Habitat Management Plan
for
Point Peninsula Wildlife Management Area
2022 – 2031

The shoreline at Point Peninsula WMA.

Photo: Irene Mazzocchi, NYSDEC

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Bureau of Wildlife

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SUMMARY

Point Peninsula Wildlife Management Area (WMA) was acquired in 1979, 1980, and 2003 from Thompson Farms and included four private parcels. The parcels, at the time, qualified on New York State's priority list under the Open Space Plan in the Lake Ontario Shorelines and Island category. In 2017, two parcels contiguous to the WMA were acquired from Jennifer Lance. The WMA is comprised predominantly of grasslands, followed by a natural wetland complex consisting of emergent marsh, shrub/scrub swamp, and floodplain forest. The grasslands on the WMA make up the Point Peninsula Bird Conservation Area[1], which is also part of an Important Bird Area of New York and Grassland Bird Focal Area.

Relatively little forested habitat exists on the lands surrounding Point Peninsula WMA (12% of the 3,000-acre peninsula), so the primary objectives for this WMA are to maintain the forested wetland complex and to enhance and maintain quality grassland habitat to promote wildlife species and wildlife-dependent recreation. Due to the makeup of this WMA, the key habitat management goals include:

- Managing a minimum of 47% as quality grasslands,
- Maintaining approximately 26% as natural and impounded wetlands to provide prime breeding and migratory stopover habitat for marsh birds and waterfowl,
- Retaining approximately 14% as intermediate and mature forest (10 to >100 years),
- Managing approximately 10% as early successional shrublands, and
- Managing 1% of the WMA (9% of the forested landscape) as young forest to promote habitat for young forest dependent species.

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-

[1] Point Peninsula Bird Conservation Area was designated in 2006 and more information can be found at https://www.dec.ny.gov/outdoor/49643.html#Wildlife.

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;
- 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 habitat adaptability and resilience under projected future conditions will be considered during the habitat management planning process and will be considered 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

Point Peninsula WMA is located in DEC Region 6, Town of Lyme, Jefferson County (Figure 1).

TOTAL AREA

1,086 acres

HABITAT INVENTORY

A habitat inventory of the WMA was conducted in 2013 and updated in 2017 to include the recently acquired Lance property. 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 Point Peninsula WMA.

Habitat Type	Current Conditions (as of 2017)			Desired Conditions	
	Acres	Percent of WMA	Miles	Acres	Percent of WMA
Forest [a]	156	14%		156	No change
Young forest	15[c]	1%		15	No change
Shrubland	111	10%		111	No change
Grassland	509	47%		509	No change
Agricultural land	0	0%		0	No change
Wetland (natural) [b]	246	23%		246	No change
Wetland (impounded) [b]	34	3%		34	No change
Open water	0	0%		0	No change
Other	0	0%		0	No change
Roads	15	1%		15	No change
Rivers and streams			0		No change
Total Acres:	1,086	100%		1,086	

[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.
[c] No entire stands are currently inventoried as young forest; however, there are at least 15 acres of young forest habitat within Stand A-4 that will be maintained.

ECOLOGICAL RESOURCES

Wildlife Overview:

Wildlife present on Point Peninsula WMA includes many species commonly found throughout northern New York and the eastern Lake Ontario shoreline, such as:

- Beaver, muskrat, mink

- Red-winged Blackbird, Eastern Meadowlark, Bobolink, Brown Thrasher, Scarlet Tanager, Pileated Woodpecker, Red-tailed Hawk, Rough-legged Hawk
- Eastern coyote, white-tailed deer, Wild Turkey, gray fox, red fox
- Painted turtle, snapping turtle
- Bullfrog, northern leopard frog, green frog, American toad, spring peeper, wood frog, chorus frog
- Garter snake, northern water snake, DeKay's brown snake, red-bellied snake, ring-neck snake, eastern milk snake, smooth green snake
- Spotted salamander, red-backed salamander, 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 Species of Greatest Conservation Need (SGCN) may occur on the WMA (Table 2).[2] SGCN listed below include species that have been documented on or within the vicinity of the WMA and 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,[3] NY Reptile and Amphibian Atlas,[4] DEC wildlife surveys and monitoring, and eBird.[5]

Table 2. Species of conservation concern that may be present on Point Peninsula 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
Birds	American Bittern			x
	American Black Duck			HP
	American Kestrel			x
	American Woodcock			x
	Bald Eagle		T	x
	Black Tern		E	HP
	Black-bellied Plover			x
	Blue-winged Teal			x
	Bobolink			HP
	Bonaparte's Gull			x
	Brown Thrasher			HP
	Caspian Tern			x
	Common Goldeneye			x
	Common Tern		T	x
	Cooper's Hawk		SC	
	Eastern Meadowlark			HP

[2] 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.
[3] Available online at https://www.dec.ny.gov/animals/7312.html.
[4] Available online at https://www.dec.ny.gov/animals/7140.html.
[5] Available online at https://ebird.org/content/ebird/about/. © Audubon and Cornell Lab of Ornithology.

Table 2 Cont.				
Species Group	**Species**	**Federal Status**	**NY Status**	**NY SGCN**
Birds	Greater Scaup			x
	Greater Yellowlegs			x
	Horned Grebe			x
	Horned Lark		SC	HP
	Least Bittern		T	
	Lesser Scaup			x
	Long-eared Owl			x
	Long-tailed Duck			x
	Northern Harrier		T	x
	Northern Pintail			x
	Osprey		SC	
	Peregrine Falcon		E	x
	Pied-billed Grebe			x
	Red-headed Woodpecker			HP
	Ruffed Grouse			x
	Rusty Blackbird			HP
	Scarlet Tanager			x
	Sedge Wren		T	HP
	Sharp-shinned Hawk		SC	
	Short-eared Owl		E	HP
	Upland Sandpiper		T	HP
	Vesper Sparrow			HP
	White-winged Scoter			x
Mammals	Indiana myotis	E	E	HP
	Little brown myotis (little brown bat)			HP
	Northern myotis (long-eared bat)	T	T	HP
Amphibians and reptiles	Blanding's turtle		T	HP
	Blue-spotted salamander			HP
	Eastern ribbonsnake			x
	Smooth greensnake			x
	Snapping turtle			x
	Spotted turtle			HP
	Western chorus frog			x
Fish	None known			
Invertebrates	None known			
Plants	None known			

Significant Ecological Communities:

There are no rare and/or significant natural communities located on Point Peninsula WMA as identified by the NY Natural Heritage Program (Figure 2). However, the WMA is known for its winter raptor concentration area. Additional information about significant ecological

communities is available in *Ecological Communities of New York State, Second Edition* [6] and in the Point Peninsula WMA Biodiversity Inventory Final Report (1998) prepared by the NY Natural Heritage Program. The biodiversity report includes variations in WMA boundaries likely from the lack of a valid field survey and timing of the acquisition.

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 Point Peninsula WMA include:

- One wetland regulated by Article 24 of the Environmental Conservation Law and several additional wetlands shown on the National Wetlands Inventory (NWI; Figure 3). Each state-regulated wetland is protected by a buffer zone of 100 feet from the delineated wetland boundary, known as the adjacent area. There may be forestry prescriptions associated with forested wetlands and adjacent areas, and each management prescription will be reviewed individually for determination of impacts.

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

Soils:

The topography commonly found within Point Peninsula WMA consists of flat open lakeshore floodplains and wetlands. Specific soil groups on the WMA include Chaumont and Kingsbury, silty clay, Guffin clay, Rhinebeck silt loam, Vergennes and Wilpoint silty clay loams, and Saprists/Aquents.[8] These soils typically hold water and have shallow water tables which do not provide ideal conditions for tree growth. Between the wetness of the WMA and the soils on the WMA, access to some areas of the WMA is limited for habitat management purposes.

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 Point Peninsula WMA (Figure 4). The landscape within a three-mile radius of the WMA is privately-owned land including:

- Open Water (65%)
- Pasture/hay and grassland (13%)
- Deciduous forest (10%)

[6] 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/.
[7] Available online at https://www.dec.ny.gov/outdoor/104218.html.
[8] Soil classification information available from: US Department of Agriculture, Natural Resources Conservation Service. Available online at https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=NY.

- Wetlands (3% combining emergent and woody wetlands)
- Early successional shrubland (2%)
- Development (2%)
- Cultivated crops (5%)

Nearby conservation lands include:

- Lake Ontario at the Isthmus Fishing Access Site, a state-owned fishing and waterway access site
- Long Point State Park (https://parks.ny.gov/parks/longpoint/details.aspx)

Point Peninsula WMA is within a landscape dominated by open water and is located within a newly identified Grassland Bird Conservation Center. The focus of habitat management on Point Peninsula WMA is on providing quality grassland habitat for both breeding and wintering grassland birds.

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, with the goal of managing at least 10% of the forested landscape on most WMAs as young forest.[9] Currently, Point Peninsula WMA and the surrounding landscape is lacking in forest habitat. Only 14% of the WMA and only 10% of the surrounding landscape is forested, which includes intermediate/mature forest, young forest, and forested wetlands. While none of the WMA stands were inventoried as young forest, most of the shrubland stands currently provide habitat that is suitable for young forest dependent species and patches within several of the forest stands currently provide young forest habitat. When shrublands are taken into consideration, 10% of the total WMA acreage, and at least 39% of the shrubland and forested acres on the WMA, provides habitat suitable for young forest species, which is well above the YFI goal of 10% of the forested acres. Instead of creating additional young forest, this plan will focus on grassland management and will maintain the shrublands and existing young forest patches through periodic mowing or tree removal, as described in the following habitat sections, while retaining the few existing intermediate and mature forest stands.

II. Management Strategies by Habitat Type

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

- Maintain habitat characteristics that will benefit wildlife abundance and diversity within the New York State landscape.
- Promote Best Management Practices for targeted wildlife and habitats.

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

- 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.

Forest habitat at Point Peninsula WMA.

Photo: Rachel Hillegas, NYSDEC

No significant forest management is planned on Point Peninsula WMA at this time. Forest fragmentation, the importance of grassland bird breeding habitat, and the quantity and location of forested wetlands are a few of the factors limiting management options.

MANAGEMENT OBJECTIVES

- Soften the transitions between grasslands and mature forest (i.e., create feathered edges), in conjunction with other management activities, for species like American Woodcock and Eastern Whip-poor-will.
- Retain 156 acres of existing forest and forested wetland to provide habitat for forest-dependent wildlife.
- Monitor emerald ash borer (EAB) infestation and consider removing hazard trees in proximity to parking lots or other infrastructure.
- Maintain approximately 15 acres of existing young forest habitat in Stand A-4.

DESCRIPTION OF EXISTING FOREST HABITAT AND TARGET SPECIES

There are 171 forested acres on Point Peninsula WMA, consisting of forested wetlands and upland hardwood forests (Table 3). No stands were inventoried as young forest, although patches of this important habitat type exist within several of the upland forest stands, most notably Stand A-4. 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 Point Peninsula WMA.

Forest Type	Acres (as of 2017)	Desired Acres	Overstory species
Natural forest (mature/intermediate)	66	66	Ash, aspen, hickory, white oak, white pine, white spruce
Plantation	0	0	-
Forested wetland	90	90	Green ash, elm, red maple
Young forest	15[a]	15	Ash, elm
Young forest (forested wetland)	0	0	-
Total Forested Acres:	171	171	

[a] While no stands were inventoried as young forest, parts of Stand A-4 are providing that habitat type and the acreage has been noted here for management planning purposes.

The forests on Point Peninsula WMA have slow growth rates and moderate health. Understory regeneration is good in many of the upland hardwood stands, but is limited by shallow soils, standing water, and competing honeysuckle, buckthorn, and dogwood. In the forested wetlands, regeneration is limited by flooding and competition from shrubs, grasses, ferns, and forbs.

The current habitat conditions, along with limited creation of feathered edges or maintenance of young forest, will benefit American Woodcock and Eastern Whip-poor-will. These species rely on forest and young forest areas for nesting, foraging, and cover and will benefit from management that provides the following habitat requirements:

- American Woodcock:
    - Singing/peenting ground – Open areas from 1 acre to over 100 acres usually in an abandoned field.
    - Daytime areas – Moist, rich soils with dense overhead cover of young alders, aspen, or birch.
    - Nesting – Open young forest stands, second growth woodlands.
    - Brood rearing – Similar to nesting except also including bare ground and dense ground cover.
    - Roosting – Open fields (minimum of 5 acres) or blueberry fields and reverting farm fields.[10]

- Eastern Whip-poor-will:

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

- General – Large home ranges with both forested and open areas in close proximity. Suitable sites provide this landscape configuration and are typically near known, occupied areas especially within Focus Areas.
- Nesting – Forested habitat with well-drained soils and adjacent to open areas. Often pine or pine/hardwood forests, especially pitch pine barrens; rarely hardwood forests or stands with closed canopy or dense shrub layer. Soils critical since the clutch of 2 eggs is placed directly in leaf litter on forest floor.
- Foraging – Open habitat (e.g., fields, gravel or sand pits, regenerating forest clearcuts, powerlines) adjacent to mature forest, due to increased prey (Lepidopterans) availability and/or increased lunar illumination. Within regenerating stands, disproportionately use areas within 100m of mature forest edge and typically avoid interior of large clearcuts.
- Roosting – Daytime roosts directly on ground or on low branch in forest/young forest. [11, 12]

MANAGEMENT HISTORY

None

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

The following management is proposed for the next 10 years:

- **Management planned for 2022-2031** (Table 4, Figure 6):
  - Maintain the existing young forest patches within Stand A-4 by clearing trails and patches.
  - Clear brush in part of Stand A-15 to provide foot-access to wetlands from South Shore Road.
  - Monitor EAB infestation and consider hazard tree removals in proximity to parking lots or other infrastructure.

Table 4. Forest management schedule for the ten-year period of this HMP (2022-2031).

Stand	Acres	Size Class	Forest Type		Management Direction	Treatment Type
			Current	Future		
A-4	15	Pole Timber 6”-11” DBH	Northern Hardwood	Seedling-Sapling-Natural	Wildlife	Brush clearing
A-15	1	Pole Timber 6”-11” DBH	Swamp Hardwoods	Seedling-Sapling-Natural	Wildlife/Access	Brush clearing

Due to the limited forest habitat on the WMA and in the surrounding area, the priority on grassland management and the associated seasonal management restrictions, and the poorly drained soils in many of the forest stands, no significant forest management is planned on the WMA. Small firewood sales may be utilized to remove hazardous trees or to create trails, if it is

[11] Hunt, P. 2014. Best Management Practices for the Eastern Whip-poor-will in New Hampshire. New Hampshire Audubon, Concord, NH. 13 pp.
[12] Wilson, M. D., and B. D. Watts. 2008. Landscape configuration effects on distribution and abundance on whip-poor-wills. The Wilson Journal of Ornithology. 120(4): 778-783.

determined there is enough value in the trees, but no extensive forest management is scheduled. The existing patches of young forest habitat in several of the forest and shrubland stands (Stands A-4, 12, & 18, specifically) will be maintained by periodically clearing trails and pockets in the dense brush. This is recommended to occur once or twice during the term of this plan.

Stand locations and planned management actions are 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:

- **Stand A-4** (57 acres) is seasonally wet. The overstory is primarily ash, with occasional elm, oak, and hickory. The understory is dominated by honeysuckle, buckthorn, and dogwood, interspersed with open, grassy areas. Ash, oak, and hickory regeneration can be found in parts of the stand. At least 15 acres could be considered young forest habitat at the moment, although it is located in smaller patches rather than one 15-acre area, which is why it was not broken out into its own young forest stand. The young forest habitat will be maintained as such by periodically clearing trails and pockets in the dense brush to provide habitat for American Woodcock and potentially Eastern Whip-poor-will.

  The dominant overstory tree is ash, which is at risk from EAB. When EAB reaches the WMA, significant ash mortality is expected to occur. A pre-EAB timber harvest is not planned at this time, due to the poorly drained soils and limited value in the trees, but EAB will be monitored and ash trees may be removed if it is determined to be important for safety or habitat reasons. Dead ash trees would provide habitat for wildlife, either as snags or as coarse woody debris, and the oak and hickory regeneration would likely benefit from the gradual "release" (reduction of shading) from the thinning of the overstory due to EAB-caused ash mortality.
- **Stand A-15** (53 acres) is a forested wetland with primarily ash in the overstory, mixed with maple, white oak, and shagbark hickory, and with dense brush in some parts of the understory. Approximately one acre of brush, and a few trees, will be cleared to provide easier on-foot access to the wetland and forested wetland from the southwestern part of the WMA (South Shore Road). The clearing will also provide habitat for young forest dependent species and potentially pollinators since it will provide structural variability as well as openings for grasses and forbs.

BEST MANAGEMENT PRACTICES

Forest management on all WMAs follows Best Management Practices (BMPs) 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** [13]
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*

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

Wildlife Considerations:

Since Blanding's turtles are known to occur on Point Peninsula WMA, date restrictions for equipment operating in wetlands will be incorporated into any management activity as described in the Wetland section below.

The WMA supports multiple state listed threatened and endangered bird species. Many of the threatened or endangered bird species on the WMA are associated with the wetlands and grasslands. To protect these species, forest management immediately adjacent to wetland and grassland areas may be limited or avoided during the breeding season. 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 forests on Point Peninsula WMA are in moderate health. Poorly drained soils and competition from thick brush limit growth and regeneration in many parts of the WMA. The primary forest health concerns at this time are invasive insect and plant species.

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 Jefferson County. 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 may be removed from the WMA if deemed a hazard, especially to users of the property or adjacent private property.

Several species of invasive plants are established on the WMA. Buckthorn and honeysuckle are a significant component of the understory in most of the shrublands and forest stands, often limiting 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 eat it. Pale swallowwort is another significant invasive plant on the WMA, which should be monitored and treated when feasible. A grove of white poplar (also known as silver poplar) is located in Stand A-7, along Beach Road. White poplar is somewhat invasive and may spread into the grassland fields if mowing is not continued on a regular basis. Forest and shrubland management on the WMA will focus on controlling invasive plant species and establishing regeneration that will improve wildlife habitat. This will be accomplished through brush clearing and possibly through herbicide treatments or planting. All treatment areas will be monitored, and additional treatments will occur as needed until desirable conditions have been established.

Pre- and Post-treatment Considerations:

Poor drainage and seasonal restrictions to protect threatened or endangered species are both limiting factors for access for management activities, especially the use of machinery in many of the forested stands. If machinery is used to conduct management activities, it should be when site conditions are suitable to fully support the weight of the equipment and when the disturbance caused by the equipment will cause the least negative impact to threatened and endangered species.

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

Management Evaluation

To determine whether the desired forest regeneration and wildlife response(s) have been achieved by the management outlined above, pre- and post-management assessments will be conducted in accordance with guidelines in the *Young Forest Initiative Monitoring Plan: 2016-2025*.[14] The Monitoring Plan establishes statewide standards for evaluating vegetation and target wildlife responses to forest management to determine if the outcome is as prescribed. Regeneration assessments will be conducted within one year of harvest completion, three, and five years after the harvest or until the forester determines adequate natural or artificial (i.e., planting) regeneration has been securely established. YFI wildlife target species selected for Point Peninsula WMA, which may be assessed to determine response to management, include:

- American Woodcock
- Eastern Whip-poor-will

Shrubland

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

Management Objectives

- Provide 111 acres of shrubland habitat for shrubland obligate species and other wildlife, including several YFI target species.

Description of Existing Shrubland Habitat and Target Species

There are 111 acres of shrublands on Point Peninsula WMA that consist of mixed shrubs, hardwood seedlings and saplings, grasses, and forbs. Dogwood thickets are a common part of the shrublands and provide habitat for a variety of species. Honeysuckle and buckthorn are also a significant component but are far less beneficial to wildlife.

Shrubland habitat at Point Peninsula WMA.

Photo: Rachel Hillegas, NYSDEC

[14] The YFI Monitoring Plan is available online at https://www.dec.ny.gov/outdoor/104218.html.

The shrublands on Point Peninsula WMA provide habitat for a variety of species, including:

- American Woodcock
- Wild Turkey
- Brown Thrasher
- Gray Catbird

MANAGEMENT HISTORY

None

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2022-2031** (Figure 6, Table 6):
    - Periodically clear meandering trails and small openings (4 acres) in portions of the stands, to maintain the existing habitat for young forest dependent species (Stands A-12 & 18).

As noted in the Forest section, above, Stands A-12 & 18 currently provide habitat suitable for young forest dependent species. They are shrubland stands with a mix of dogwood, honeysuckle, and some buckthorn. There are scattered ash, elm, and aspen trees, most of which are currently small diameter trees. An occasional apple, oak, or hickory can also be found in the shrublands; they provide important food sources for wildlife.

Once or twice during the term of this management plan, trails and patches will be mowed or cleared in parts of these stands to create openings in the brush to provide structural diversity. The invasive honeysuckle and buckthorn will be prioritized for removal, and large dogwood patches will be divided or trimmed back to prevent them from becoming a solid thicket across the stand. A few of the ash, elm, or aspen trees may be cut to maintain the existing young forest habitat. The oak, hickory, and apple trees will be retained wherever possible.

BEST MANAGEMENT PRACTICES

Brush hogging or mowing will be conducted from mid-August through early October when dry conditions are more likely and there is minimal interference with the nesting activities of wildlife and upland game hunting. Winter clearing can be considered if needed as long as interference with wintering raptors can be avoided.

MANAGEMENT EVALUATION

Singing ground surveys may also be conducted in this area for American Woodcock.

GRASSLAND

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

- Maintain the existing grassland areas (509 acres).
- Enhance the quality of grassland fields by removing shrubs or dense vegetation from the fields (e.g., brush hogging, disking and seeding, and/or hydro-axing), where appropriate.
- Provide nesting habitat and cover for breeding grassland and waterfowl species.
- Monitor for invasive species and attempt to eradicate where possible.

DESCRIPTION OF EXISTING GRASSLAND HABITAT AND TARGET SPECIES

There are 509 acres of grassland habitat on Point Peninsula WMA (Figure 6). The WMA is within the St. Lawrence Valley Grassland Focal Area and the newly proposed Grassland Conservation Centers for New York State. Grasslands in this area are important for reaching the goals set forth in the North American Bird Conservation Initiative and the Comprehensive Wildlife Conservation Strategy for the eastern Lake Ontario-St. Lawrence Basin in New York State. Due to the large sizes and quality of the grassland fields on the WMA, this area plays an important role in the preservation of breeding grassland birds and the guild of winter raptors that depend on it. Current grassland management also provides habitat for pollinators. The grasslands on this WMA are managed via an agricultural contract, see Agricultural Land section for more information.

Grassland habitat at Point Peninsula WMA.

Photo: Rachel Hillegas, NYSDEC

Several of the species that benefit from grassland habitat on the WMA include:

- Northern Harrier
- Bobolink
- Sedge Wren
- Short-eared Owl
- DeKay's brown snake
- Ring-necked snake
- Smooth green snake

MANAGEMENT HISTORY

In the past, the majority of old field/grassland habitat, which represents 47% of the WMA, had been maintained through multiple cooperative agreements. Annual mowing, through the cooperative agreements, was used to set back vegetative succession to maintain grassland

habitat. Currently agricultural contracts are used to manage the late mowing of the grassland habitat on a rotational basis.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2022-2031** (Figure 6):
  - Continue to maintain the grasslands by late mowing.
  - Removal of invasive species
  - Removal of tree or shrub clumps within or along the edges of the grassland fields (i.e., Stand A-7 white poplar removal)

At the time this HMP was prepared, the Department anticipates acquiring over 200 acres of additional lands directly adjacent to the WMA as mitigation for renewable energy project development impacts to occupied grassland bird habitat elsewhere in the Region. The mitigation includes a provision whereby all grassland habitat management will be funded by the energy project developer. Once acquisition is completed, we will amend this HMP to reflect the addition.

BEST MANAGEMENT PRACTICES

The following sub-sections provide guidelines for grassland habitat management on all WMAs in NY. For more detailed information and recommendations see *A Plan for Conserving Grassland Birds in New York*.[15] In particular, refer to the plan for species-specific habitat requirements and detailed recommendations regarding grassland management and restoration techniques.

General Management Recommendations

- Target management for grassland bird species known to be in the vicinity and consider the needs of both breeding and wintering grassland bird species.
- Consider the surrounding landscape when making management decisions.
- Conduct baseline grassland bird surveys on newly acquired fields or fields targeted for management changes to determine which species are present.
- Increase field size by hedgerow removal, removing trees, etc. to benefit species that require large, open fields.
- Control invasive plant species (glossy buckthorn, pale and black swallowwort, Canada thistle, Phragmites, etc.) to improve habitat quality.
- When developing grassland planting or habitat restoration projects, consider a variety of factors including the targeted grassland bird species, pollinators, seed mix (warm versus cool season grasses, forbs, wildflower mixes, grass height and density), timing of planting, existing site conditions, and vegetation removal techniques (including herbicide and intensive disking).
- Utilize mowing, haying, burning, and grazing for maintaining grassland habitat, after evaluating the appropriateness of these methods relative to site conditions and management objectives. In particular, burning cool season grasses is not advisable in most situations in New York.

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

Timing of Management

- Fields over 25 acres (including all contiguous fields) and fields of any size with a history of listed (federally listed and/or state E/T or SC) grassland bird species within the last 10 years:
    - Avoid mowing or conducting other management between April 23 and August 15, unless the field(s)/area(s) targeted for management are first assessed or surveyed to confirm there is no active nesting by E/T/SC grassland birds and the proposed management will provide long-term benefits to the habitat/wildlife (such as invasive species management). In some cases, if nesting locations can be avoided, such as using spot treatment for invasive species, work can be done as long as any negative impacts to the species of concern are eliminated.
- Fields under 25 acres (including all contiguous fields) with no history of listed species:
    - Fields can be managed/mowed between April 23 and August 15 to accomplish other goals and priorities that benefit other species that use the habitat. If early management is proposed, then the habitat requirements and nesting periods of other species should be considered (e.g., nesting waterfowl, American Bittern, reptiles, and amphibians).
- Winter Restrictions: Avoid mowing and other management from November 1 to March 1 within fields over 25 acres (including all contiguous fields) and fields with a history of listed wintering raptors (regardless of field size). If management to improve habitat is planned during this time, conduct pre-treatment winter raptor surveys using established protocols to confirm there is no use by listed wintering raptors (short-eared owl and northern harrier). Other activities that cause excessive disturbance such as frequent high-speed snowmobile, ATV, motorized vehicle operation, or other loud noises should be avoided from November 1 to March 1, inclusive for the protection of wintering raptors.

Additional Mowing Guidelines

- Frequency of mowing, size of area mowed, and mowing techniques should be based on species present and current and desired habitat conditions.
- Block or spot mowing is preferred, and strip mowing should be limited (especially in fields over 25 acres). In some cases, spot/wander mowing can be done to leave cover while targeting problem areas.
- Unmowed blocks should be in the shape of a square as opposed to long rectangles.
- When mowing, consider mowing from one side of the field to the other side or start in the center and mow outwards to avoid concentrating animals in the area yet to be mowed.
- In general, mow grass to a residual height of 6-12 inches.

Management Evaluation

DEC staff have conducted annual presence/absence point counts for grassland breeding birds on the WMA since 2013. Surveys for both breeding and wintering grassland bird species will occur every three to five years or as determined necessary by the Regional Wildlife Manager and/or federal aid workplans to maintain current records of habitat usage by grassland birds including threatened and endangered species such as Sedge Wren, Northern Harrier, and Short-eared Owl.

Agricultural Land

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

Description of Existing Agricultural Lands Habitat

Point Peninsula WMA fields are managed as hay crop only and there is no row crop agricultural land. As of 2020, there is an active agricultural contract that is valid for three years with the option of extending it for two years. All mowing and activities related to the management of the grassland fields are outlined by wildlife staff prior to the start of the mowing season. The acreage is counted as Grassland in Table 1 and Best Management Practices are listed in the Grassland section, above.

Management History

Prior to 2020, the grassland fields were managed by using co-operative agreements with local farmers. The agreements were good for up to a five-year interval. This type of farming is covered in the Grassland section.

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, dike, road, or other structure. Forested wetlands are addressed in the Forest section above.

Management Objectives

- Retain 246 acres of non-forested wetlands as they currently exist.
- Maintain and inspect the impounded wetlands totaling 34 acres to provide habitat for wetland-dependent wildlife such as waterfowl, muskrat, and beaver.
- Provide habitat for Blanding's turtle.

DESCRIPTION OF EXISTING WETLAND HABITAT AND TARGET SPECIES

There are 280 acres of natural and impounded wetlands (non-forested; see Forest section for the forested wetlands) on Point Peninsula WMA (Figure 3). The diverse wetlands, consisting of scrub-shrub, emergent, and open water type wetlands, provide habitat for species such as:

- American Woodcock, American Bittern, Belted Kingfisher, Black Tern, migratory waterfowl, Greater Yellowlegs, Bald Eagle
- Beaver, muskrat
- Blanding's turtle, midland painted turtle, spotted turtle
- Chorus frog, bullfrog, northern leopard frog, green frog, American toad, spring peeper, wood frog, pickerel frog
- Northern water snake, eastern milk snake

Clover Construction Management Inc mitigation site at Point Peninsula WMA.
Photo: Irene, Mazzocchi, NYSDEC

MANAGEMENT HISTORY

In 2007, Clover Construction Management Inc. proposed a mitigation project on Point Peninsula WMA for wetland impacts associated with the Eagle Ridge Townhouse Project in the town of LeRay. Ducks Unlimited, Inc. was hired by Clover Construction Management Inc to construct a minimum of six acres of wetlands on Point Peninsula WMA. Ducks Unlimited completed the construction as per the project proposal and the mitigation site was monitored for five years with annual reports submitted to the NYSDEC for success of the project (Ducks Unlimited 2013 Monitoring Report).

In 2007, funds from the North American Wetlands Conservation Act were secured through Ducks Unlimited and were used to develop wetland restoration plans for the construction of three low level berms at Point. Peninsula WMA just across the road from the mitigation project. Historically, Point Peninsula WMA contained a number of swales that were installed to drain wetlands and wet areas within the fields, for agricultural purposes. The goal of the Ducks Unlimited project was to restore approximately 30 acres of emergent marsh with individual pool sizes at 5 ac, 3.8 ac and 19 ac. The berms are intended to restore emergent marsh habitat that will benefit spring and fall migrating waterfowl, as well as other wetland wildlife, including migrating shorebirds and the Blanding's turtle. Each berm has an in-line water control structure for water control and pool management.

IMPLEMENTATION PLAN AND ANTICIPATED SCHEDULE

- **Management planned for 2022-2031:**
  - Maintain control structures so they function properly i.e. remove vegetation as needed.

MANAGEMENT EVALUATION

Monitor the wetlands for the presence of Blanding's turtle and conduct Black Tern surveys every three years as part of the NY statewide count.

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, Black Lake).

DESCRIPTION OF EXISTING OPEN WATER HABITAT

Point Peninsula WMA borders Lake Ontario, other than that there is no open water habitat on the WMA (Figure 6).

HABITAT MANAGEMENT SUMMARY

In summary, Table 6 lists the habitat management actions planned for Point Peninsula 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 Point Peninsula WMA, 2022-2031 (See Figure 6).

Habitat	Management Action	Acres	Timeframe
Forest	Clear brush in portions of the stand to maintain young forest habitat – Stand A-4	15	2022-2031
Forested Wetland	Clear a path from South Shore Road to the wetland/forested wetland to provide access and habitat – Stand A-15	1	2022-2031
Grassland	Mow and manage grassland according to BMPs – Stands A-3, 7, 13, 14, 16, 17, and 19	509	2022-2031
Shrubland	Clear meandering paths and patches as needed to maintain young forest habitat – Stands A-12 and A-18	4	2022-2031
Wetlands	Inspect and treat berms of impounded wetlands as needed – Stand A-10	<5	2022-2031

III. FIGURES

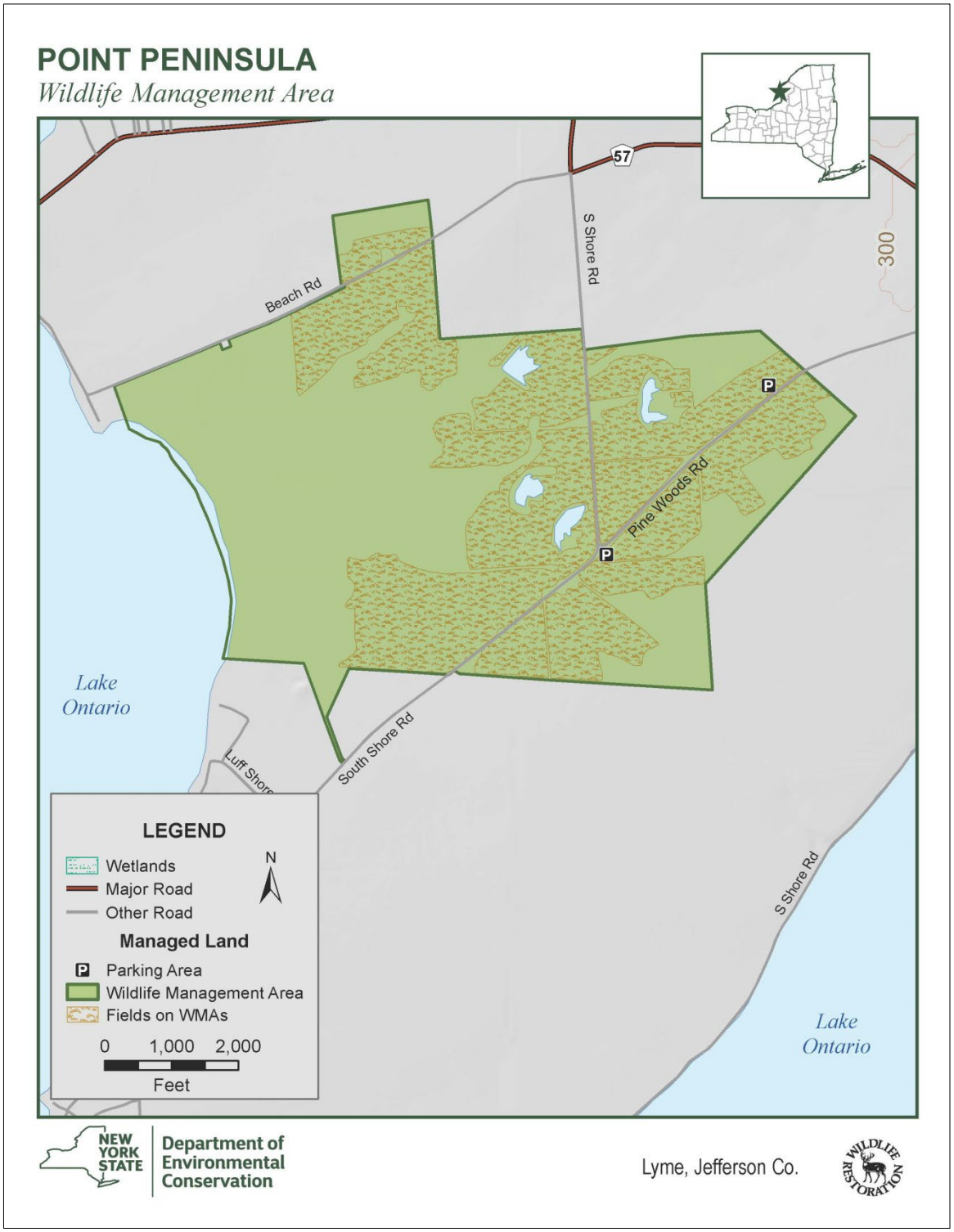

FIGURE 1. Location and access features at Point Peninsula WMA.

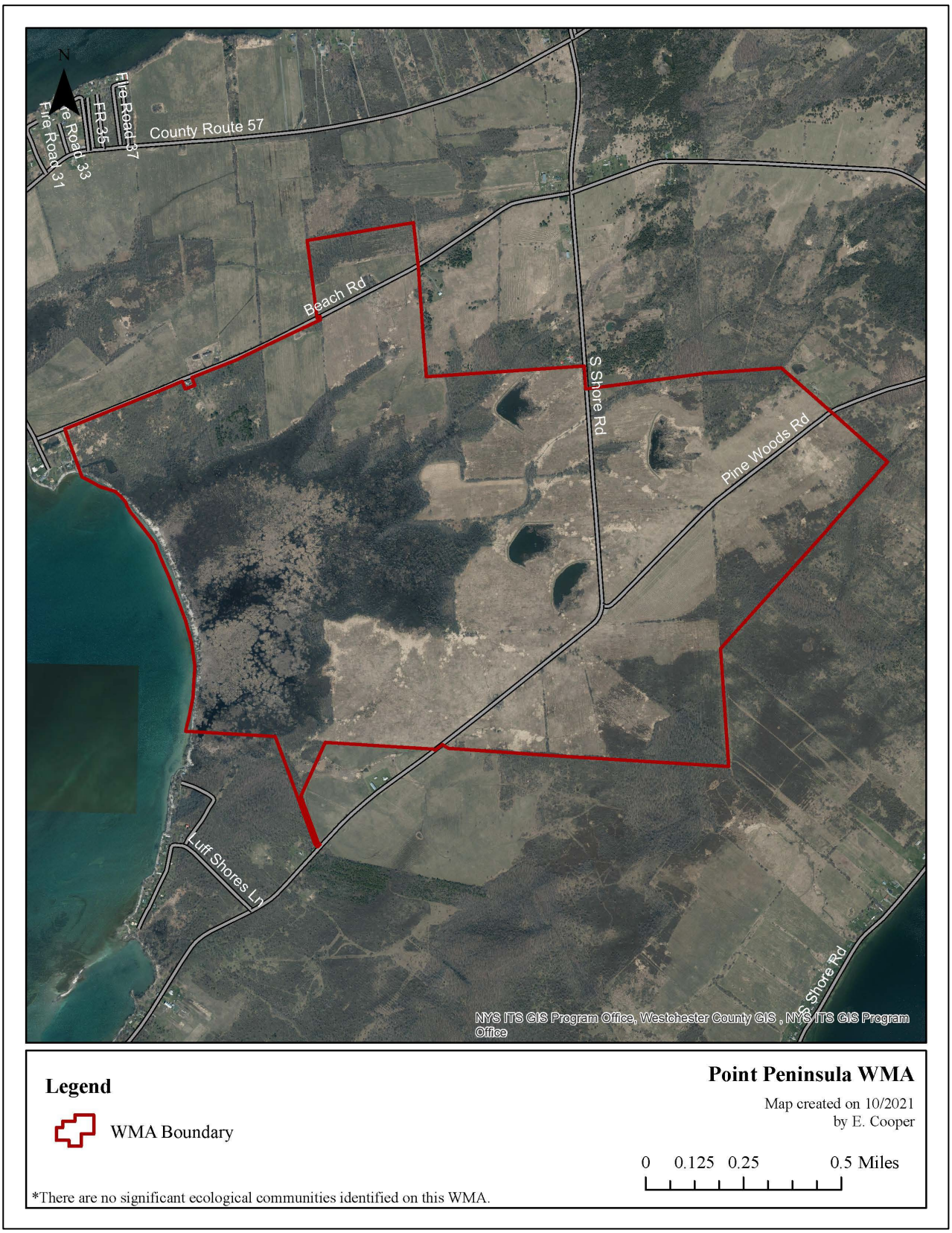

FIGURE 2. No significant ecological communities are on Point Peninsula WMA. Data is from the NY Natural Heritage Program.

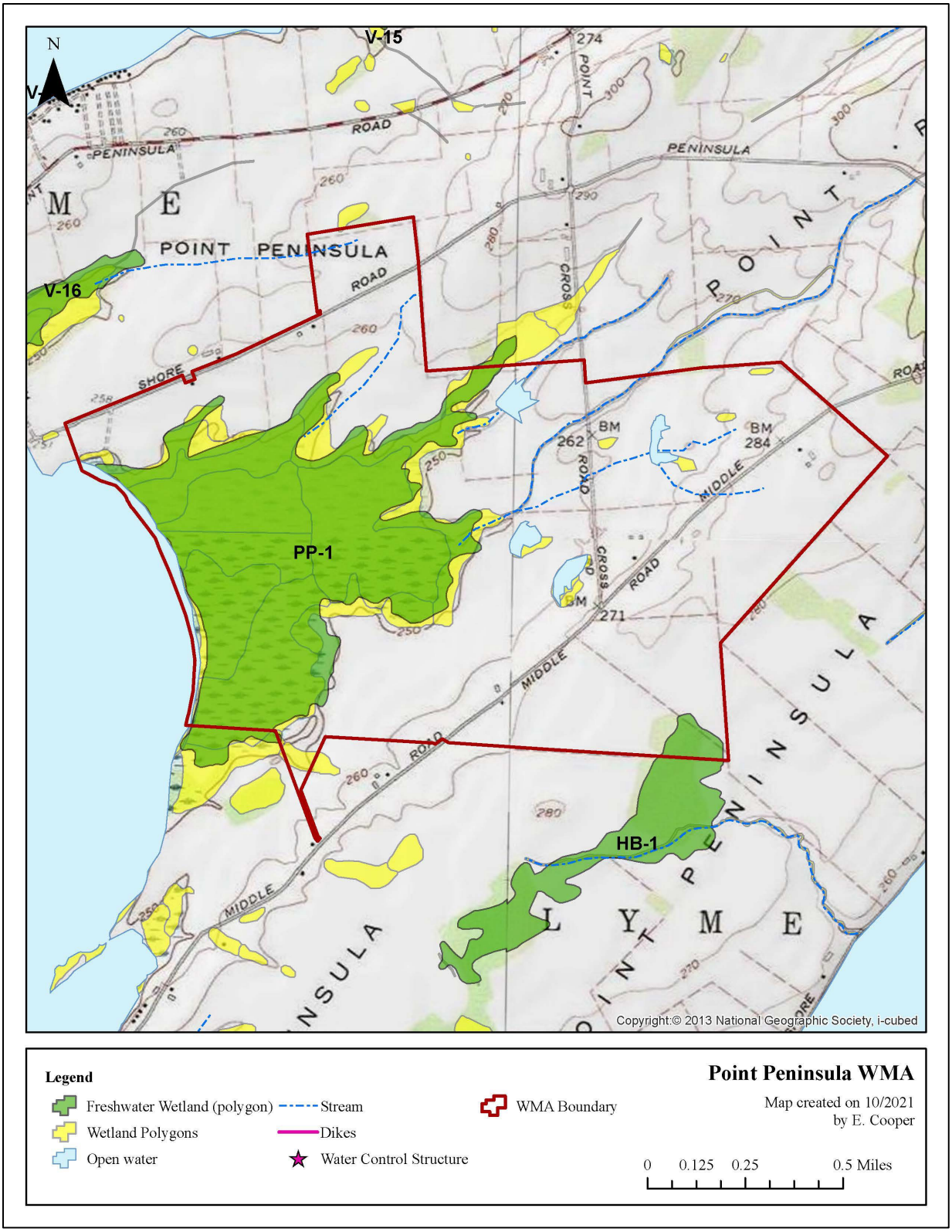

FIGURE 3. Wetlands, open water, and streams of Point Peninsula WMA. Note: Wetland boundaries are not exact and may not be used for regulatory purposes without a current delineation.

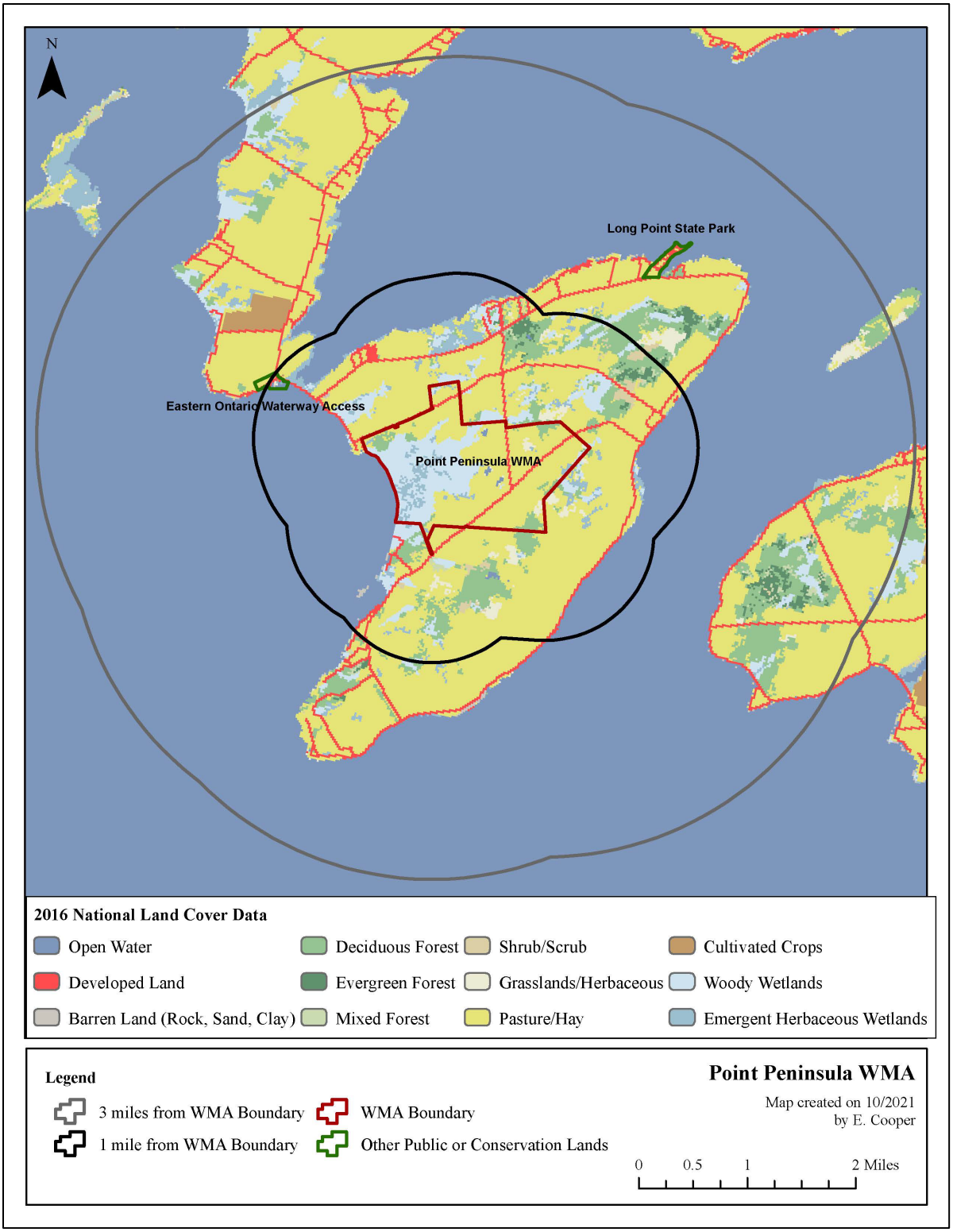

FIGURE 4. Land cover types and conservation lands in the landscape surrounding Point Peninsula WMA. Conservation lands are from the NY Protected Areas Database available online at https://www.nypad.org/. Land cover types are from the 2016 National Land Cover Data (NLCD) and differ from the habitat types 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.

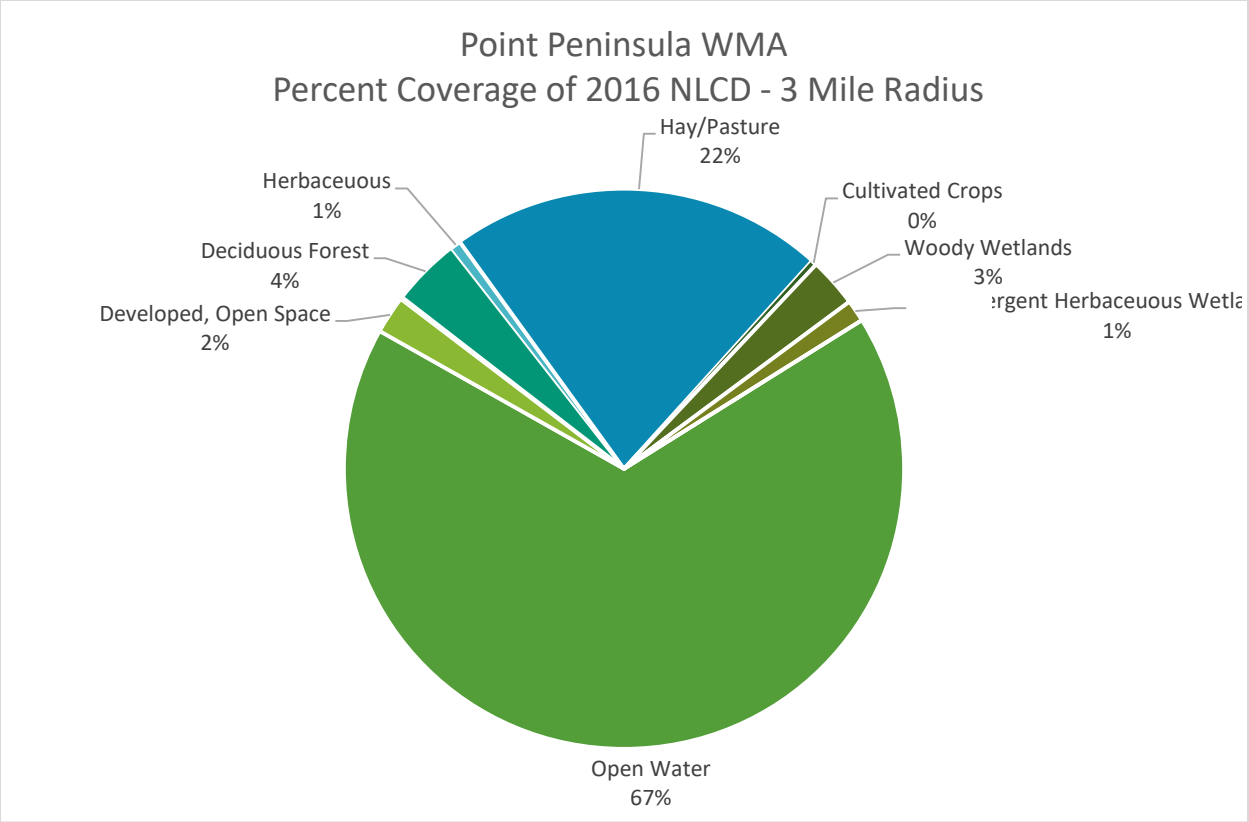

FIGURE 5. Percent cover of land cover types within three miles of Point Peninsula WMA.

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.

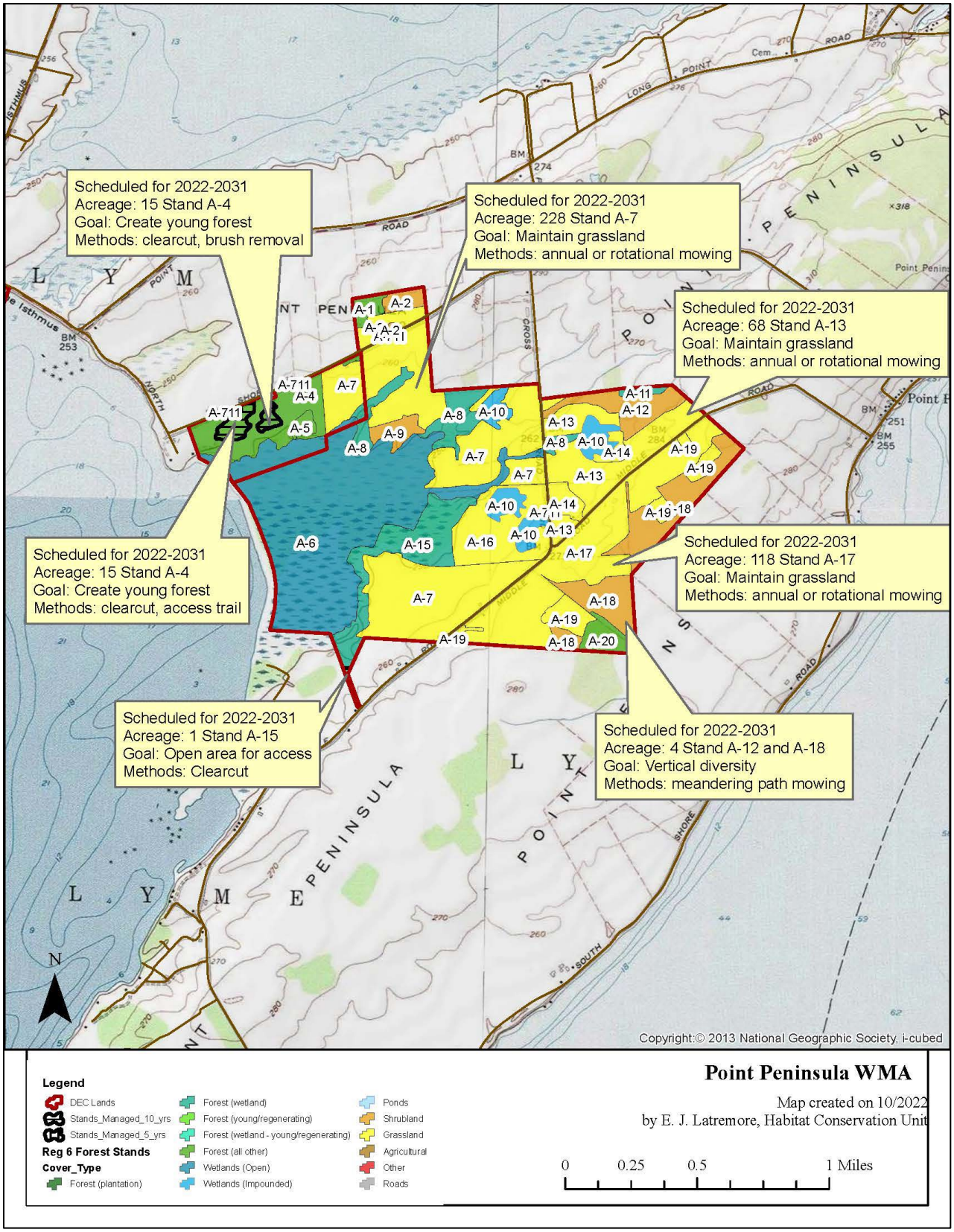

FIGURE 6. Habitat types and location(s) of proposed management on Point Peninsula WMA. Numbers indicate the stand number from habitat inventory.

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 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. STATEMENT OF CONFORMITY WITH SEQRA

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).[16] 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).[17]

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.

[16] Available online at https://www.dec.ny.gov/regulations/28693.html.
[17] 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:

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.