Vegetation Management Plan (VMP)

Town of Wellesley MA
2025 thru 2029

Prepared By:

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INTRODUCTION

The Town of Wellesley is a predominantly residential community, located approximately 13 miles west of Boston, and covers an area of 10.49 square miles with a population of 29,365 in 2023. Its geographic location and its visual characteristics make it a highly desirable suburb of the Boston area. This town has over 255 acres of active recreational space, 642 acres of passive open space, and over 6,000 public street trees.

Wellesley has been actively using a roadway Vegetation Management Plan (VMP) and a Yearly Operation Plan (YOP) since 2005. Following these plans has helped the Department of Public Works improve communications with residents concerning the Rights of Way (ROW) spraying program in the town. With the required publishing of an Annual Notice in the town`s local newspaper and an active posting on the town`s website, residents have been kept informed about the DPW's spraying activity. This has also helped with residents' reporting problem areas in need of herbicide control, especially with public health issues related to poison ivy. Over the last few years, the pesticide use in Wellesley by the DPW has on an annual basis has been reduced and the town always tries to use herbicides as a last resort. The Town maintains ROW with minimal use of pesticides and primarily for Poison Ivy, Swallowwort and Tree of Heaven.

GOALS AND OBJECTIVES

The roadway Vegetation Management Plan (VMP) for the Town of Wellesley is intended to establish the criteria whereby municipal, and private entities which control vegetation along roads and highways are following the Rights of Way Management regulations (333 CMR 11.00). The goal of the roadway VMP is to ensure that the vegetation management practices along public roadways and trails are conducted in the most environmentally sound manner through an integrated program that will minimize the reliance upon pesticides. Vegetation management along roads is necessary to control unwanted vegetation that poses a public nuisance and to control all other woody growth that creates a traffic and pedestrian hazard. The operational goal of this VMP is to utilize integrated vegetation management designed to maximize control of undesirable vegetation while minimizing the use of herbicides. In order of preference by the Department of Public Works, the integrated vegetation management program will involve the use of cultural, mechanical, and chemical control techniques to control undesirable vegetation in an ecologically sound manner. The choice of the target vegetation and appropriate control technique will be at the heart of the program. Achievement of this goal will be made through an annual inspection by local management programs of all public ways, and control of the areas as needed by the most environmentally sensitive means possible.

IDENTIFICATION OF TARGET VEGETATION

Target vegetation along public rights-of-way includes:

- Public Nuisance Vegetation
- Nuisance Grass and Weeds
- Invasive plant vegetation that threatens the environment, as identified by the Massachusetts Invasive Plant List.
- Vegetation poses a public risk to pedestrian or vehicular safety.

Public Nuisance Vegetation

This includes vegetation that grows along public roads and paths that cause allergic reactions or other problems. The overwhelming majority of plant material to be controlled is poison ivy.

Nuisance Grass and Weeds

In most instances, grass is a desirable plant species. However, grasses and other weeds that grow along the shoulders of roads in areas that include cracks in asphalt, along guardrails, and between sidewalks and adjacent cubing. Grasses and weeds in these types of situations accelerate the deterioration of the town's roadway infrastructure and are maintained through mechanical mowing or hand cutting.

Invasive Vegetation

Invasive plants are non-native species that have spread into landscapes throughout Wellesley. These plants cause economic or environmental harm by developing self-sustaining populations that disrupt native ecosystems. Massachusetts has 66 identified invasive species that need to be managed to protect our ecosystems. When possible, these species will be targeted as part of the town`s vegetation management plan. However, most of the invasive plants that are foliar or cut stump treated are Black and Pale Swallowwort (*Cynanchum louisea* and *Cynanchum rossi*) and Tree of Heaven (*Ailanthus altissima*).

Vegetation Posing a Risk to Safety

Vegetation that hampers visibility or impedes movement along roads and trails is considered to pose a risk to public safety. M.G.L. Chapter 87, Section 5 authorizes tree wardens to have control of "all public shade trees, shrubs, and growths" along public ways. Mowing and/or hand cutting shall control most plants that interfere with traffic and visibility.

VEGETATION MANAGEMENT METHODS AND REASON FOR USE

Right of Way vegetation management will involve Integrated Pest Management techniques (e.g. sealing cracks in asphalt), mechanical methods (hand cutting, mowing, selective trimming), and chemical control (foliar herbicide and cut stump treatments). The methods listed above will be chosen based on a variety of factors. The method chosen for a given vegetation problem will attempt to achieve a long-term, minimal-maintenance vegetation management program. It should be noted that the main goal of this plan is to control vegetation affecting the use of paths, sidewalks, roadways, and town easements.

Hand Cutting

Hand cutting consists of the mechanical cutting of target species using pruners, loppers, weed whackers, and chain saws. **No foliar application of herbicides shall be used to control vegetation greater than 12 feet in height.** Hand cutting is used to protect environmentally sensitive sites or on target vegetation less

than twelve feet tall where herbicide use is prohibited by regulation. Hand cutting is used on those restricted sites when terrain, site size, or sensitivity renders mowing impossible or impractical. Hand cutting may be used at any time of the year.

Mowing

Mowing consists of the mechanical cutting of target vegetation using machines. Depending upon the resources available, mechanical cutting is done by using a walk-behind brush mower, flail mower, and blade weed whacker or string trimmers. The selection of specific equipment is based on terrain, target vegetation size, and equipment availability. Mowing shall be used in most areas where terrain and target stem size permit efficient use of the equipment and especially in areas where herbicide use is prohibited by regulation. Mowing shall be the principal vegetation control measure on the shoulders of roads. Mowing may be used at any time of the year except when deep snow precludes operations.

Foliar Treatments

Foliar treatments involve the selective application of an herbicide, diluted in water, to the foliage of the target vegetation with sprayer that uses low pressure, below 60 psi at the nozzle. Foliar treatments can be made using a hand pump sprayer or squirt bottles. The herbicide solution is applied to wet the target plant lightly. This technique has a few limitations with the exception being reduced effectiveness on tall, high-density target vegetation. Foliar applications will take place when plants are in full leaf and actively growing and following the manufacturer's recommendations.

Cut Stump Treatment

Cut stump treatments consist of mechanical cutting of target species immediately followed by herbicide treatment. The herbicide is applied by a hand-held dauber and applied to the freshly cut cambium ring on the surface of the stump. Cut stump application is preferred during the growth period from May to October.

Selective Trimming

Selective trimming consists of the mechanical pruning of the encroaching limbs of trees, which may hamper access to the roadway. This trimming will be accomplished using aerial lifts mounted on trucks or tractors or, if terrain or obstructions prevent equipment access, by climbing crews.

SUMMARY OF CONTROL STRATEGIES

TARGET	TECHNIQUES	COMMENTS
Poison Ivy	low volume foliar spray	Growing within 10 feet of the roadway. Spot treatment will be made by using low volume foliar method.
Grasses	mowing, weed whacking	Used as main control method.
Low growth	mowing, weed whacking	Used as main control method.
	hand cutting	Terrain prevents mowing and resprouting is not a concern. Ex.- shrubs
	low volume foliar spray	Terrain prevents mowing or hand-cutting; rapid resprouting species such as Swallowwort

Tall growth	Selective trimming	Cases where the visibility or interference does not warrant removal of all the vegetation.
	hand cutting	Terrain prevents mowing and /or species is greater than 12 feet in height.
	low volume foliar	Used on target vegetation less than 12 feet in height such at Tree of Heaven
	Cut stump	Species greater than twelve feet in height and where foliar applications are not appropriate for the site conditions or time of year when work is performed.

JUSTIFICATION OF HERBICIDE APPLICATIONS PROPOSED

The goal of vegetation management on the public rights of way is the management of nuisance vegetation (poison ivy) and other woody plants that interfere with pedestrian and traffic safety, and the vegetation that grows in the cracks in road, sidewalks, and curbing. Herbicide use for the control of target vegetation will be a last resort. Mechanical cutting and mowing in most instances will achieve the desired goals of controlling nuisance vegetation and vegetation that poses a safety risk.

Public Nuisance Vegetation

As previously noted, the control of public nuisance vegetation (poison ivy) along the ROW is a major objective of this vegetation management plan. Due to the low growing nature of poison ivy, and the fact that it grows along stolons, it is nearly impossible to control poison ivy through cultivation, hand pulling or mowing at the height generally used in roadside mowing operations. Moreover, the climbing characteristics of this plant, over stonewalls, tree trunks and guardrails, make mechanical control out of the question for safety and economic reasons. In some locations, the judicious use of herbicides may develop herbaceous communities that crowd out poison ivy. The resulting herbaceous community that crowds out poison ivy can be maintained through mowing. Weeds growing in sidewalks or curbing, or between sidewalks and curbing, will also be a target of public nuisance vegetation control as part of this plan.

All Other Vegetation

Woody vegetation (low and high growth species) growing along the rights-of-way that interfere with pedestrian or vehicles is controlled by a variety of techniques. Pruning or cutting using hand tools or chain saws primarily controls woody vegetation. Depending upon the species of plant removed and its proximity to other vegetation, these stumps may be treated with an herbicide to prevent resprouting. Small woody plants that are growing along the road shoulder in an accessible location will be mowed along the roadside grass.

METHODS, REFERENCES AND SOURCES FOR IDENTIFYING SENSITIVE AREAS AND CONTROL STRATEGIES PROPOSED FOR SENSITIVE AREAS.

Methods, References and Source for Identifying Sensitive Areas

Sensitive areas defined at 333 CMR 11.04 are identified as public groundwater supplies, public surface water supplies, private drinking water supplies, surface waters, wetlands, inhabited areas, and agricultural areas. For identification, sensitive areas can be separated into two categories; areas not readily identifiable in the field; and areas that are readily identifiable in the field.

Sources to identify sensitive areas not readily identifiable in the field include:

1) Massachusetts Department of Environmental Protection (DEP) Watershed Maps (1:25,000). delineates the perimeter of public watersheds and the location of public wells.
2) Massachusetts DEP Wetlands Conservancy Map (scale usually 1:1,000).
3) Municipal maps and records, Boards of Health, Conservation Commissions, and water suppliers.
4) Regional Planning Agency's maps and records.
5) U.S. Fish and Wildlife Service National Wetlands Inventory Maps, available from the University of Massachusetts, Cartographic Information Research Services, Amherst.
6) Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program.
7) Massachusetts Office Geographic and Environmental Informational.

The following is a description of how the sensitive areas will be identified for required protection.

1) Consult the appropriate reference materials and sources to determine the precise location of these areas.
2) Place the boundaries of these sensitive areas on U.S. Geological Survey (USGS) topographical maps.
3) Prior to commencement of herbicide application operations, the treatment crew will be provided with a marked-up topographic map with which to flag boundaries of these sensitive areas.
4) The treatment crew will deploy a cutting crew or point person in advance of the main herbicide application operation to locate and flag these boundaries or the boundaries of the appropriate limited spray area.
5) The local Conservation Commission Agent will assist in locating and marking sensitive areas.

Sensitive areas readily identifiable in the field include surface waters, inhabited areas, agricultural areas, and wetlands. The method utilized to identify these sensitive areas will be as follows:

1) Consult USGS topographic and Mass GIS maps to locate any of these sensitive areas that may already be identified on these maps.
2) Prior to commencement of herbicide application operations, the treatment crew shall be provided a marked topographical map.
3) The treatment crew will visually survey the area to be treated for any sensitive areas.

Sensitive Area Restriction Guide (333 CMR 11.04)

Sensitive Area	No Spray Area	Limited Spray Area	Where Identified
Wetlands and Water Over Wetlands	Within 10 feet (unless provisions of 333 CMR 11.04(4)(c) are followed)	10 – 100 feet. 12 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps and identify on site
Certified Vernal Pool	Within 10 feet	10 feet to the outer boundary of any Certified Vernal Pool Habitat. 12 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps and identify on site
Public Ground Water Supply	Within 400 feet (Zone I)	Zone II or IWPA (Primary Recharge Area). 24 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps
Public Surface Water Supply	Within 100 feet of any Class A public surface water source	100 feet to the outer boundary of Zone A. 24 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps
	Within 10 feet of any tributary or associated surface water body located outside of the Zone A	10 feet to the outer boundary of Zone A. 24 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	
	Within 100 feet of any tributary or associated surface water body located within the Zone A of a Class A public surface water source		
	Within a lateral distance of 100 feet for 400 feet upstream of any Class B Drinking Water Intake	Within a lateral distance of between 100 - 200 feet for 400 feet upstream of intake. 24 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	
	Within 50 feet	50 – 100 feet;	

Sensitive Area	No Spray Area	Limited Spray Area	Where Identified
Private Water Supply		24 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	In YOP well list and identify on site
Surface Waters	Within 10 feet from mean annual high-water line	10 feet from the mean annual high-water line and the outer boundary of the Riverfront Area. 12 months must elapse between applications. Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps and identify on site
Agricultural and Inhabited Areas	N/A	0 – 100 feet 12 months must elapse between application; Selective low pressure, using foliar techniques or basal or cut-stump applications.	Identify on site
State-listed Species Habitat	No application within habitat area except in accordance with a Yearly Operational Plan approved in writing by the Division of Fisheries and Wildlife		YOP Maps

OPERATIONAL GUIDELINES FOR APPLICATIONS RELATIVE TO HERBICIDE USE

As required by regulation, applicators to roadside rights of way must hold a valid pesticide certification from the Department of Agricultural Resources. In addition to the applicable rules and regulations, applicators will adhere to the following operational guidelines:

Weather - Herbicide application will be restricted during certain adverse weather conditions, such as rain or wind. Herbicide applications will not be made during periods of moderate or heavy rainfall. Foliar applications are effective in light mist situations; however, any measurable rainfall that creates leaf runoff will wash the herbicide of target. If foliar applications are interrupted by unexpected rainfall, the treatment will not resume until the rain ends and active leaf runoff has ceased. Cut stump treatments will not be made during measurable precipitation. Cut stump treatments will cease during measurable precipitation and will not resume until precipitation has ceased.

Excessive wind can create drifting during foliar applications. Significant herbicide drift can cause damage to desirable vegetation on or off the roadside. Cut surface treatments are much less affected by wind because they are applied in such a proximity to the ground.

To minimize off-target drift, the applicator will comply with the following restrictions:

a. During periods of wind, which are strong enough to bend the tops of the main stems of tree species on the roadside, the applicator will periodically observe the application of the foliar treatment to ensure that there is no significant movement of the herbicide. If the applicator can see the herbicide moving off target, the application will immediately stop until the wind has subsided enough to permit further applications.

b. All herbicide solutions to be used for a foliar application will contain low drift agents. Low-drift agents will be added to the foliar herbicide solution as per the low drift agent label. In moderate wind conditions, as per label recommendations, more low-drift may be added, at the discretion of the applicator to control increased drift.

c. Foliar treatments will not be made to target vegetation that exceeds twelve feet in height.

Equipment Calibration - Foliar application equipment will be calibrated at the beginning of the season, prior to touch-up application treatment, and in accordance with manufacturer's recommendations. High volume foliar application equipment will be calibrated to maintain pressures not exceeding sixty pounds per square inch at the nozzle. Applicator nozzles will be adjusted to apply a coarse spray pattern.

Cut stump treatment squirt bottle applicators or hand pump sprayers will be adjusted to deliver the herbicide solution in a thin stream to the target zone.

Sensitive Area Restrictions – in defined sensitive areas, there exists a no-spray area where herbicide use is prohibited and a limited area where herbicide use is allowed under certain conditions. In areas around sensitive areas where herbicide use is allowed, only the minimum labeled rate of application for the control of target species can be applied.
Schools – Right-of-ways through or around private and/or public schools shall be sprayed in conjunction with the guidelines prescribed under the Children's Protection Act and the schools written IPM plan.

The Department of Public Works shall notify the Board of Selectmen, Board of Health, and the Natural Resource Commission at least 21 days in advance of the application of herbicides to town ROW. The notice shall include but not be limited to the approximate date on which such spraying shall occur, provided however that said spraying shall not conclude more than ten days after said approximate date; a copy of a MDAR approved Herbicide Fact Sheet on the active ingredient(s) of the Herbicide(s) used; and the name of the D.P.W. certified applicators who would be making the applications.

Traffic Island planting beds will be flagged with 4" X 5" caution flags after treatment. The flags will have a white background with red lettering. The Public Works 24-hour telephone number will also be noted on the flag. See example flag attachment.

<----------5”---------->

Caution

Herbicide / Pesticide Applied

(Product applied w/ EPA Reg.#)

Wellesley D.P.W.

1-781-235-7600 ext. 3330
DPW@wellesleyma.gov

←4”

IDENTIFICATION AND QUALIFICATIONS OF INDIVIDUALS DEVELOPING AND SUBMITTING A PLAN

Cricket Vlass has 43 years in the Green Industry. Massachusetts Certified Arborist #1430, Massachusetts Certified Landscape Professional #1449. Currently serving as Superintendent of the Park & Tree Division of the Town of Wellesley DPW.

TECHNIQUES AND PROGRAMS TO MINIMIZE THE AMOUNT AND FREQUENCY OF HERBICIDE APPLICATION

Vegetation management activities will place non-chemical techniques as the methods of choice in considering the goal of controlling the undesirable vegetation. When used, herbicide use will be minimized through timing of applications to maximize control and avoiding fixed application schedules while protecting environmentally sensitive sites. The specific components of the program include:

Monitoring - All roadsides will be surveyed prior to any scheduled treatment program. Monitoring will be done by foot or by vehicle. Monitoring of areas may be the result of requests from the public.

Maintenance – All roads will be cleaned using street sweepers. Cracking asphalt and sidewalks and other right-of-way defects will be repaired. The use of ground cover will be used where appropriate to assist in the prevention of vegetation growth.

Record Keeping - A log of areas surveyed will be kept by the Department of Public Works for future planning and reference. Areas maintained either through physical repair, mechanical or chemical control will be recorded.

Control Tactics – The decision to use one of the vegetation control techniques will depend on evaluating the specific situation. Emphasis will be given to the control tactic will address the vegetation problem in the most environmentally sound manner and in a way to minimize vegetation control in the long term.

A. Mechanical Controls
   1. Selective pruning
   2. Ground cutting
   3. Mowing
   4. Street Sweeping

B. Chemical Controls
   1. Cut stump treatments
   2. Low pressure foliar treatments with backpack sprayers.

C. Physical Controls
   1. Sealing cracks
   2. General Right-of-Way repairs (i.e. Repaving, install new sidewalk)
   3. Use of ground cover or less aggressive native plant species.

DESCRIPTION OF ALTERNATIVE LAND USE PROVISION OR AGREEMENTS THAT MAY BE ESTABLISHED WITH INDIVIDUALS, STATE, FEDERAL OR MUNICIPAL AGENCIES THAT WOULD MINIMIZE THE NEED FOR HERBICIDE USE, INCLUDING THE RATIONALE FOR ACCEPTING OR DENYING ANY REASONABLE REQUEST MADE BY AN INDIVIDUAL.

Every effort will be made for alternative land use options. However, there are specific criteria to be met for adoption of alternative land use options. First, the alternative land use option must control the undesirable vegetation in a similar manner, ecologically and efficaciously as allowed in this VMP. For example, a common practice of abutters to roadways is to mow and maintain road shoulders. In this instance, the monitoring program would reveal that the area does not warrant vegetation control. A written agreement would clearly specify that the DPW will not treat vegetation in these areas and outline the landowner's responsibilities for vegetation control.

REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

All mixing and loading of herbicides will be conducted at the central facility where the herbicides are stored. Only the amount of herbicide required to conduct the vegetation control will be transported off site. Early monitoring of site locations will ensure that there will be no waste and will minimize potential problems. The vehicles conducting the spray operations will be equipped with a bag of absorbent, activated charcoal, leak-proof containers, a broom and a shovel in case of minor spills. A clipboard log of the herbicides on the vehicle will be kept on the vehicle. Herbicide labels and fact sheets, along with the VMP and YOP shall be carried on-site by the applicator.

As soon as any spill is observed, immediate action will be taken to contain the spill and protect the spill area. The cause of the spill must be identified and secured. Spill containment will be accomplished by covering the spill with absorptive clay or other absorptive material or, for large spills, building clay or soil dikes to impede spill progress. Until completely cleaned, placing barriers, flagging or D.P.W. workers at strategic locations will accomplish protection of the spill area. If a fire is involved, care will be taken to avoid breathing fumes from any burning chemicals.

Minor spills will be remedied by soaking up the spill with adsorption clay or other adsorptive material and placing it in leak proof containers, removed from the site and disposed of property. Dry herbicides, such as granules, will be swept up or shoveled up directly in leak proof containers for proper disposal. All contaminated soil will be placed in leak proof containers, removed from the site, and disposed of properly. Activated charcoal will be incorporated into the soil at a rate prescribed by the herbicide manufacturer to inactivate any herbicide residue. Any minor spill will be reported to the Pesticide Bureau.

Massachusetts Department of Environmental Protection shall be contacted when a spill of a quantity of regulated material listed in 310 CMR 40.000.

Major spills will be handled in a similar manner as minor spills, except in cases where the spill cannot be contained and/or removed by the crew. In this case the DEP Incident Response Unit and the Pesticide Bureau must be contacted.

In the event of a spill, information on safety precautions and clean up procedures may be gathered from the following sources:

- Herbicide label
- Herbicide SDS sheet
- Herbicide Manufacturer
  Corteva Agriscience (800) 992-5994
- Massachusetts Pesticide Bureau (617) 626-1781
- Massachusetts Department of Environmental Protection (888)-304-1133
- Chem Trec (800) 424-9300
- Massachusetts Poison Control Center 24-Hour Hotline (800) 222-1222
- Department of Public Health – Environmental Toxicology Program (617) 624-5757
- Wellesley Fire Department (781)-235-1300
- Wellesley Health Department (781)-235-0135
- Wellesley Police Department (781)-235-1212
- National Pesticide Information Center (800)-858-7378
- National Animal Poison Control Center (888)-426-4435