

City of Portland

LMAC Waiver Committee



Friday, April 4, 2025 at 10:30 PM The LMAC Waiver Committee will conduct this meeting remotely via Zoom. Allow your computer to install the free Zoom app to get the best meeting experience. If you are not able to attend live either in person or via Zoom, a recording will be available in the [Agenda Center](#) following the meeting.

<https://portlandmaine-gov.zoom.us/j/89988685831?pwd=cYI0aeTp2a0PLmzjV5L47K82e8rJbT.1>

REMOTE ACCESS INFORMATION:

1. Introduction / Review purpose of the meeting
2. Applicant presentation
 - a. Application for waiver to apply otherwise prohibited pesticides at 690 Seashore Avenue, Peaks Island.
3. Discussion
4. Adjournment



LANDCARE ORDINANCE WAIVER APPLICATION
Landcare Management Advisory Committee (LMAC)

APPLICANT INFORMATION

Applicant Name: _____

Address: _____

Email Address: _____

Telephone Number: _____

Submission Date: _____

I am a: Resident Landlord Business Municipality Landscape company

Are you a licensed commercial applicator? Yes No

REASON FOR REQUESTING THE USE OF A PROHIBITED FERTILIZER OR PESTICIDE:

- Is an emergency and threatens the public health and safety
- For the control of invasive plants that pose a threat to the environment (*For a list of Maine Invasive Plants visit: http://www.maine.gov/dacf/mnap/features/invasive_plants/invsheets.htm*)
- Required to protect buildings or structures from damage
- Using a synthetic fertilizer on performance turf or for new development, with one or more the following conditions:
 - I. The soil temperature is less than 55 degrees Fahrenheit and reasonable grounds exist to justify fertilizer use at that location and at that time;
 - II. The turf is experiencing high stress due to high use and must be ready for high performance play when the sports season(s) begin; or
 - III. A suitable organic product that meets the nutrient needs of the soil as specified in a soil test is unavailable.

Making the right pest identification is important and can be difficult. Resources for pest identification are available at: <http://www.maine.gov/dacf/php/gotpests/invasive-pests.htm>. NOTE: Applications for poisonous plants such as poison ivy, pests of significant health importance such as ticks and mosquitos, and destructive pests such as carpenter ants and termites are exempted under the ordinance. No waiver is necessary to address these pests.

Please provide a detailed account of the problem you would like to address with the proposed fertilizer or pesticide application. Include photos of the problem/pest and of the extent of the problem (this may be number of pests or area covered):

What steps did you take to evaluate alternative methods to the proposed fertilizer or pesticide application, including but not limited to, non-fertilizer/pesticide management tactics, minimum risk fertilizers or pesticides, non-synthetic fertilizers or pesticides, and selecting the minimum amount of the least toxic, most effective fertilizer or pesticide necessary.

PROJECT INFORMATION

What are you treating? Turf Shrubs Trees Invasive Weeds

Address of proposed application: _____

Please attach a map of the proposed application area (*this may be a sketch, however it should be to scale and include property boundaries, structures, and water bodies*).

Is this application within 75ft. of a waterbody? Yes No

Proposed fertilizer or pesticide: _____

Amount to be applied: _____

Method of application: Liquid Granular Injection/systemic Cut stem treatment

Proposed timing(s)/frequency of use: _____

Proposed date of application: _____

Please provide a detailed management plan for your proposed application, including how you will minimize the impact of this application on abutting properties and, to the maximum extent possible, ensure that the grant of the waiver will not be detrimental to the public's health, safety or welfare.

NOTE: the following applications are prohibited:

- Broadcast applications: the spreading of pesticides over an entire area
- Preemptive applications: the application of pesticides as a measure against something possible, anticipated or feared, i.e., as a preventive or deterrent measure

In order for the waiver to be considered, all of the fields above must be completed. For questions, please contact Troy Moon in the Sustainability Office at 207-756-8362.

Completed forms may be emailed to landcare@portlandmaine.gov, or mailed or delivered to City Hall, 389 Congress Street, Portland, ME 04101.

LAND MANAGEMENT PLAN

A NARRATIVE FOR INVASIVE MANAGEMENT & NATIVE PLANT RESTORATION



LANDSMAN PROPERTY • PEAKS ISLAND, PORTLAND, MAINE





A view of the Landsman residence and the vegetation behind the home. The orange vegetation shows a Knotweed monoculture that extends beyond the property boundary.

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PROJECT INTRODUCTION

This plan addresses proposed invasive management and contains a native restoration narrative at the Landsman property on Peaks Island, Portland, Maine. The oceanfront property sits on the East side of the Island spanning just over 0.5 acres in a residential area. The property abuts large natural areas to the West and Wharf Cove in the Atlantic Ocean to the East. As a monoculture of mature Knotweed from the western natural areas encroach on the Landsman property, little more than invasive and a few nonnative ornamental plants comprise the property's vegetation. With approval from the Department of Environmental Protection (DEP), removing invasive species will allow Matthew Cunningham Landscape Design (MCLD) team, specializing in native plant garden design, to manage the restoration planting.

The invasive population on-site and on the entirety of Peaks Island is mature and self-perpetuating. These invasive species outcompete native trees, shrubs, and wildflowers in Peaks Island's natural habitats, create monoculture stands devoid of biodiversity, create habitat for ticks, and reduce habitat for native wildlife. These species will inevitably displace the remnant native population of the Island and are considered a highly invasive threat to entire ecosystems unless decisive action is taken. The invasive on the Landsman property are classified as "widespread" and "severely invasive" by the Maine Natural Areas Program (MNAP), which is within the Maine Department of Agriculture, Conservation, and Forestry.

Significant invasive plant pressure exists on the site of highly invasive and mature Knotweed, Asiatic Bittersweet, Shrub Honeysuckle, and Multiflora Rose. Additionally, the deep, matted root system of Knotweed poses a threat to the septic system on-site and has prompted the interest of the property owner to work collaboratively with abutters to help abate Knotweed growth. Action to remedy the densely invaded property boundary on the western part of the site now could spare the rest of the property from invasion and allow MCLD to restore the property to a healthy and biodiverse ecosystem.

This plan identifies the invasive plants we propose to remove, describes each, and details best management practices for control and management. The plan also includes a narrative for proposed native restoration and specifying plant species. Finally, it provides a detailed maintenance calendar for all aspects of proposed management and ecological restoration over an extended timeline.



Map the of residential parcels on Peaks Island including the Landsman property boundary and the large natural area parcels to the West.

PROJECT GOALS

The Landsman property is on the Eastern side of Peaks Island, Maine. The property abuts Wharf Cove in the Atlantic Ocean to the East, large natural areas to the West, and several residential properties to the North and South. Little more than invasive plant varieties and a few nonnative ornamental plants comprise the property's vegetation as the invasive species dominate the native ecosystems that are present. This Land Management Plan aims to present an inventory of the invasive species, share our Invasive Plant Management strategies, and propose native species to replace the removed invasive plants.

Native plant restoration will be managed by Matthew Cunningham Landscape Design (MCLD), a team specializing in native plant garden design.



An aerial view of the Landsman property shows the bright orange vegetation of a mature Knotweed monoculture encroaching from the West. The area of Knotweed that this plan proposes for invasive management and removal is highlighted in blue.

EXISTING CONDITIONS: INVASIVE PLANT SPECIES

INVASIVE SPECIES PLANT KEY

BOTANICAL NAME	COMMON NAME
Celastrus orbiculatus	Bittersweet
Lonicera morrowii	Shrub Honeysuckle
Ligustrum vulgare	Privet
Fallopia japonica	Knotweed
Rosa multiflora	Multiflora Rose



(Above) A bramble of *Celastrus orbiculatus*, Bittersweet, at the front of the property.

(Below) Mature *Lonicera morrowii* Shrub Honeysuckle, along the foundation of the home.



(Above) *Fallopia japonica*, Knotweed, is encroaching on the property from the West.

(Below) *Rosa multiflora*, Multiflora Rose & *Lonicera japonica*, Shrub Honeysuckle are intertwined.



An aerial view of the Landsman residence. The orange vegetation shows a Knotweed monoculture that extends beyond the property boundary. The area that this plan proposes for invasive management and removal is highlighted in blue and includes Knotweed, Shrub Honeysuckle, and Bittersweet.

INVASIVE PLANT MANAGEMENT TECHNIQUES

IMPORTANT NOTE ON HERBICIDE APPLICATIONS BY COASTLINE AREA

Because some of the areas we will treat with herbicide are adjacent to the coastline, every effort will be made to perform these applications safely. We will prioritize manual removal where possible. We will use cut and dab herbicide applications when working in sensitive areas. We will only work with herbicide during dry stretches of weather and on calm days to minimize drift. We will use wetland safe herbicides only (Garlon 3A and Roundup Custom).

CUT AND DAB TREATMENT:

All invasive plant species that have a base greater than 1" in caliper will be addressed with herbicide application. Invasive plants of this size usually have extensive fibrous root systems which provide beneficial soil stabilization and are best left in situ. Unfortunately, they also maintain the ability to resprout, which is why we propose a cut and dab method with Garlon 3A™ (a triclopyr-based herbicide) on individual cut stumps. Licensed Herbicide Applicators will complete all treatments.



Licensed applicators with required Personal Protective Equipment paint the stems of invasive species after cutting.



FOLIAR FOAM:

Cutting alone is not an effective tool for managing Knotweed. However, cutting can be integral to managing this plant, particularly when combined with follow-up herbicide application. An adequately timed cutting will eliminate the tall canopy and simplify follow-up operations. For more extensive mature stands of Knotweed, stands should be cut in May, and foliar or stem herbicide should be applied in late summer. The cutting in May causes the Knotweed to regrow to a more manageable height in late summer. At this point, the leaves can be easily painted with a 6.0% Aquaneat (glyphosate) solution before the plant pulls its nutrients back into the roots in preparation for winter. Cutting later than June reduces your operational window to chemically treat knotweed, and waiting too late in the season can result in almost no regrowth.

After the Knotweed has been cut in early June, the plant will respond by utilizing stored carbohydrates, further reducing the plant's vigor. The herbicides used for a foliar application move through the plant. To control the rhizomes, the application needs to be made later in the season, when the movement of carbohydrates is back to the rhizomes for growth and storage.



Foliar herbicide application by licensed technician

CUT AND FILL:

When foliar application is not an option (Knotweed in sensitive areas and/or mixed with desired plants) or for smaller patches of Knotweed stem application is an option. For large populations, the large stems are cut at 18 inches. The remaining stems are then treated between the first and second nodes with a 50% solution of glyphosate that is put into the hollow tube of the stem and its walls. This should be done for consecutive 2-5 seasons.



Herbicide application by licensed technician

PROPOSED MANAGEMENT PER INVASIVE SPECIES

ORIENTAL BITTERSWEET

CELASTRUS ORBICULATUS



DESCRIPTION:

Celastrus orbiculatus, Asiatic Bittersweet is a deciduous climbing vine common in areas of disturbance in our New England forests. It has glossy, rounded leaves that are alternate with finely toothed margins. The leaves turn yellow in the fall. The fruiting plants produce small greenish flower clusters from leaf axils that mature in fall to produce high numbers of fruiting seed. The seed are noticeably yellow, globular capsules that split open at maturity to reveal red-orange fruiting seeds. Roots are also distinctly orange.

HABITAT:

Bittersweet spreads easily into forest edges, woodlands, unmanaged meadows and old fields. Most disturbed sites that are not being actively managed that receive full sun are susceptible. The vine can tolerate shade but is often found in more open, sunny areas.

MANAGEMENT:

Small seedlings can be hand pulled, but bittersweet resprouts proliferate to form root fragments, so more aggressive measures must be taken on all specimens. For established plants, vines should be cut to the ground to reduce mass and treated with the cut-and-dab method. Bittersweet aggressively suckers after cutting, so it is essential to cut and treat during or after its flowering period (late June to December).



SHRUB HONEYSUCKLE

LONICERA MORROWII



DESCRIPTION:

Lonicera morrowii, Morrow's honeysuckles are upright, deciduous shrubs that typically have a multi-stem mounding appearance. Oval leaves are opposite along the stem with smooth edges (no teeth or lobes) and hairy on the underside. Mature stems are often hollow on the interior and peeling on the outer bark. In the spring pairs of fragrant, tubular flowers less than an inch long are borne along the stem in the leaf axils. The fruits are red to orange, and fleshy.

HABITAT:

Honeysuckles are relatively shade-intolerant and usually colonize forest edges, abandoned fields, and other open, upland habitats. Grazed meadows and disturbed woodlands are especially vulnerable. Woodlands and open meadows, especially those that have been grazed or otherwise disturbed and are left unmanaged are also highly susceptible. Morrow's Honeysuckle are highly adaptable and can grow in even challenging environments such as roadsides and wetland edges.



MANAGEMENT:

Honeysuckle management can combine mechanical mowing and manual hand pulling with cut and dab herbicide treatments. Small specimens may be removed manually as honeysuckle root systems are fairly shallow. Root resprouting can persist for a few years and several seasons of management may be required to fully control the population.



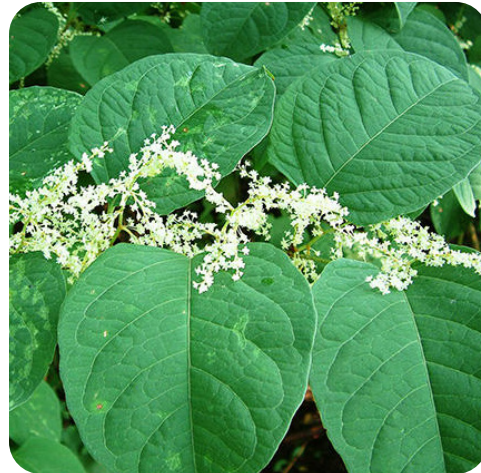
JAPANESE KNOTWEED

Fallopia japonica



HABITAT:

that forms dense monocultures on various site conditions, from roadsides to stream banks. Knotweed is a relative of buckwheat, smartweed, and the Noxious Weed mile-a-minute vine. Japanese knotweed was introduced to the U.S. as ornamentals during the late 1800s. However, it has become an invasive plant in our natural areas due to its imposing height, dense growth habit, aggressive spread, and seeming indifference to control methods.



DESCRIPTION:

Knotweed, *Fallopia japonica*, is a tall-growing, hollow-stemmed, perennial plant that can grow to over 10 feet in height. Stems of Japanese knotweed are smooth, stout and swollen at joints where the leaf meets the stem. Although leaf size may vary, they are normally about 6 inches long by 3 to 4 inches wide on a mature plant, broadly oval to somewhat triangular and pointed at the tip. The greenish-white flowers occur as branched sprays in summer and are followed soon after by small winged fruits. Seeds are triangular, shiny, and very small, about 1/10 inch long.



MANAGEMENT:

Knotweed management can combine foliar spray and cut-and-fill herbicide treatments. Precisely timed cuttings of Knotweed increase the operational window to chemically treat. Either of these treatments should be done for consecutive 2-5 seasons.



MULTIFLORA ROSE

Rosa multiflora

DESCRIPTION:

Rosa multiflora, Multiflora Rose is a shrub with arching canes and a mounding shape in the landscape. The leaves are divided into five to eleven sharply toothed leaflets. The base of each leaf stalk has a pair of fringed bracts, which is a key identifier of the plant from other wild roses. Beginning in early summer, clusters of showy white flowers appear. The flowers are followed by developing red fruit, or hips, during the summer that remain on the plant through the winter.



HABITAT:

Multiflora Rose thrives in early successional habitat. The rose has a wide tolerance for various soil, moisture, and light conditions. It occurs in dense woods, along river banks and roadsides and in open unmanaged fields. It can form a dense understory that suppresses growth of native plant species. The seed is readily dispersed by birds, and the extended productivity of the fruit into winter months allows widespread distribution of the plant.



MANAGEMENT:

Manual methods of hand-pulling seedlings is effective. For more established shrubs, a combination of pruning to reduce mass followed by cut & dab treatments with a triclopyr-based herbicide is recommended. Persistent root infestations may require repeat cutting over several seasons. Rake any seeds present, bagging and disposing of correctly.

MANAGEMENT CALENDAR FOR TREATMENT & PLANTING

TASK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Hand removal woody seedlings < 1" caliper	Optimal	Optimal	Optimal	Optimal	Optimal	Possible	Possible	Possible	Possible	Possible	Possible	Possible
Hand pulling herbaceous species	Possible	Possible	Optimal	Optimal	Optimal	Possible	Possible	Possible	Optimal	Optimal	Possible	Possible
Mechanical management of woody invasive	Optimal	Optimal	Optimal	Optimal	Optimal	Possible	Possible	Possible	Possible	Possible	Optimal	Optimal
Cut and dab herbicide on woody invasive	Possible	Possible	Possible	Possible	Possible	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
Japanese Knotweed Cutback	Possible	Possible	Possible	Optimal	Optimal	Optimal	Possible	Possible	Possible	Possible	Possible	Possible
Japanese Knotweed Chemical Treatment	Possible	Possible	Possible	Possible	Possible	Possible	Possible	Optimal	Optimal	Optimal	Possible	Possible

- Optimal timing and efficiency
- Not optimal but mostly effective
- Possible, but not ideal

The timing of various containment and restoration strategies is critical to their success. Fortunately, the calendar provides ample opportunity for action at any time of the year. Tasks should be performed by trained ecological technicians and licensed herbicide applicators. These recommendations for restoration take into consideration the long term health of the East Point Audubon Sanctuary. Once invasive plants have been managed in a particular area, the restoration of native species should begin.

PROPOSED MANAGEMENT AND MAINTENANCE SCHEDULE

LATE SPRING/ EARLY SUMMER 2025 (WITH DEP APPROVAL)

- » Systematically remove woody invasive plants according to priority.
- » Cut and remove all Japanese Knotweed

LATE SUMMER/FALL 2025

- » Treat Japanese Knotweed reprints with herbicide (foliar treatment of foam).
- » Treat woody plant reprints with herbicide (foliar treatment of foam).
- » If the invasive plant management schedule holds, it is possible to plant larger trees and shrubs into the disturbed areas in the late fall of 2025. However, due to the intense nature of the Knotweed monoculture, we would recommend waiting until the following year to plant.

2026

- » Continue the same pattern as the 2025 season.

2027

- » Assess the effectiveness of the management in the past 2 years.