



EIGHT POINT WIND ENERGY CENTER INVASIVE SPECIES CONTROL PLAN

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**Eight Point Wind Energy Center and Transmission Line
Invasive Species Control Plan
For Construction Activities and Post-Construction Monitoring**

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ATTACHMENTS

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1.0 Introduction

Eight Point Wind, LLC (Eight Point Wind or Applicant), a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC (NextEra), is planning to construct, operate and maintain the Eight Point Wind Energy Center (EPWEC), a proposed utility scale wind energy generation project located in Steuben County, New York (the Project). Specifically, the wind facility area will consist of up to 31 utility scale wind turbines, approximately 14.2 miles of access roads, approximately 34.8 miles of 34.5 kilovolt (kV) collection lines, a 34.5 kV collection substation, one to two permanent meteorological (met) towers, and an Operations and Maintenance (O&M) building, all of which will be located within an area encompassing approximately 15,295 acres. Likewise, energy generated at the EPWEC will be delivered to the electric grid by the construction of an approximately 16.5 mile overhead 115 kV interconnection transmission line. The transmission line will begin at the EPWEC collection substation on Town Line Road in Greenwood, New York (NY), traverses north through Greenwood and Hartsville, and will ultimately interconnect to new POI (Point of Interconnect) facilities within the fence line of the existing New York State Electric and Gas Corporation (NYSEG) Bennett Substation in Hornellsville, New York.

The EPWEC is to be permitted as part of the Article 10 Application (Case No. 16-F-0062), submitted on November 28, 2017. Correspondingly, as the transmission line is greater than 100 kV and the length exceeds 10 miles, the Applicant is seeking a Certificate of Environmental Compatibility and Public Need (Certificate) from the Public Service Commission (Commission) under Article VII of the Public Service Law (PSL).

The Project consists of rolling hills and is a patchwork of forests, successional shrubland, open fields and wetland ecological communities. Construction activities will result in vegetation clearing and soil disturbance in the immediate vicinity of the proposed towers, transmission line, access roads, electrical collection lines, collection substation, O&M building, and associated infrastructure.

Invasive vegetative species are a concern because they are not native to the area, and their spread is likely to cause some degree of environmental, human health, or economic harm. Additionally, invasive insect species can alter ecosystems and destroy native vegetation. 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) are of particular interest in this Invasive Species Control Plan (ISCP) for plants. Because invasive plant species will readily spread in disturbed areas, construction activities related to the Project have the potential to accelerate their distribution and are the primary focus of this ISCP.

For purposes of this report, the Project Areas of the Article 10 and Article VII will collectively be referred to as the Project Areas.

1.1 Goals and Objectives

The intention of the ISCP is to outline a clear plan to minimize the spread of invasive species that are present within the Project Areas. To prevent their spread, it is necessary to identify the existing invasive

species within the proposed transmission line Right-of-Way (ROW) and wind facility area, and develop a plan to monitor and control the species during construction, restoration, and operation. The goal of the ISCP is to maintain a zero percent increase in invasive species distribution and coverage within the Project Areas.

Invasive species are regulated by the New York State Department of Environmental Conservation (NYSDEC) pursuant to Environmental Conservation Law Sections 9-1709 and 71-0703. Regulations under Part 575 of 6 NYCRR restrict the sale, purchase, possession, propagation, introduction, importation, and transport of invasive species. This ISCP is being developed in accordance with this regulation, to prevent the introduction of new, and spread of existing, invasive species within the Project Areas.

2.0 Priority Invasive Plant Species within Region

Both Project Areas are located within the Finger Lakes Partnership for Regional Invasive Species Management (PRISM). There are eight PRISMs within New York State, each of which is made up of resource managers, non-governmental organizations, industry, resource users, citizens and other state agencies and stakeholders (NYSDEC, 2017a). The PRISMs were enacted under Title 17, Environmental Conservation Law (ECL) 9-1705(5) (g). The Finger Lakes PRISM separates priority species, which are highly invasive species either within the region or approaching the region, into three Working Groups (WGs): the Aquatic Working Group (AWG), the Terrestrial Working Group (TWG) and the Agricultural Working Group (AgWG) (FL-PRISM, 2017a).

The Finger Lakes PRISM identifies the following terrestrial plants as priority invasive species within the TWG:

- Giant hogweed (*Heracleum mantegazzianum*)
- Japanese knotweed (*Polygonum cuspidatum*)
- Oriental bittersweet (*Celastrus orbiculatus*)
- Swallow-wort (pale and black) (*Cynanchum louisae*; *C. rossicum*)

The following species are considered high priority early detection invasive species within the TWG:

- Japanese stiltgrass (*Microstegium vimineum*)
- Mile-a-minute (*Persicaria perfoliata*)
- Slender falsebrome (*Brachypodium sylvaticum*)

As the Project Areas also contains agricultural land that will be impacted as part of the Project, Eight Point Wind, LLC also reviewed priority invasive species of concern within the AgWG:

- Autumn and Russian olive (*Elaeagnus umbellata* and *E. angustifolia*)
- Canada thistle (*Cirsium arvense*)
- Field bindweed (*Convolvulus arvensis*)
- Japanese knotweed (*Polygonum cuspidatum*)
- Johnson grass (*Sorghum halepense*)
- Ragweed (*Ambrosia* spp.)
- Spotted knapweed (*Centaurea stoebe*)
- Swallow-wort (*Cynanchum* spp.)
- Velvet leaf (*Abutilon theophrasti*)

- Wild parsnip (*Pastinaca sativa*)

2.1 Invasive Plant Species Identified within Project Areas

As part of the ecological resource survey field efforts performed for the EPWEC and the transmission line in the fall of 2016 and spring/summer of 2017, TRC biologists documented observed occurrences of invasive species within both the transmission line and wind facility Project Areas. As part of the field efforts, TRC identified 17 invasive vegetative species which are listed as prohibited on the *Prohibited and Regulated Invasive Plants* list published by the NYSDEC on September 10, 2014 (see Attachment A) and also listed as a priority invasive according to the Finger Lakes PRISM. Inclusion on the prohibited list means that they cannot be possessed, sold, imported, purchased, transported or introduced and therefore, construction activities which would knowingly cause distribution of these species is prohibited.

The following invasive plant species were identified in low densities throughout the Project Areas:

- Amur honeysuckle (*Lonicera maackii*)
- Autumn olive (*Elaeagnus umbellata*)
- Black locust (*Robina pseudoacacia*)
- Canada thistle (*Cirsium arvense*)
- Common buckthorn (*Rhamnus cathartica*)
- Common reed (*Phragmites australis*)
- Cut-leaf teasel (*Dipsacus laciniatus*)
- Garlic mustard (*Alliaria petiolata*)
- Japanese honeysuckle (*Lonicera japonica*)
- Morrow's honeysuckle (*Lonicera morrowii*)
- Mugwort (*Artemisia vulgaris*)
- Multiflora rose (*Rosa multiflora*)
- Purple loosestrife (*Lythrum salicaria*)
- Ragweed (*Ambrosia spp.*)
- Reed manna grass (*Glyceria maxima*)
- Smooth buckthorn (*Rhamnus frangula*)
- Tartarian honeysuckle (*Lonicera tartarica*)

Three of the invasive species identified within the Project Areas are listed as priority species on the Finger Lakes PRISM regional invasive species list. They are: autumn olive, Canada thistle, and ragweed. Due to their regional significance and priority listing, these species are discussed in further detail below.

2.2 Autumn Olive (*Elaeagnus umbellata*)

This species is listed as priority in AgWG within the Finger Lakes PRISM. The species of deciduous shrub is endemic to eastern Asia. This species is known to grow vigorously in infertile soils because it fixes nitrogen in its roots (Clark et al., 2008). This ability has made it highly competitive in disturbed areas propagating its spread and advancement to non-native areas. This species was first introduced to North America in the 1830's. Throughout the 19th century the species was planted as an ornamental however its competitive nature in disturbed areas allowed the species to easily establish in the wild.

Autumn-olive is known to aggressively outcompete native plants and shrubs. They have been documented to grow rapidly and re-sprout quickly after cutting or burning. Also, this species is also known to be a prolific fruit producer. Such fruits are widely distributed by birds and mammals. Like most non-native shrubs, this species leafs-out early and retains its leaves late into the fall and can germinate and survive



Photo 1. Autumn Olive Shrub. Photo by S. Kelly Kearns (Wisconsin DNR, 2017)

in the sun and shade. Such timing and ability outcompetes desirable native species and reduces biodiversity as well.

Mechanical controls such as pulling, digging, grazing, and repeated cutting in the very earliest stages of invasion, when only seedlings and young plants are present are known to be adequate methods to mechanically control or eradicate autumn olive. Mechanical control methods are particularly useful where volunteers are available. These methods are impractical in larger, established infestations, but may effectively supplement the use of herbicide. Chemical controls are advised for large and well-established infestations. Factors that

should be considered when selecting an herbicide for use on a particular site include proximity to water or wetlands, presence or absence of desirable native vegetation, potential for erosion and the effectiveness of the herbicide under consideration on autumn olive. Because autumn olive leafs out early and remains green much later than many native species, spring or fall treatment may minimize damage to desirable plants.

Within the Project Areas, autumn olive was primarily identified in areas where successional shrubland persisted after presumed agriculture or logging operations took place in the vicinity, as well as along the edges of active roadways. As this species can aggressively spread and outcompete native species in disturbed areas, it is important to ensure that disturbed areas as a result of the Project are not populated by this species during the restoration phase and that early recognition of the plants at the earliest stages of invasion occur for proper management.

2.3 Canada Thistle (*Cirsium arvense*)

This species is listed as priority in AgWG within the Finger Lakes PRISM, and is an aggressive herb which colonizes pastures, agricultural fields and natural areas (NYIS, 2017b). Seedlings of this species emerge in the mid to late spring, and are able to regenerate from root tissue in as early as 7 to 8 weeks. Seeds are dispersed through the wind and can survive for up to 20 years in the soil (NYIS, 2017).

The mature Canada thistle plant is a broadleaved weed, growing 2 to 5 feet in height. The spine of this plant is hairy, with dark green, irregularly shaped leaves with spines at the tips (FL-PRISM, 2017b). Flowers are pink to purple, which occur at the apex of the stems in clusters, surrounded by spineless bracts (NYIS, 2017). Due to the unpalatable nature of this plant, it is not typically consumed by wildlife or livestock, allowing it to continue to spread largely uninterrupted.

Canada thistle is an aggressive competitor and often outcompetes native species for access to light, nutrients, and moisture (NYIS, 2017b). Once established, this species can spread rapidly and will often displace native grasses and forbs.

Mechanical control of Canada thistle, including cutting, plowing, and cultivating, is the most effective means of control for this species; however, mechanical control must be repeated in order to weaken the root systems to prevent future spread (NYIS, 2017b; FL-PRISM, 2017b). To be effective, mowing must be repeated at least twice a year, primarily once in early June when the plant is flowering and root reserves are the lowest (NYIS, 2017b).



Photo 2. Flowering Canada thistle (FL-PRISM, 2017b).

If mechanical control is not a feasible option to control Canada thistle, which can be the case in large infestations, herbicides are another option. Glyphosate is a broadleaf herbicide which can be used to control this species. It is best suited for use in the early spring before the plants have begun to flower (NYIS, 2017b).

Within the Project Areas, Canada thistle was primarily identified in old field habitat, as well as along the edges of roadways. As this species can propagate from fragments of roots and leaves in the soil, it is important to ensure that propagule and seeds are not transmitted within and out of the Project Areas.

2.4 Ragweed (*Ambrosia spp.*)

This genus is listed as priority in AgWG within the Finger Lakes PRISM. Within the Project Areas, this species was witnessed within disturbed areas and within some active agricultural fields. Common ragweed (*Ambrosia spp.*) are a group of summer annual herbaceous plants that are erect, with many long, fleshy, branches which can reach heights between 3 to 6 feet (GISD, 2018). Most ragweed species have a stem



Photo 3. Flowering common ragweed (Ohio State Weed Lab Archive, The Ohio State University).

which is grooved, reddish in color and slightly hairy. The tops of the plants leaves tend to be pale green with white hairs on the underside of the leaf. The leaves of most ragweed species are bright green on both sides with whitish nerves. On older plants the lower leaves can be arranged opposite and the upper leaves can be alternately arranged on the stem (GISD, 2018).

Common ragweed is often found in disturbed sites associated with frequent and extensive impact regimes resulting from human activities. Common ragweed is found throughout New York along roadsides, railways, gravel pits, construction sites, agricultural fields, waterways, urban areas, and also public landscapes. Common ragweed is defined as a pioneer species which readily establishes after disturbance in early successional plant communities. This species prefers exposed areas receiving full sun with nutrient rich and slightly acidic soils (Wittenberg, R. (ed.) 20005) and can tolerate dry soil conditions (GISD, 2018). These characteristics along with the ability of this plant's seeds to enter a second dormancy period make this group of plants well adapted to, and prolific in, continuously disturbed sites. Some seeds have been discovered to be viable after 20 years of burial (GISD, 2018).

Issues arise with the proliferation of this species as common ragweed is regarded as an abundant source of seasonal allergens in late-summer to early fall throughout its range. In studies performed in Europe and North America, approximately 10-15% of the population is sensitive to the pollen of common ragweed causing rhinitis, oculorhinitis, asthma, and dermatitis (GISD, 2018). Common ragweed is also considered a weed pest in some agricultural crops as it quickly establishes recently tilled soils in agriculture practices and displaces planted crops and also the fruits can be regarded as toxic to livestock which ingest it (GISD, 2018). Due to its robust nature this species also naturally outcompetes native vegetation in its introduced range especially after a disturbance such as overgrazing or construction which put competitive pressures on the native flora and reduce local biodiversity.

As with most invasive species, preventing an infestation is the most cost-effective approach to control mechanisms. It is advised that preventative measures to the establishment of this invasive species include maintaining healthy vegetation to inhibit establishment and also the early detection and surveillance along with proper land management will deter an infestation (GISD, 2018). Hand-pulling of single plant stands is proposed to be combined with early detection and surveillance in areas with beginning infestation (GISD, 2018).

Multiple control methods can be adopted to inhibit the spread of these species. It has been documented that planting red clover (*Trifolium pretense*) as a cover crop in established crop rotation areas reduced the biomass of common ragweed in some areas (Mutch et al., 2003). Also, common ragweed may be controlled by hand weeding, repetitive mowing, and by crushing with a road roller (Vincent et al., 1992). Hand weeding was indicated as the most effective in reducing pollen and seed production. Mechanical cutting can reduce common ragweed seed production by up to 74% depending on the number and timing of cuttings. When larger and more established common ragweed populations persist, a number of post- and pre-emergence chemicals have also been used to control common ragweed successfully in some scenarios.

2.5 Common reed (*Phragmites australis*)

Although not listed by the Finger Lakes PRISM as a priority invasive, non-native common reed (*Phragmites australis*) is a widespread invasive which can colonize both upland (primarily roadside ditches and disturbed areas), swales and wetland communities and can be difficult to control.

Common reed is an herbaceous, perennial plant reaching heights of greater than 15 feet with thick root growth include rhizomes that can spread farther than 10 feet wide and several feet deep in one growing season (NYIS, 2017c). This species can sprout from rhizome fragments, making management particularly difficult, and can overtake hundreds of acres while displacing critical wetland species and forming a dense monoculture (FL-PRISM, 2017c).

In order to control non-native common reed, repeated mowing is a common practice. However, this mechanical control generally only produces short-term results due to the extensive root networks which re-sprout. Additionally, removing the root system can leave behind fragments of roots or rhizomes which will continue to sprout (NYIS, 2017c). If large root systems of common reed are removed, this also leads to depleted nutrient systems in the soil and an increased chance for erosion and detrimental effects to often sensitive (i.e., wetland) habitats. It is important to have a restoration plan in place to stabilize soils and reintroduce nutrients if common reed is to be removed mechanically.



Photo 4. Stand of common reed (FL-PRISM, 2017c).

Herbicides may be applied to control the spread of common reed; however, these are most useful on new colonies of common reed and should be applied after the plant has flowered (late summer or early fall) (NYIS, 2017c). Multiple years of application may be required to reduce the viability of the plant and eradicate it from an area.

3.0 Invasive Insect Species in Vicinity of the Project Areas

As previously mentioned, TRC biologists documented observed occurrences of invasive species within the Project Areas during ecological resource survey field efforts. No invasive insect species, or signs of infestation, were observed as part of this field effort; however, one insect species, the emerald ash borer (*Agrilus planipennis*) is also listed as a Priority Invasive of Concern within the TWG (FL-PRISM, 2017a). Additional information regarding this species is presented below.

3.1 Emerald Ash Borer (*Agrilus planipennis*)

The emerald ash borer (EAB) (*Agrilus planipennis*) is an invasive beetle, native to Asia, which was first identified in the United States in 2002 (in Michigan). In New York, the EAB was first identified in Cattaraugus County in 2009, and has now spread to more than 30 counties, including Steuben County (NYSDEC, 2017b). This insect infects ash (*Fraxinus* sp.) trees and causes tree canopy dieback, yellowing and browning of leaves, leading to death of infected trees within two to four years (NYSDEC, 2017b).

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 beginnings in late-May or early-June (NYIS, 2017d), 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, 2017d).



Photo 5. Emerald ash borer adult (NYSDEC, 2017b).

New York State has implemented programs to help with early detection of EAB to prevent the spread, and all of Steuben County is included in the May 2017 Restricted Zone for the EAB. Restricted Zones include quarantines around known EAB infestations. Within these zones, regulated articles may not be removed from the zone without a compliance agreement or permit from the New York State Department of Agriculture and Markets (NYSDAM). These permits are applicable only during the non-flight season of the EAB, which is between September 1 and April 30 (NYSDEC, 2017b). Regulated articles include ash wood, ash logs, ash firewood (untreated), 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, 2017b).

The Project will comply with the Restricted Zone requirements, and will contact the NYSDEC's Firewood and Invasive Insects Hotline at (866) 640-0652 if a suspected infestation or sighting is identified as part of the Project. Additionally, the Project will not transport ash products offsite.

4.0 Control Measures

To prevent introduction and spread of the listed species, management actions 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 particular 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 Project Areas should be limited to minimize the possibility of spreading invasive species. Importation of these materials should be limited by reusing excavated products to the maximum extent practicable. Imported construction materials should be obtained from reputable sources and thoroughly inspected for the presence of invasive species prior to transportation or use on the site. Materials should 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 spread of the species to other areas of the Project Areas. 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 shall be carried out in accordance with Part 325 of 6 NYCRR, Application of Pesticides. Removal methods will be determined based on the species and density of the encountered invasive. Invasive species that are removed should be either, left in the infested area, or placed in a secure container for proper disposal offsite.
3. **Sanitation:** As it relates to invasive species control, sanitation includes the cleaning of clothing and equipment prior to movement or use within the Project Areas. 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, washing stations should be established to thoroughly clean machinery and clothing. 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 of work site within the Project Areas.

4. **Restoration:** Invasive species spread most readily in disturbed soil, and stabilizing the site quickly will limit the amount of time that invasive species have to get established in a particular 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. The seed mix should include a combination of forbs, warm and cool season grasses as well as cover crop species. The specific seed mix will not be known until additional consultation occurs with the landowners and local agency representatives, but ultimately the seed mix will contain only native species commonly found within the Project Areas. Best management practices (BMPs) should also be implemented in accordance with the Stormwater Pollution Prevention Plan to prevent erosion and limit the potential for spread of invasive species bearing soil offsite.

5.0 Monitoring

Prior to the start of construction, crews should be educated regarding the contents of the ISCP to ensure that their activities on site comply with the BMPs outlined in it. Monitoring should be conducted throughout the duration of the Project to ensure that the ISCP is being implemented appropriately and that the goals outlined in it 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 Project related construction activities. The ISCP goal of a zero net increase in the number of invasive species present and their distribution in the Project Areas 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 Project related activities on site. More specifically, Eight Point Wind, LLC 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 is to ensure that ISCP goals are met, as germination and spread of invasive species can continue long after construction activities have concluded. Movement of invasive species, as identified by visual inspection of a qualified biologist, will be treated in accordance with the control measures listed above, as deemed appropriate based on the characteristics of the invasive species. A final report will be prepared detailing the success of the ISCP. Failure to meet the goals of the ISCP 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.

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ATTACHMENT A

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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