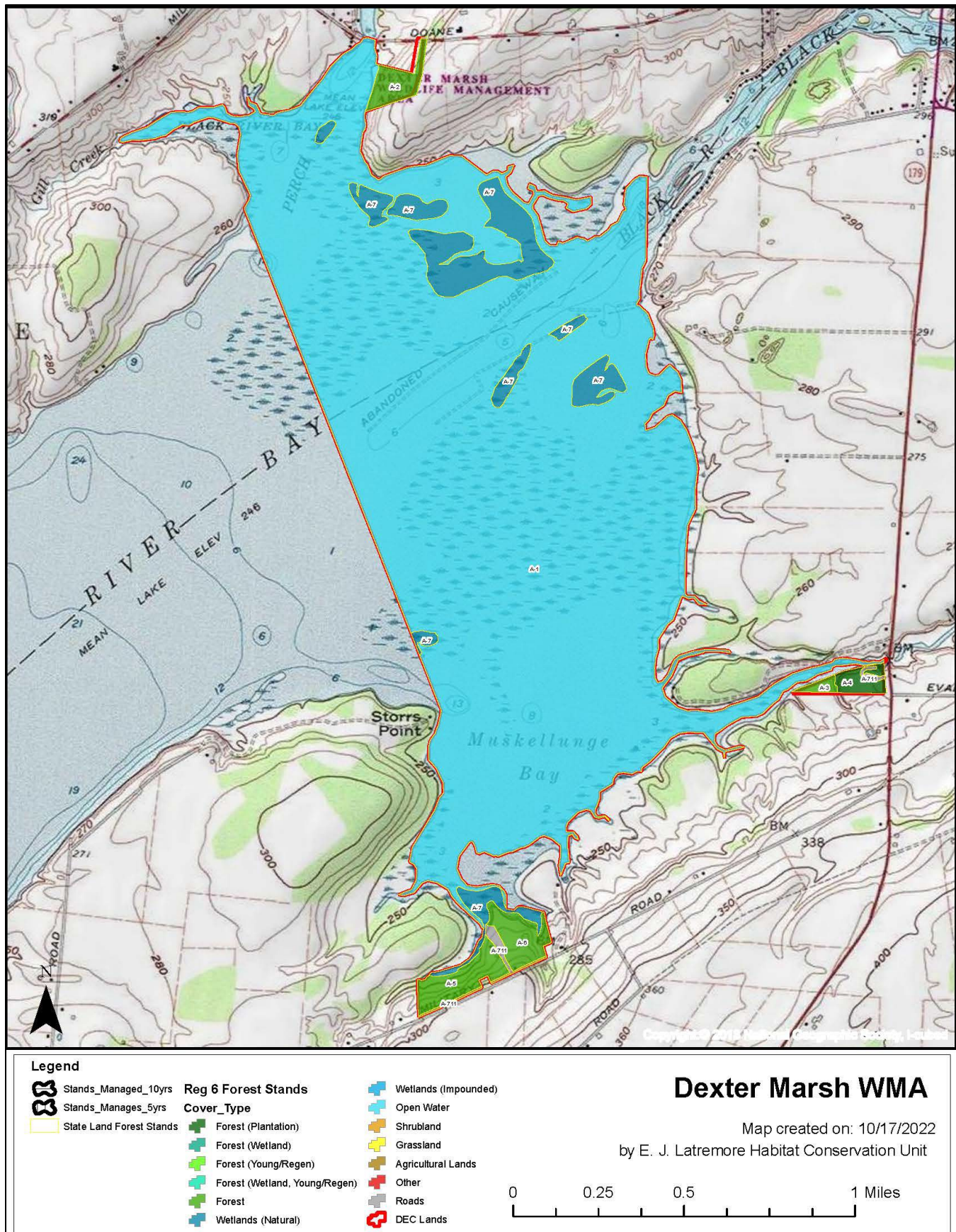


FIGURE 6. Habitat types and location(s) of proposed management on Dexter Marsh WMA. Numbers indicate the stand number from habitat inventory.

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 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-leaved, 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 Bird Conservation Center: A landscape of at least 25,000 acres that meets at least two of the following three criteria: (1) >7,500 acres of grassland [i.e., >25% of the landscape is currently in some form of grassland habitat], (2) a grassland “anchor” field that meets specific criteria, and/or (3) at least 1,000 acres of grasslands already managed under BMPs for grassland birds (NYSDEC Strategy for Grassland Bird Habitat Management and Conservation 2021-2026).

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. 2014. 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. 2014. 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. 2014. 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.

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. 2014. 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 are generally 0-20 years following a disturbance and composed of seedling-sapling sized trees (<5” DBH). Includes the stand initiation and beginning of stem exclusion phases of stand development. Old fields with woody encroachment and shrublands offer similar habitat structure as seedling-sapling stands for many of the target species.

APPENDIX B: COMPLIANCE WITH STATE ENVIRONMENTAL QUALITY REVIEW

This plan identifies habitat management activities to be conducted on the Wildlife Management Area. These activities were analyzed in the 1979 *Programmatic Environmental Impact Statement on Habitat Management Activities of the Department of Environmental Conservation; Division of Fish and Wildlife* (PEIS), as updated and amended in 2017 by the *Supplemental Final Environmental Impact Statement* (SFEIS).¹¹ Any activity that exceeds the thresholds of, or was not analyzed in the 1979 PEIS as amended in 2017, will require individual, site-specific environmental review. Environmental assessment forms prepared as a result of this review will be posted on the Environmental Notice Bulletin (ENB).¹²

The activities recommended in this plan:

- Will not adversely affect threatened or endangered plants or animals or their habitat.
 - Prior to implementation of any activity, staff review the NY Natural Heritage Program's "Natural Heritage Element Occurrence" database and perform field surveys when necessary. If a protected species is encountered in a project area, staff may establish buffer zones around the occurrence, move the project area, follow time-of-year restrictions, or cancel the project.
- Will not induce or accelerate significant change in land use.
 - All lands and waters within the WMA system are permanently protected as wildlife habitat.
- Will not induce significant change in ambient air, soil, or water quality.
 - Activities are designed to protect air, soil, and water quality through careful project planning, use of appropriate Best Management Practices, 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.
 - Activities will follow established plans or policies of other state and federal agencies, including all relevant U.S. Fish and Wildlife Service rules and regulations.
- Will not induce significant change in public attraction or use.
 - The WMA system 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. Proposed activities 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 an area or result in areas of significantly different character or ecological processes.
 - Activities will be conducted in a manner that maintains, enhances, or mitigates ecological processes and/or natural disturbances as appropriate for each WMA and habitat type. Some activities, such as even-aged forest management, intentionally result in areas of different character and ecological processes; however, they are not considered significant because they are ephemeral or transitional and will not permanently alter the landscape.
- Will not affect important known historical or archeological sites.
 - Activities that may result in ground disturbance are reviewed by DEC's State Historic Preservation Officer (SHPO) and/or the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) to identify potential impacts to historical or archeological sites. Sensitive sites will be protected under the direction of DEC's SHPO and the OPRHP Archaeology Unit.
- Will not stimulate significant public controversy.
 - It is not anticipated that activities on WMAs will stimulate significant public controversy. A public comment period was held during development of both the PEIS and the SFEIS; no relevant comments in opposition of proposed management activities were received during the SFEIS public comment period. Staff also hold a public information session after completing each HMP, consider feedback from these sessions, and may adjust management as deemed appropriate. Kiosks, signs, webpages, articles, demonstration areas, and other outreach materials also raise awareness about habitat management activities.

¹¹ Available online at <https://www.dec.ny.gov/regulations/28693.html>.

¹² Available online at <https://www.dec.ny.gov/enb/enb.html>.

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:

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 “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.