



## **FLAT CREEK SOLAR**

**Case No. 23-00054**

**Appendix 11-1**

**Invasive Species Management and Control Plan**

**August 2024**

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Figure 1. Pre-Construction Mapping of Invasive Species

## Attachment

Attachment A. New York State Prohibited and Regulated Invasive Plants, September 10, 2014

## **1.0 Introduction**

Flat Creek Solar NY LLC (Applicant), a subsidiary of Cordelio Power LP, is proposing to construct the Flat Creek Solar Facility (Facility), a 300 megawatt (MW), alternating current (AC) photovoltaic (PV) solar facility in the Towns of Root and Canajoharie in Montgomery County, New York (Figure 1-1). Facility facilities will include commercial-scale solar photovoltaic (PV) arrays, access roads, inverters, fencing, buried electric collection lines, and electrical interconnection facilities.

The Facility consists primarily of agricultural land, forests, successional shrubland, old-field, and wetland ecological communities. Construction activities will result in vegetation clearing and soil disturbance in the immediate vicinity of the proposed solar arrays, access roads, electrical collection lines, and associated infrastructure.

Invasive vegetative species are of special concern as their spread is likely to cause some degree of environmental, human health, or economic harm. For example, invasive species will often out-compete native species because they may lack control mechanisms that are present in their native habitats. The result can be a rapid spread of invasive species populations, which can alter ecological communities and diminish biological diversity. Normal dispersal methods for invasive plant species include wind, water, and wildlife; however, anthropogenic means of spread (e.g., construction activity) have the potential to accelerate their distribution and are the primary focus of this Invasive Species Management and Control Plan (ISMCP).

### **1.1 Goals and Objectives**

The intent of the ISMCP is to outline a clear plan to minimize the spread of invasive species that are present within the Facility Site. To prevent their spread, it is necessary to identify the existing invasive species within the Facility Site and develop a plan to monitor and control the species during construction, restoration, and operation. The goal of the ISMCP is to maintain a zero percent increase in invasive species distribution and coverage within the Facility Site.

Invasive species are regulated by the Environmental Conservation Law (ECL) Sections 9-1709 and 71-0703. Regulations under Part 575 of 6 New York Codes, Rules and Regulations (NYCRR) restrict the sale, purchase, possession, propagation, introduction, importation, and transport of invasive species. This ISMCP is being developed in accordance with this regulation, to prevent the introduction of new or spread of existing invasive species within the Facility Site.

## 2.0 Invasive Plant Species Identified within the Facility Site – Baseline Survey Results

As part of the Facility field efforts, ecological resource surveys were performed for the Facility in 2020 through 2024. During ecological resource surveys and wetland and stream delineations, TRC biologists documented occurrences of invasive species within the Facility Site to be used as a baseline survey for future monitoring efforts (Figure 1). TRC biologists recorded observations of invasive plant species (listed below). No invasive insect species or signs of infestation were observed at the time of surveys.

Prior to initiating field efforts, field biologists reviewed the priority list of invasive species for the region and key identifying characteristics using the website [nyimainvasives.org](http://nyimainvasives.org). Stands of invasive plants were recorded when a species was present at a concentration of 10 percent or greater over an area of 100 square feet or greater or if it was a species of concern for even a single plant (e.g., Japanese knotweed [*Reynoutruria japonica*]). If plant species meeting the criteria were identified, then a point was taken using a Global-Positioning System (GPS) and the observed species, concentrations of the species, and area affected were noted.

When priority invasive animals were observed, a similar process was followed to document the approximate location of the species, behaviors observed (if applicable), and the number of individuals observed. This data was used to generate a map depicting the locations of occurrences of invasive species throughout the Facility Site (see Figure 1).

During field efforts, four invasive vegetative species were identified as prohibited on the New York State Department of Environmental Conservation's (NYSDEC's) *Prohibited and Regulated Invasive Plants* list, published on September 10, 2014, (Attachment A). Inclusion on the prohibited list means that they cannot be possessed, sold, imported, purchased, transported, or introduced and therefore, construction activities that would knowingly cause distribution of these species is prohibited.

The following invasive plant species were identified in low densities within the Facility Site:

- Canada thistle (*Cirsium arvense*),
- Japanese honeysuckle (*Lonicera japonica*),

- Common reed grass (*Phragmites australis*), and
- Japanese knotweed.

The invasive species identified within the Facility Site are listed in the *Prohibited and Regulated Invasive Plants* list. The approximate locations of the identified species are included in Figure 1.

### **3.0 Invasive Insect Species in Vicinity of the Facility Site**

No invasive insect species, or signs of infestation, were observed as part of field efforts at the Facility Site.

There are four invasive insect species that the NYSDEC identifies as a potential problem; therefore, Facility construction will be monitored for these species in accordance with 6 NYCRR Part 575, Prohibited and Regulated Invasive Species. These species include the emerald ash borer (EAB) (*Agrilus planipennis*), the Asian longhorned beetle (ALB) (*Anoplophora glabripennis*), the spotted lanternfly (SLF) (*Lycorma delicatula*), and the hemlock woolly adelgid (HWA) (*Adelges tsugae*). Additional information regarding these species is presented below.

#### **3.1 Emerald Ash Borer (*Agrilus planipennis*)**

The EAB is an invasive beetle, native to Asia, which was first identified in Michigan in 2002. According to the NYSDEC, three counties in New York do not have EAB, including Montgomery County where the Facility Site is located. In New York State, the EAB was first identified in Cattaraugus County in 2009 (NYSDEC, 2024). This insect infects ash trees (*Fraxinus* spp.) and causes tree canopy dieback and yellowing and browning of leaves, leading to death of infected trees within two to four years (NYSDEC, 2024).

The EAB has a one-year life cycle and four stages of life: adult, egg, larva, and pupa. The EAB emerges from beneath the bark tree of ash species beginning in late-May or early-June (New York Invasive Species Information [NYIS], n.d.), with the adult flight season complete by early August. The adult life span is approximately three weeks, and the adults are most active during the day in sunny, warm weather. In wet or cooler weather, adult EAB shelter beneath the bark of ash trees (NYIS, n.d.).

New York State has implemented programs to help with early detection of EAB to prevent the spread, including the May 2017 Restricted Zone for the EAB. Montgomery County borders a

Restricted Zone but is not within one. Restricted Zones include quarantines around known EAB infestations. Within these zones, regulated articles may not be removed from the zone. Regulated articles include ash wood, ash logs, untreated ash firewood, ash nursery stock, and wood chips (only between April 15 and May 15). Additionally, in accordance with 6 NYCRR Part 575 (Prohibited and Regulated Invasive Species), the EAB itself may not be moved in any life stage, unless for management, control, identification, or disposal (NYSDEC, 2024).

As the Facility is located outside the EAB Restricted Zone, the Restricted Zone requirements will not apply to the Facility. However, should a suspected infestation or sighting occur within the Facility Site, the NYSDEC's Forest Health Information Line will be contacted at (866) 640-0652.

### **3.2 Asian Longhorned Beetle (*Anoplophora glabripennis*)**

The ALB is an invasive wood-boring insect, native to China and Korea, which was first identified in the United States in 1996 in Brooklyn, New York (NYSDEC, 2018). Additional infestations of the ALB have been identified throughout the New York City and Long Island regions; including Manhattan, eastern Queens, Staten Island, and central Long Island (NYSDEC, 2018). The ALB can infest a variety of hardwood tree species including maples (*Acer* spp.), elm (*Ulmus* spp.), horsechestnut (*Aesculus* spp.), willow (*Salix* spp.), sycamore (*Planatus* spp.), and birch (*Betula* spp.) (NYIS, 2019). Trees that have been infested by ALB often have wilted foliage and canopy dieback, leading to death of infected trees within seven to nine years (NYSDEC, 2018).

Adult ALBs have shiny black bodies with irregular white markings, long antennae, and can reach 1.5 inches in length (NYIS, 2019). Females deposit their eggs into depressions chewed into the bark of hardwood trees and can lay between 35 and 90 eggs per season (NYIS, 2019). Once hatched, beetle larvae will tunnel through the infested tree feeding on the bark and heartwood through winter, and then forming galleries in the trunk and branches (NYIS, 2019). The adult beetles then chew their way out of the infested trees, emerging between June and October (NYIS, 2019).

The United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS), in coordination with State officials, have determined ALB Quarantine and Regulated Areas within states experiencing infestations, including New York, Massachusetts, and Ohio (USDA, 2021a). Quarantines help to eradicate beetles by restricting the movement of materials that have been infested by the ALB, minimizing the chance of spread to new locations (USDA,

2021a). Montgomery County does not contain an identified Quarantine area according to the 2021 New York State ALB Program Overview maps (USDA, 2021b).

In the event of a suspected infestation or sighting, the NYSDEC's ALB tip line at (866) 702-9938 and the NYSDEC Region 5 forester at (518) 897-1303.

### **3.3 Spotted Lanternfly (*Lycorma delicatula*)**

The SLF is a plant-hopping insect native to Asia and was first identified in Pennsylvania in 2014. The SLF has since been found in Connecticut, New Jersey, Delaware, Maryland, Virginia, and New York. In New York, SLF has been identified in the southeastern portion of the state, including Long Island and the Hudson Valley, Finger Lakes region, Erie County, and Herkimer County, among other areas (New York State Integrated Pest Management [NYSIPM], 2024). The SLF is a threat to both woody and non-woody hosts that are present throughout the United States. The greatest agricultural concern is for grapes, hops, apples, blueberries, and stone fruits.

SLF is a threat to agricultural and forest health due to the wide range of plant species they attack. Adults and nymphs feed on the sap of more than 70 plant species. The stress on the plants makes them vulnerable to disease and attacks from other insects. Additionally, the SLF excrete large amounts of sticky "honeydew," which attracts sooty molds that interfere with plant photosynthesis and negatively affects the growth and fruit yield (NYSDEC, 2024a).

SLF nymphs can be seen as early as April and are black with white spots and turn red before transitioning into adults. As observed by NYSDEC (2024a),

*Adults begin to appear in July and are approximately 1 inch long and ½ inch wide at rest, with eye-catching wings. Their forewings are grayish with black spots. The lower portions of their hindwings are red with black spots and the upper portions are dark with a white stripe. In the fall, adults lay 1-inch-long egg masses on nearly anything from tree trunks and rocks to vehicles and firewood. They are smooth and brownish-gray with a shiny, waxy coating when first laid.*

Infestations can be identified by sap oozing or weeping from open wounds on tree trunks, one-inch-long egg masses that are brownish-gray, waxy, and mud-like when new, and large honeydew build-up under plants, sometimes with black sooty mold (NYSDEC, 2024a).

SLF are spread primarily through human activity when eggs are inadvertently transported to new areas on vehicles, firewood, outdoor furniture, and stones. In response to the continuing spread of SLF in New York, NYSDEC, along with NYSDAM and USDA, have developed a plan to detect and prevent further spread of SLF. This plan includes trapping surveys in high-risk areas, as well as inspections of nursery stock, stone shipments, and commercial transports. NYSDAM has issued a quarantine to restrict the movement of goods into New York from quarantined areas of Delaware, New Jersey, Pennsylvania, Maryland, and Virginia. NYSDEC has also established a Protective Zone encompassing 20 counties near PA and NJ infestations to allow NYSDEC and partners to conduct surveying, monitoring, and management to prevent the spread of SLF. Montgomery County is not included in the 20 counties in the Protective Zone (NYSDEC, 2024a).

If there is a suspected infestation identified, pictures will be taken of the insect, egg masses, and/or infestation signs and sent via email to [spottedlanternfly@agriculture.ny.gov](mailto:spottedlanternfly@agriculture.ny.gov) and/or [spottedlanternfly@dec.ny.gov](mailto:spottedlanternfly@dec.ny.gov). An online form is also available through NYSDAM's website (<https://survey123.arcgis.com/share/a08d60f6522043f5bd04229e00acdd63>) to report the infestation and location.

### **3.4 Hemlock Woolly Adelgid (*Adelges tsugae*)**

The HWA is an invasive, aphid-like insect, native to Asia, that attacks and damages North American hemlock trees. It was introduced to the United States in the 1920s and first reported in the eastern US in Richmond, Virginia in 1951. In New York State, the HWA was first identified in the lower Hudson Valley and Long Island in 1985 and has now spread north into the Capitol Region and west to the Catskills and Finger Lakes Regions, Buffalo and Rochester. The first known occurrence in the Adirondack Park was discovered in Lake George in 2017 (NYSDEC, 2018). While it has not been documented in Montgomery County, it has been confirmed in the Town of Johnstown, NY (Fulton County), which borders the Town of Root across the Mohawk River to the north. HWA juveniles feed on hemlocks (*Tsuga* spp.), typically at the base of the needles, causing canopy damage by disrupting the flow of nutrients, resulting in mortality usually within 4 to 10 years (NYSDEC, 2018).

New York State has implemented biological control programs since the 1990s to help control the spread of HWA, including the release several natural predators of HWA in the Finger Lakes and Catskills regions. NYSDEC also partners with the New York State Hemlock Initiative to further

research of HWA biological control. Chemical control agents, such as insecticides Imidacloprid and Dinotefuran, have also shown promising results when applied to affected trees.

Although the Facility Site does not lie within an area where HWA has been reported, Eastern hemlock (*Tsuga canadensis*) could utilize forest communities within the Facility Site. Should a suspected infestation or sighting occur within the Facility Site, efforts should be made to document the evidence (including photos and GPS coordinates) and the NYSDEC's Forest Health Information Line will be contacted at (866) 640-0652.

#### **4.0 Control Measures – Best Management Practices**

To prevent introduction and spread of the listed species, the following best management practices (BMPs) will be enacted by the Applicant over the course of Facility construction and as part of post-construction monitoring efforts. These BMPs can be grouped into four main categories including material inspection, targeted species treatment and removal, sanitation, and restoration. Within each category, specific actions or combinations thereof can be taken depending on characteristics of a species and its density within the target area.

- 1. Material Inspection:** Material inspection includes the use of products such as seed, mulch, topsoil, fill, sand, and stone that are free of invasive species. Movement of these materials both into and out of the Facility Site should be limited to minimize the possibility of spreading invasive species. Importation of these materials will be limited by reusing excavated products to the maximum extent practicable. Imported construction materials will be obtained from reputable sources and thoroughly inspected for the presence of invasive species prior to transportation or use on the Site. Materials will be used immediately to limit the amount of time they are stockpiled.
- 2. Targeted Species Treatment and Removal:** Targeted removal is used in instances where invasive species are encountered during construction and cannot be avoided. Removal in that instance would prevent the spread of the species to other areas of the Facility Site. Targeted removal includes options such as hand-pulling, burning, cutting, burying, excavating, or herbicide application, which will either kill or limit the ability of a species to propagate. Herbicide application, if applicable, shall be carried out in accordance with Part 325 of 6 NYCRR, Application of Pesticides. Removal methods will be determined based on the type of species and its density. Invasive species that are

removed should be either left in the infested area or placed in a secure container for proper disposal off-site.

- 3. Sanitation:** As it relates to invasive species control, sanitation includes the cleaning of clothing and equipment prior to movement or use within the Facility Site. Seeds and viable plant parts can easily be transported to different locations on clothing and equipment. When working in an area known to have invasive species present, invasive species cleaning stations should be established to thoroughly clean machinery and clothing. Cleaning methods shall be limited to mechanical practices such as spraying equipment with compressed air and cleaning with brushes. The use of water is not permitted for the removal of invasive species. It is important to note that cleaning should be conducted both prior to equipment arriving on-site and prior to it leaving to prevent the spread of invasive species onto and off the work site within the Facility Site. Construction equipment should arrive to the Site clean and free of invasive materials and soils.
- 4. Restoration:** Invasive species spread most readily in disturbed soil. Stabilizing the Site quickly will limit the amount of time that invasive species have to establish in an area. Therefore, once construction is complete, disturbed areas should be regraded and stabilized (with seed and mulch) as quickly as possible. Once the Site is regraded, native seed mixes should be applied along with seed free mulch to reestablish vegetative cover. BMPs will also be implemented in accordance with the Stormwater Pollution Prevention Plan (SWPPP) to prevent erosion and limit the potential for spread of invasive species bearing soil off-site.

## **5.0 Monitoring**

Prior to the start of construction, the Applicant, in coordination with the Environmental Monitor (EM), will conduct mandatory environmental training sessions for contractors and subcontractors before they begin work on the Facility. The purpose of this training will be to explain the environmental compliance program in detail and assure that all personnel on-site are aware of the environmental requirements for construction of the Facility. Additionally, crews will be educated on the ISMCP to ensure that their activities on-site comply with the BMPs outlined in Section 4.0, and that they are familiar with the invasive species present as outlined in Sections 2.0 and 3.0. Monitoring will be conducted throughout the duration of Facility construction to ensure that the ISMCP is being implemented appropriately and that its goals are being met. It is important

to note that invasive species identified on-site prior to construction are likely to spread even in the absence of further human intervention. It is, therefore, necessary to distinguish between natural movement of invasive species and anthropogenic movement caused by Facility-related construction activities. The ISMCP goal of a zero-net increase in the number of invasive species present and their distribution in the Facility Site is based on the latter.

Post-construction invasive species monitoring will be conducted for a period of no less than five years following completion of Facility-related construction activities on-site. More specifically, the Applicant proposes that the post-construction monitoring of invasive species will be conducted in year one, year three, and year five following completion of construction and restoration. This monitoring schedule is to ensure that ISMCP goals are met, as germination and spread of invasive species can continue long after construction activities have concluded.

To achieve the goal of a zero-net increase in the number of invasive species present in the Facility Site and no new locations of existing invasive species in the Facility Site resulting from Facility construction or operation, the Post-construction Monitoring Plan and Adaptive Management Plan (if necessary) will be based on the recommendations of the invasive plan species baseline survey. A qualified biologist will monitor the area to determine the movement of invasive species through a visual inspection and compare to the baseline survey conducted (see Sections 2.0 and 3.0, above). If the spread or new occurrences of invasive species is observed by the qualified biologist, these instances will be treated in accordance with the control measures listed above, as deemed appropriate based on the characteristics of the invasive species. Interim reports will be produced for each year of monitoring, and a final report will be prepared detailing the success of the ISMCP. Reports will be provided to the NYSDEC, the New York State Department of Public Service (NYS DPS), the Office of Renewable Energy Siting and Electric Transmission (ORES), the host Towns of Root and Canajoharie, and NYSDAM. Evaluation of measures implemented will be completed following each monitoring period, and an adaptive management plan will be employed where appropriate to ensure objectives of the ISMCP are met. Failure to meet the goals of the ISMCP will result in revision of the control plan and extension of the post-construction monitoring phase for a period of two years from implementation of the revised plan. If it is determined that the goals of the 5-year post-construction monitoring plan are not being met, NYSDEC, ORES, NYSDPS, NYSDAM, and the Applicant can consult to determine appropriate adaptive management actions, revisions to the post-construction monitoring plan, or mitigation measures, as necessary.

## 6.0 References

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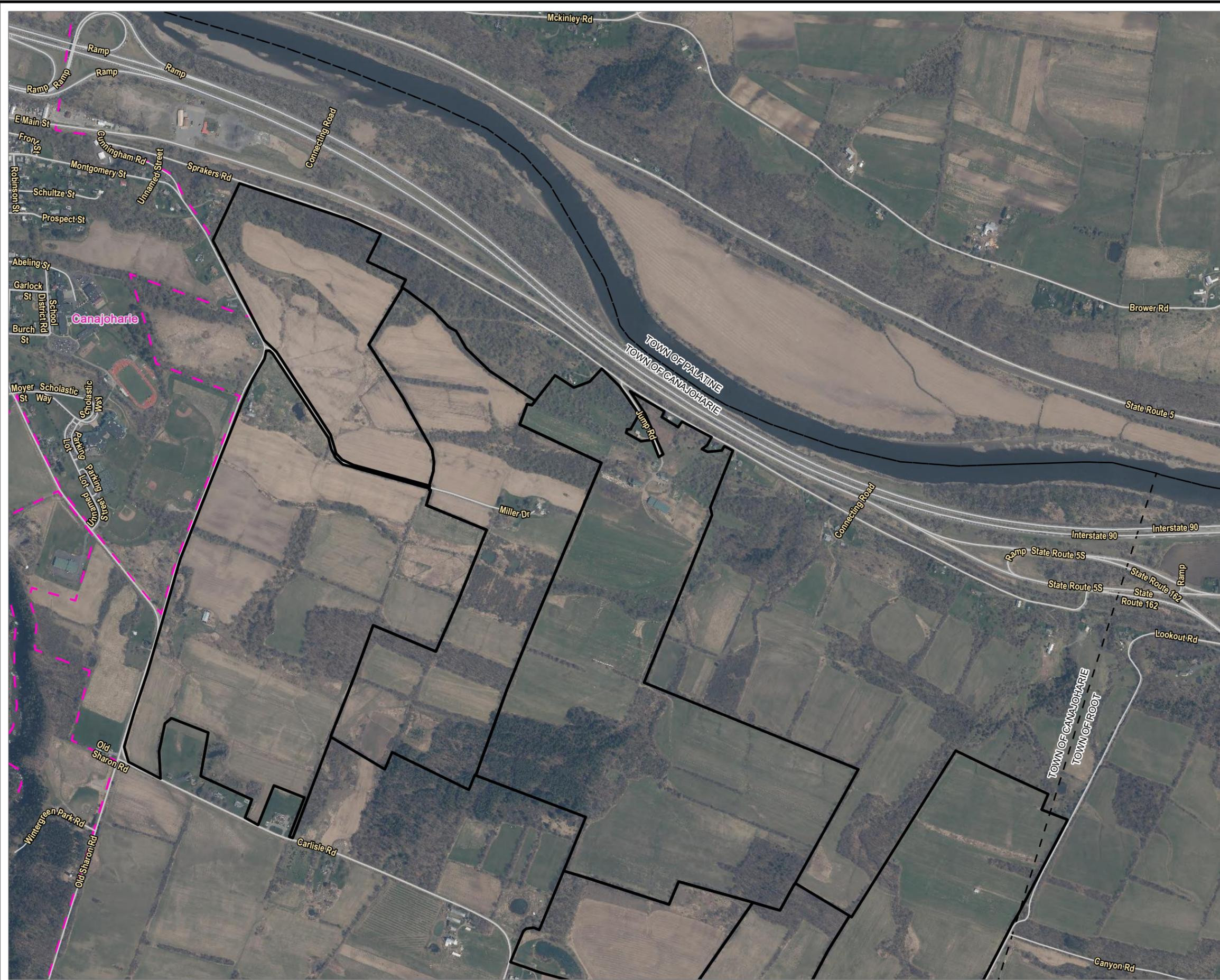
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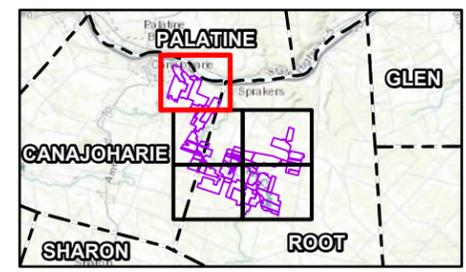
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- FACILITY SITE
- INVASIVE SPECIES**
- BLACK LOCUST
- COMMON REED
- MULTIFLORA ROSE
- PURPLE LOOSESTRIFE
- VILLAGE BOUNDARY
- TOWN BOUNDARY

**NOTES:**  
 1. THIS FIGURE IS DESIGNED TO BE VIEWED OR PRINTED IN COLOR AT 11X17.  
 2. INVASIVE SPECIES DATA ACQUIRED IN THE FIELD BY TRC DURING 2021 FIELD SEASON.  
 BASE MAP: NYSGIS "LATEST ORTHOIMAGERY" ONLINE SERVICE LAYER.  
 DATA SOURCES: TRC, NYSGIS, NYS/DAM/NYSERDA.

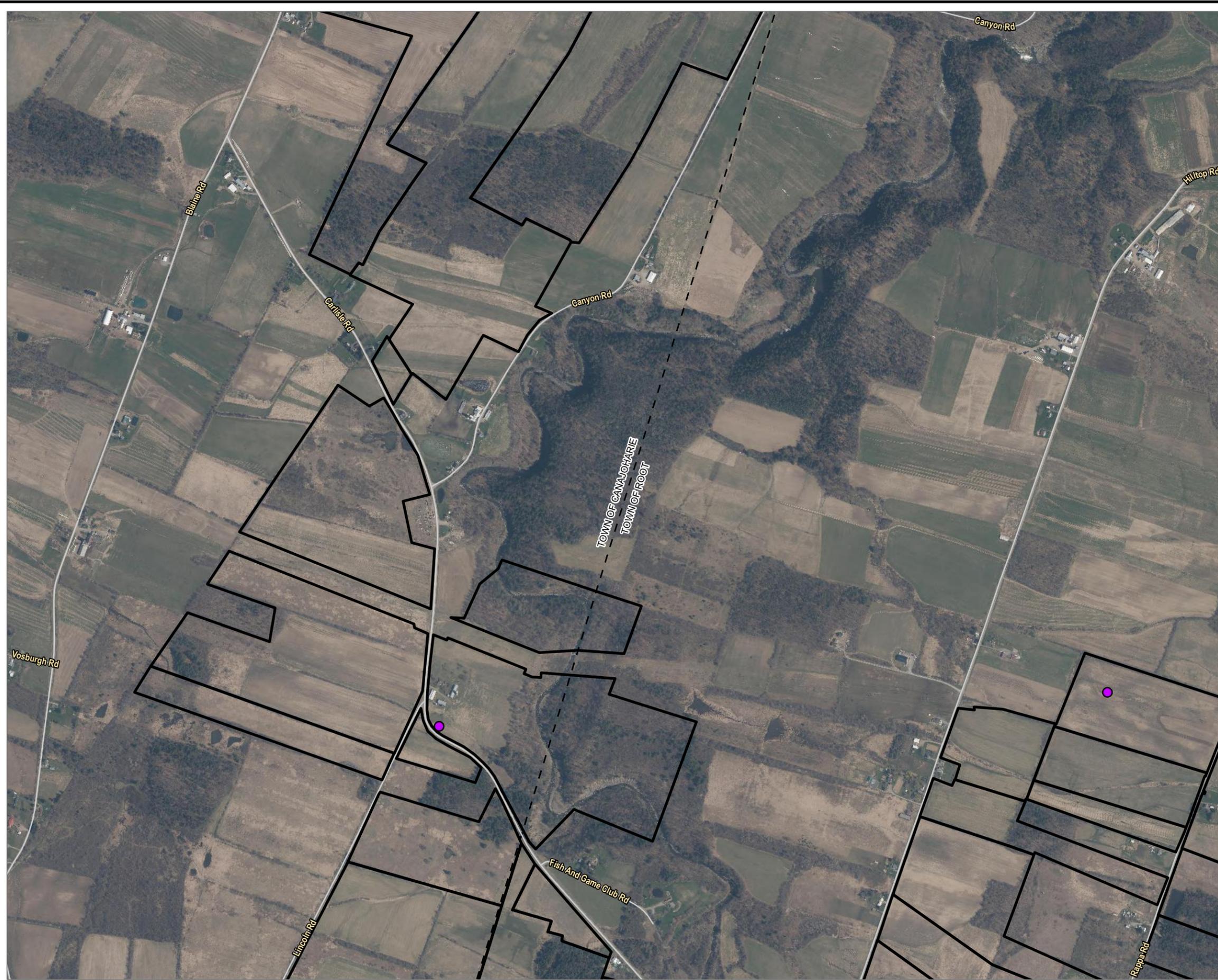


North Arrow  
 1:12,000  
 1" = 1,000'  
 0 1,000 2,000 FEET

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<b>TITLE:</b> PRE-CONSTRUCTION MAPPING OF INVASIVE SPECIES	
<b>DRAWN BY:</b> G. CORYELL	<b>PROJ. NO.:</b> 427281.2022.0000
<b>CHECKED BY:</b> B. STOOS	<b>FIGURE 1</b> Sheet 1 of 5
<b>APPROVED BY:</b> S. KRANES	
<b>DATE:</b> JULY 2024	

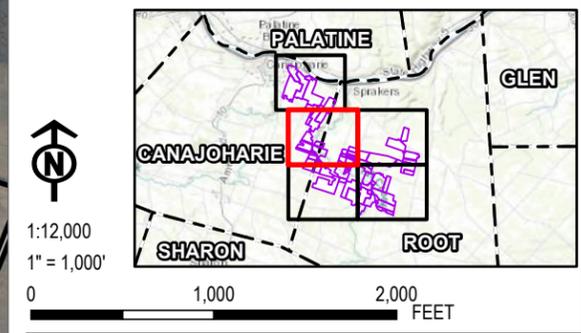
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 -- Saved By: GCORYELL on 7/28/2024, 14:09:23 PM; Layout Name: ISMP Figure 1; Pre-Construction Mapping of Invasive Species

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0  
 -- Sheet 1 of 5 -- Drawn By: G.CORYELL on 7/28/2024, 14:09:23 PM; Layout Name: ISMP\_Figure\_1; Pre-Construction Mapping of Invasive Species



- FACILITY SITE
- INVASIVE SPECIES**
- BLACK LOCUST
- COMMON REED
- MULTIFLORA ROSE
- PURPLE LOOSESTRIFE
- TOWN BOUNDARY

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 1. THIS FIGURE IS DESIGNED TO BE VIEWED OR PRINTED IN COLOR AT 11X17.  
 2. INVASIVE SPECIES DATA ACQUIRED IN THE FIELD BY TRC DURING 2021 FIELD SEASON.  
 BASE MAP: NYSGIS "LATEST ORTHOIMAGERY" ONLINE SERVICE LAYER.  
 DATA SOURCES: TRC, NYSGIS, NYSDAMNYSERDA.



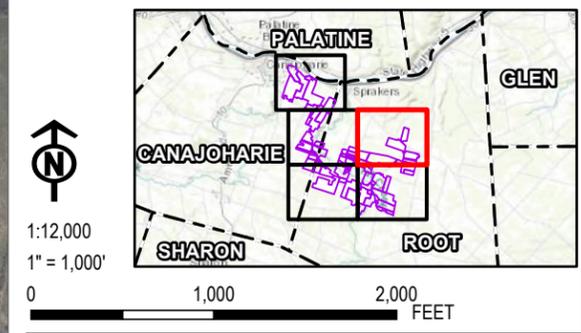
<b>PROJECT:</b>		<b>FLAT CREEK SOLAR TOWNS OF CANAJOHARIE AND ROOT MONTGOMERY COUNTY, NY</b>	
<b>TITLE:</b>		<b>PRE-CONSTRUCTION MAPPING OF INVASIVE SPECIES</b>	
<b>DRAWN BY:</b>	G. CORYELL	<b>PROJ. NO.:</b>	427281.2022.0000
<b>CHECKED BY:</b>	B. STOOS	<b>FIGURE 1 Sheet 2 of 5</b>	
<b>APPROVED BY:</b>	S. KRANES		
<b>DATE:</b>	JULY 2024		

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0  
 -- Sheet By: GCORYELL on 7/28/2024, 14:09:23 PM; Layout Name: ISMP Figure 1 Pre-Construction Mapping of Invasive Species



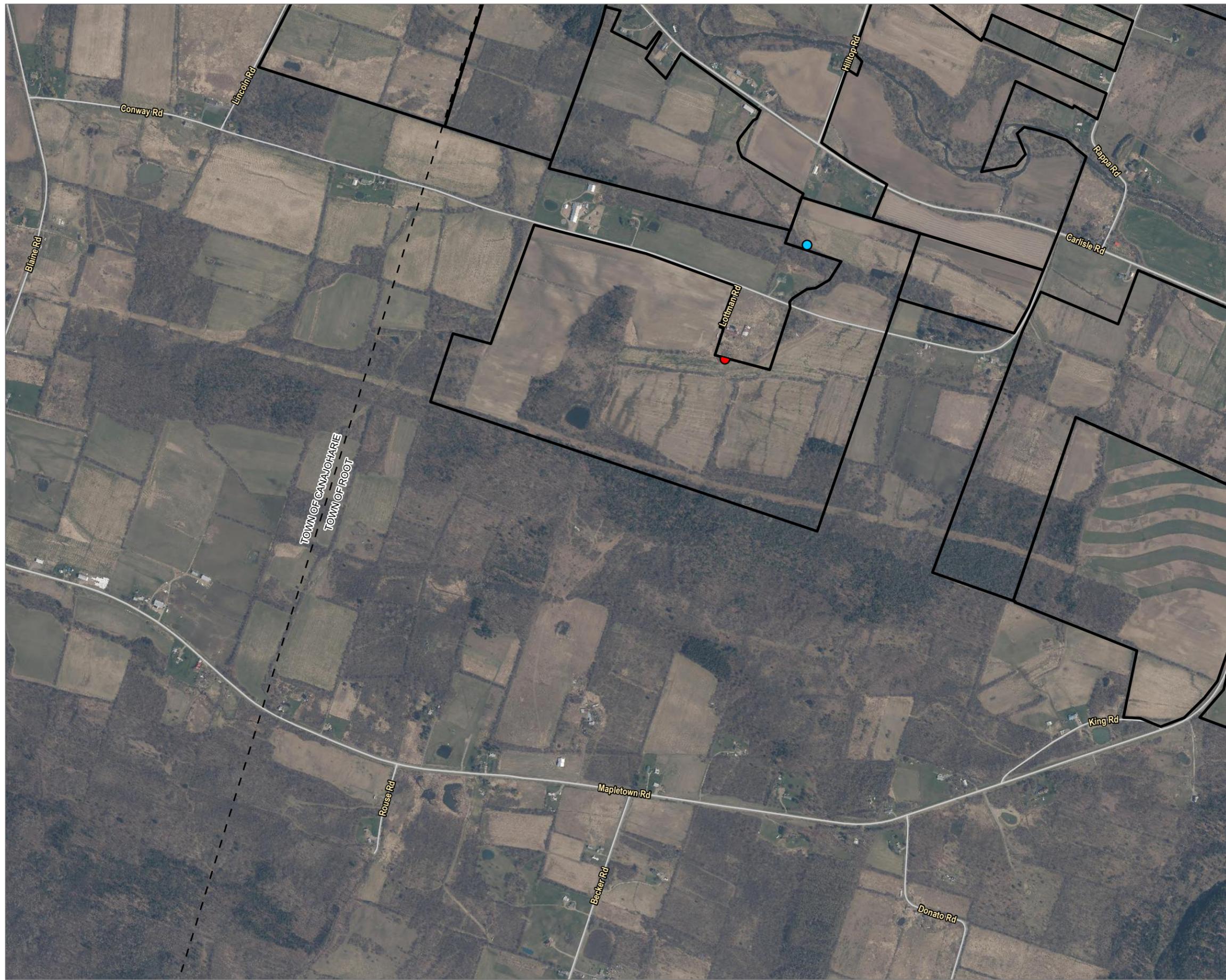
- FACILITY SITE
- INVASIVE SPECIES**
- BLACK LOCUST
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 DATA SOURCES: TRC, NYSGIS, NYSDAMNYSERDA.



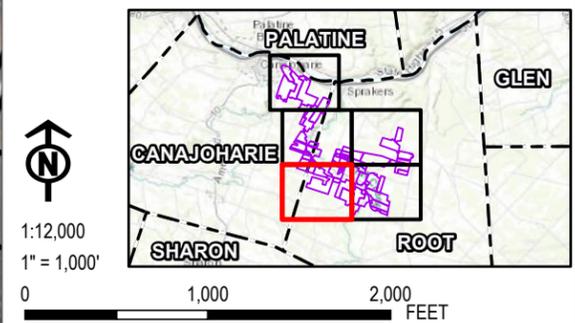
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		<b>MAPPING OF INVASIVE SPECIES</b>	
DRAWN BY:	G. CORYELL	PROJ. NO.:	427281.2022.0000
CHECKED BY:	B. STOOS	<b>FIGURE 1</b> Sheet 3 of 5	
APPROVED BY:	S. KRANES		
DATE:	JULY 2024		
<b>TRC</b>		15 GREENFIELD PKWY., STE. 102 LIVERPOOL, NY 13088	
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Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0  
 -- Saved By: GCORYELL on 7/28/2024, 14:09:23 PM; Layout Name: ISMP Figure 1; Pre-Construction Mapping of Invasive Species



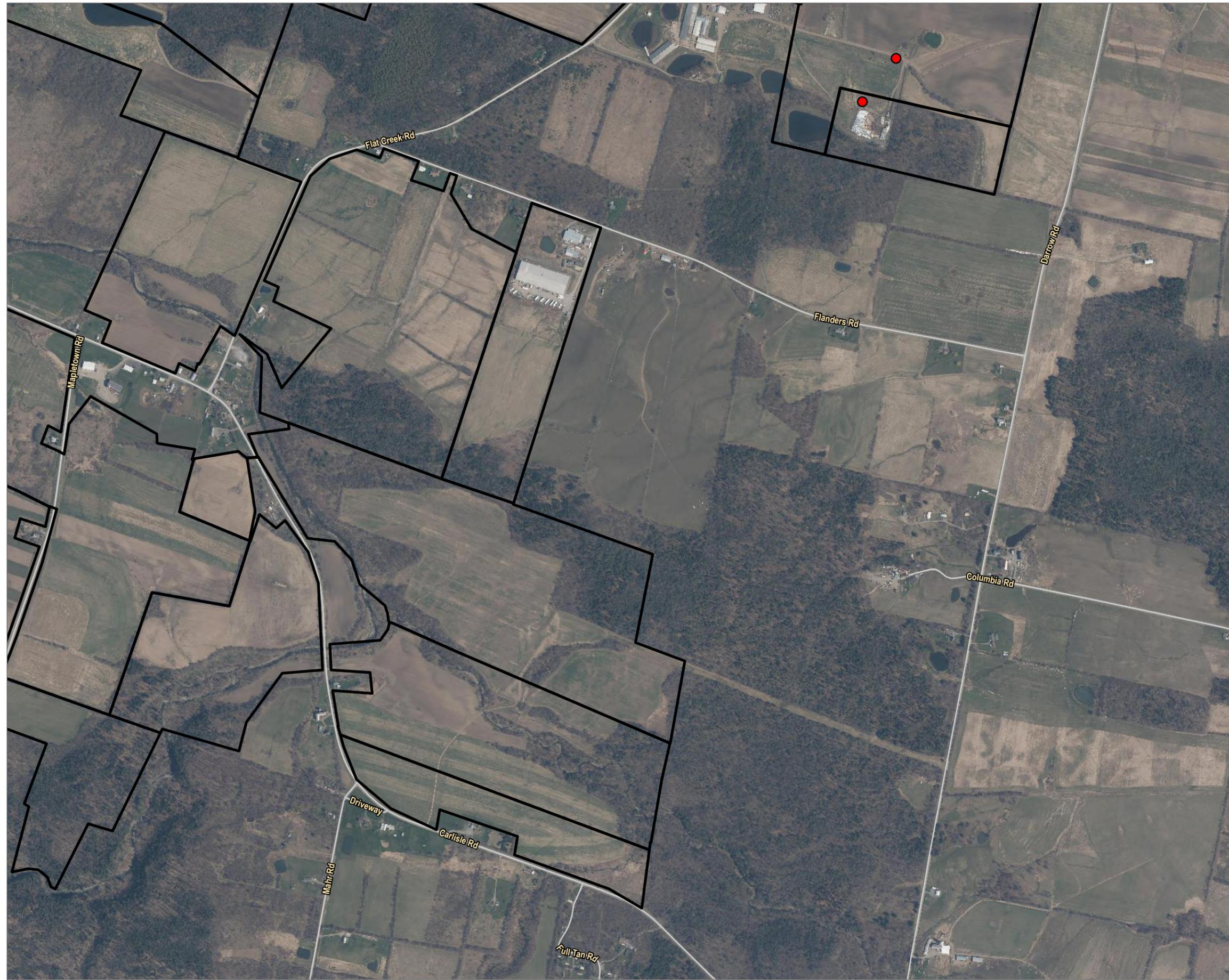
- FACILITY SITE
- INVASIVE SPECIES**
- BLACK LOCUST
- COMMON REED
- MULTIFLORA ROSE
- PURPLE LOOSESTRIFE
- TOWN BOUNDARY

**NOTES:**  
 1. THIS FIGURE IS DESIGNED TO BE VIEWED OR PRINTED IN COLOR AT 11X17.  
 2. INVASIVE SPECIES DATA ACQUIRED IN THE FIELD BY TRC DURING 2021 FIELD SEASON.  
 BASE MAP: NYSGIS "LATEST ORTHOIMAGERY" ONLINE SERVICE LAYER.  
 DATA SOURCES: TRC, NYSGIS, NYSDAM/NYSERDA.



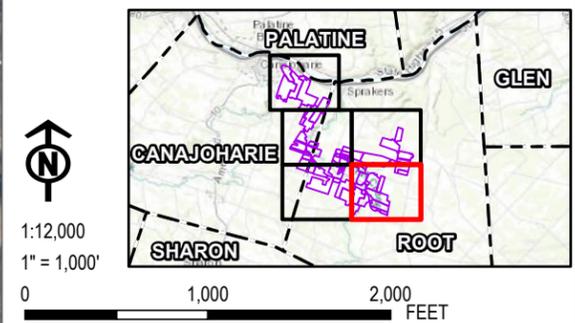
<b>PROJECT:</b> FLAT CREEK SOLAR TOWNS OF CANAJOHARIE AND ROOT MONTGOMERY COUNTY, NY	
<b>TITLE:</b> PRE-CONSTRUCTION MAPPING OF INVASIVE SPECIES	
<b>DRAWN BY:</b> G. CORYELL	<b>PROJ. NO.:</b> 427281.2022.0000
<b>CHECKED BY:</b> B. STOOS	<b>FIGURE 1</b> Sheet 4 of 5
<b>APPROVED BY:</b> S. KRANES	
<b>DATE:</b> JULY 2024	

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0  
 -- Saved By: GCORYELL on 7/28/2024, 14:09:23 PM; Layout Name: ISMP\_Figure\_1\_Pre-Construction Mapping of Invasive Species



- FACILITY SITE
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<b>DRAWN BY:</b>	G. CORYELL	<b>PROJ. NO.:</b> 427281.2022.0000
<b>CHECKED BY:</b>	B. STOOS	<b>FIGURE 1 Sheet 5 of 5</b>
<b>APPROVED BY:</b>	S. KRANES	
<b>DATE:</b>	JULY 2024	

**ATTACHMENT A**

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**New York State Prohibited and Regulated Invasive Plants,  
September 10, 2014**

# New York State Prohibited and Regulated Invasive Plants

September 10, 2014



NYS DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION



NYS DEPARTMENT OF  
AGRICULTURE AND MARKETS

**New York State Department of Environmental Conservation  
NYCRR Part 575 Invasive Species Regulations  
Questions and Answers**

**<http://www.dec.ny.gov/regulations/2359.html>**

**What are invasive species?**

Invasive species means a species that is nonnative to a particular ecosystem, and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

**Why are invasive species a problem?**

Invasive species can harm natural communities and systems (plants and animals found in particular physical environments) by out-competing native species, reducing biological diversity, altering community structure and, in some cases, changing ecosystems. Invasive species threaten New York's food supply, not only agriculture but also harvested wildlife, fish and shellfish; our landscaping, parks, gardens, and pets; and our recreation resources and even animal and human health. All New Yorkers have a stake in the invasive species issue.

**How will these regulations help?**

These regulations are to help control invasive species by reducing the introduction and spread of them by limiting commerce in such species. By preventing introduction of new invasive species, New York will save time, effort, and money in the future.

**How were the lists included in the regulations developed?**

The lists of prohibited and regulated species were developed using the species assessment and listing process outlined in the 2010 report "A Regulatory System for Non-native Species," which can be found at <http://www.dec.ny.gov/animals/63402.html>.

**When will the regulations be implemented?**

The final regulations (or a summary) were published in the State Register September 10, 2014, they become effective 6 months thereafter.

**What is the difference between prohibited and regulated invasive species?**

Prohibited invasive species cannot be knowingly possessed with the intent to sell, import, purchase, transport or introduce. In addition, no person shall sell, import, purchase, transport, introduce or propagate prohibited invasive species. Regulated invasive species, on the other hand, are species which cannot be knowingly introduced into a free-living state, or introduced by a means that one should have known would lead to such an introduction, although such species shall be legal to possess, sell, buy, propagate and transport.

**What species have grace periods established in the regulations?**

A one-year grace period is included in the regulations for Japanese Barberry (*Berberis thunbergii*), during which existing stock of this species may be sold.

**Who will enforce the regulations?**

The regulations will be enforced by the Department of Environmental Conservation, with assistance from the Department of Agriculture and Markets.

# TERRESTRIAL PLANTS

PROHIBITED



**Amur Cork Tree** *Phellodendron amurense*

PROHIBITED



**Amur Honeysuckle** *Lonicera maackii*

PROHIBITED



**Autumn Olive** *Elaeagnus umbellata*

PROHIBITED



**Beach Vitex** *Vitex rotundifolia*

PROHIBITED



**Black Swallow-wort** *Cynanchum louiseae*  
(*C. nigrum*, *Vincetoxicum nigrum*)

PROHIBITED



**Bohemian Knotweed** *Reynoutria x bohemica*  
(*Fallopia x bohemica*, *Polygonum x bohemica*)

PROHIBITED



**Border Privet** *Ligustrum obtusifolium*

PROHIBITED



**Broad-leaved Pepper-grass**  
*Lepidium latifolium*

PROHIBITED



**Canada Thistle** *Cirsium arvense*  
(*C. setosum*, *C. incanum*, *Serratula arvensis*)

# TERRESTRIAL PLANTS

PROHIBITED



**Chinese Lespedeza** *Lespedeza cuneata*

PROHIBITED



**Chinese Yam** *Dioscorea polystachya (D. batatas)*

PROHIBITED



**Cogon Grass** *Imperata cylindrica (I. arundinacea, Lagurus cylindricus)*

PROHIBITED



**Common Buckthorn** *Rhamnus cathartica*

PROHIBITED



**Cup-plant** *Silphium perfoliatum*

PROHIBITED



**Cut-leaf Teasel** *Dipsacus laciniatus*

PROHIBITED



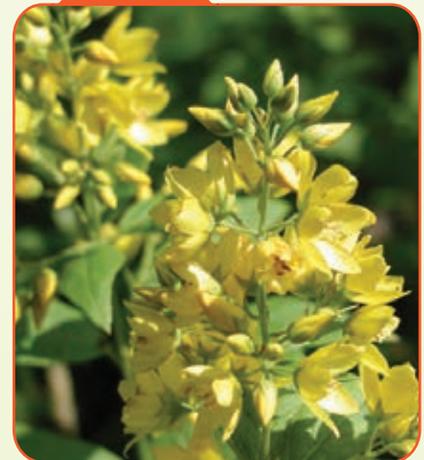
**Cypress Spurge** *Euphorbia cyparissias*

PROHIBITED



**Fly Honeysuckle** *Lonicera x bella*

PROHIBITED



**Garden Loosestrife** *Lysimachia vulgaris*

# TERRESTRIAL PLANTS

PROHIBITED



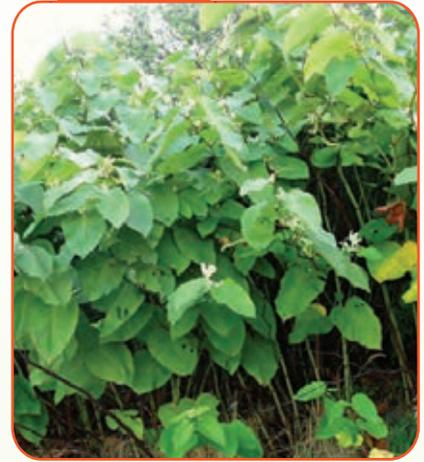
**Garlic Mustard** *Alliaria petiolata*

PROHIBITED



**Giant Hogweed** *Heracleum mantegazzianum*

PROHIBITED



**Giant Knotweed** *Reynoutria sachalinensis*  
(*Fallopia sachalinensis*, *Polygonum sachalinensis*)

PROHIBITED



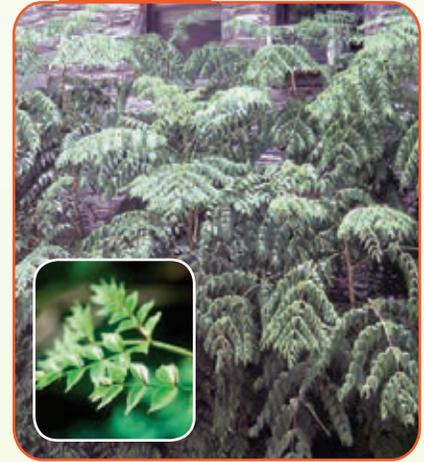
**Golden Bamboo** *Phyllostachys aurea*

PROHIBITED



**Gray Florist's Willow** *Salix atrocinerea*

PROHIBITED



**Japanese Angelica Tree** *Aralia elata*

PROHIBITED



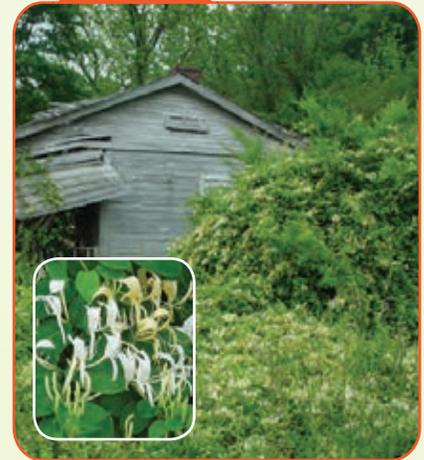
**Japanese Barberry** *Berberis thunbergii*

PROHIBITED



**Japanese Chaff Flower** *Achyranthes japonica*

PROHIBITED



**Japanese Honeysuckle** *Lonicera japonica*

# TERRESTRIAL PLANTS

PROHIBITED



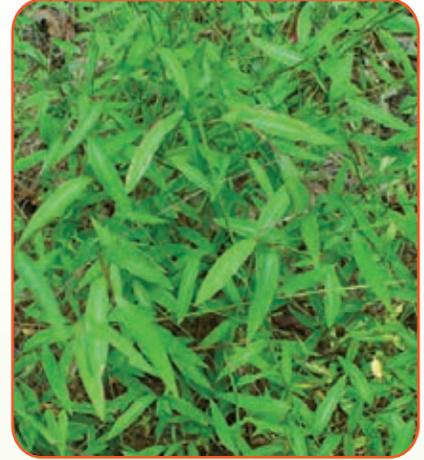
**Japanese Hops** *Humulus japonicus*

PROHIBITED



**Japanese Knotweed** *Reynoutria japonica*  
(*Fallopia japonica*, *Polygonum cuspidatum*)

PROHIBITED



**Japanese Stilt Grass** *Microstegium vimineum*

PROHIBITED



**Kudzu** *Pueraria montana*

PROHIBITED



**Leafy Spurge** *Euphorbia esula*

PROHIBITED



**Lesser Celandine** *Ficaria verna*  
(*Ranunculus ficaria*)

PROHIBITED



**Mile-a-minute Weed** *Persicaria perfoliata*  
(*Polygonum perfoliatum*)

PROHIBITED



**Morrow's Honeysuckle** *Lonicera morrowii*

PROHIBITED



**Mugwort** *Artemisia vulgaris*

# TERRESTRIAL PLANTS

PROHIBITED



**Multiflora Rose** *Rosa multiflora*

PROHIBITED



**Narrowleaf Bittercress** *Cardamine impatiens*

PROHIBITED



**Oriental Bittersweet** *Celastrus orbiculatus*

PROHIBITED



**Pale Swallow-wort** *Cynanchum rossicum*  
(*C. medium*, *Vincetoxicum medium*, *V. rossicum*)

PROHIBITED



**Porcelain Berry** *Ampelopsis brevipedunculata*

PROHIBITED



**Slender False Brome**  
*Brachypodium sylvaticum*

PROHIBITED



**Small Carpetgrass** *Arthraxon hispidus*

PROHIBITED



**Spotted Knapweed** *Centaurea stoebe*  
(*C. biebersteinii*, *C. diffusa*, *C. maculosa* misapplied,  
*C. xpsammogena*)

PROHIBITED



**Sycamore Maple** *Acer pseudoplatanus*

# TERRESTRIAL PLANTS

PROHIBITED



**Tartarian Honeysuckle** *Lonicera tatarica*

PROHIBITED



**Wavyleaf Basketgrass** *Oplismenus hirtellus*

PROHIBITED



**Wild Chervil** *Anthriscus sylvestris*

PROHIBITED



**Wineberry** *Rubus phoenicolasius*

PROHIBITED



**Yellow Groove Bamboo**  
*Phyllostachys aureosulcata*

# TERRESTRIAL PLANTS

REGULATED



**Black Locust** *Robinia pseudoacacia*

REGULATED



**Burning Bush** *Euonymus alatus*

REGULATED



**Chinese Silver Grass** *Miscanthus sinensis*

REGULATED



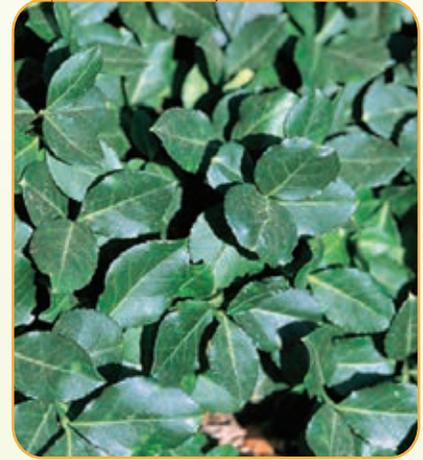
**Japanese Virgin's Bower**  
*Clematis terniflora*

REGULATED



**Norway Maple** *Acer platanoides*

REGULATED



**Winter Creeper** *Euonymus fortunei*

# WETLAND PLANTS

PROHIBITED



**Common Reed Grass** *Phragmites australis*

PROHIBITED



**Marsh Dewflower** *Murdannia keisak*

PROHIBITED



**Purple Loosestrife** *Lythrum salicaria*

PROHIBITED



**Reed Manna Grass** *Glyceria maxima*

PROHIBITED



**Smooth Buckthorn** *Frangula alnus*  
(*Rhamnus frangula*)

PROHIBITED



**Yellow Iris** *Iris pseudacorus*

# AQUATIC PLANTS

PROHIBITED



**Brazilian Waterweed** *Egeria densa*

PROHIBITED



**Broadleaf Water-milfoil Hybrid**  
*Myriophyllum heterophyllum x M. laxum*

PROHIBITED



**Curly Pondweed** *Potamogeton crispus*

PROHIBITED



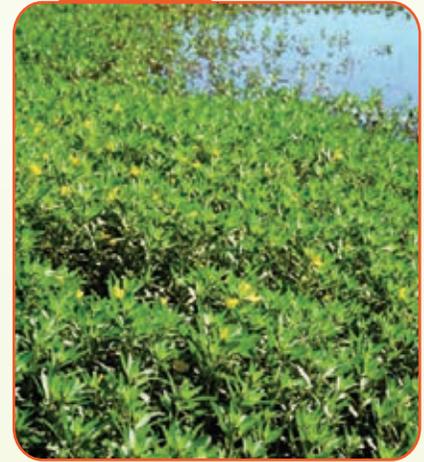
**Eurasian Water-milfoil**  
*Myriophyllum spicatum*

PROHIBITED



**Fanwort** *Cabomba caroliniana*

PROHIBITED



**Floating Primrose Willow**  
*Ludwigia peploides*

PROHIBITED



**Frogbit** *Hydrocharis morsus-ranae*

PROHIBITED



**Hydrilla/Water Thyme** *Hydrilla verticillata*

PROHIBITED



**Parrot-feather** *Myriophyllum aquaticum*

# AQUATIC PLANTS

PROHIBITED



**Uruguayan Primrose Willow**  
*Ludwigia hexapetala* (*L. grandiflora*)

PROHIBITED



**Water Chestnut** *Trapa natans*

PROHIBITED



**Yellow Floating Heart** *Nymphoides peltata*

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Japanese Knotweed	<i>Reynoutria japonica</i> ( <i>Fallopia japonica</i> , <i>Polygonum cuspidatum</i> )	6	Eurasian Water-milfoil	<i>Myriophyllum spicatum</i>	11
Japanese Stilt Grass	<i>Microstegium vimineum</i>	6	Fanwort	<i>Cabomba caroliniana</i>	11
Japanese Virgin's Bower	<i>Clematis terniflora</i>	9	Floating Primrose Willow	<i>Ludwigia peploides</i>	11
Kudzu	<i>Pueraria montana</i>	6	Frogbit	<i>Hydrocharis morsus-ranae</i>	11
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