Vegetation Management Plan (VMP)

Town of Franklin, MA

2017-2021

Prepared By:

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Table of Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td></td>
</tr>
<tr>
<td>Table of Contents</td>
<td></td>
</tr>
<tr>
<td>Statement of Goals and Objectives</td>
<td>1</td>
</tr>
<tr>
<td>Past Results</td>
<td>1</td>
</tr>
<tr>
<td>Target Vegetation</td>
<td>1</td>
</tr>
<tr>
<td>Vegetation Management Methods &amp; Actions to Minimize Herbicide</td>
<td>2</td>
</tr>
<tr>
<td>Justification of Herbicide Use</td>
<td>5</td>
</tr>
<tr>
<td>Identification of Sensitive Areas</td>
<td>6</td>
</tr>
<tr>
<td>Operational Guidelines for Applicators Relative to Herbicide Use</td>
<td>9</td>
</tr>
<tr>
<td>Qualifications of Individuals Developing &amp; Submitting a Plan</td>
<td>10</td>
</tr>
<tr>
<td>Alternative Land Use Options</td>
<td>10</td>
</tr>
<tr>
<td>Remedial Plan to Address Spills and Related Accidents</td>
<td>10</td>
</tr>
<tr>
<td>Monitoring Plan</td>
<td>12</td>
</tr>
<tr>
<td>Notification Procedures</td>
<td>13</td>
</tr>
</tbody>
</table>

Tables

| Table 1. Summary of Control Methods                                   | 5        |
| Table 2. Sensitive Area Restrictions                                  | 8        |

Appendix

Municipal Sign-Off Form

333 CMR 11.00 Rights-of-Way Management Regulations
Statement of Goals and Objectives

This Vegetation Management Plan (VMP) establishes criteria for the Town of Franklin to control vegetation along municipal Rights of Way (ROW) in compliance with the ROW Management Regulations (333 CMR 11.00) as promulgated by the Massachusetts Department of Agricultural Resources.

The primary objective of this VMP is to provide the public with safe and unobstructed ROWs while utilizing an Integrated Pest Management (IPM) program and minimizing reliance upon herbicides. Vegetation maintenance is necessary along public ROWs to control unwanted vegetation that may pose a public nuisance, result in safety hazards or cause damage to structures and infrastructure. The goal of the program is to control undesirable vegetation while maximizing environmental protection and minimizing herbicide use. The plan’s success will be based upon periodic monitoring and inspection which is expected to result in:

- protection of the public and environment;
- control of target vegetation;
- reduction in volume of chemical application;
- reduction in frequency of chemical application; and
- protection of sensitive areas.

This VMP will serve as a technical guidance for individuals involved in ROW vegetation management and as an accessible source of information for residents and public officials.

Past Results

Over the past 5 years since implementing the previous VMP, the Town of Franklin has been able to reduce the amount of herbicides needed to target vegetation that poses a safety hazard, public nuisance or has invasive properties that can cause detriment to natural resources. The reduction in herbicide use can be attributed to multiple factors; the continued method of spot treating only areas with vegetation while using the lowest recommended rate of application, along with increased street sweeping and the adoption of Low Impact Development techniques during right of way development and redevelopment have contributed substantially to the reduced use of herbicides. The town has also replaced and/or repaired numerous sidewalk cement panels, resulting in fewer cracks and a reduction in weed invasion. The increase in street sweeping has continued to be beneficial towards maintaining stormwater quality and has provided the unforeseen benefit of removing sediment from the edge of the roadway before it can be used by plants that would need to be managed by mechanical or chemical controls. By integrating low impact development (LID) techniques including rain gardens that utilize native and low maintenance plant species, the Town now has a reduced dependence on utilizing chemical controls. In addition to LID, mechanical control and the effectiveness of the town’s herbicide program has resulted in the reduced use of herbicides.
Target Vegetation

Target vegetation will be limited to species that pose a safety hazard, compromise infrastructure, are a public nuisance, or are invasive and may have detrimental effects on natural resources.

Hazard Vegetation

Hazard vegetation poses a risk to public safety and represents vegetation that impedes movement along public ways. Hazard vegetation may obscure sightlines, obscure signs, obscure vehicular movement, create windfall hazards, and cause winter shading (causing ice/reduced melting). Hazard vegetation may include but is not limited to trees, tree limbs and shrubs.

Nuisance Vegetation

This category includes vegetation that could cause problems to the general public, employees or contractors and generally include poisonous and noxious plant species. Nuisance vegetation poses a risk to safety and health often due to dermal contact with plants that are poisonous, heavily-thorned or densely colonized. Target vegetation in this category is primarily Poison Ivy and other nuisance vegetation within 10 feet of the edge of pavement.

Detrimental Vegetation

Detrimental vegetation includes grasses and woody plants that are destructive or compromise the function of infrastructure by growing in cracks along the roadway, pavement/bridge joints, medians/traffic islands, and drainage structures/drainageways.

Invasive Vegetation

Invasive species can colonize a space and virtually eliminate the biodiversity of an area. This can result in changes in wildlife due to habitat change, impede natural hydrologic function and cause an overall change in the natural functions of an area. Managing invasive species via mechanical means can be ineffective and/or detrimental depending on the species, making the colonization stronger. In these situations, the use of an herbicide may be necessary. Working in conjunction with the Conservation Commission and/or private groups, there may be opportunities to remove invasive vegetation and encourage the growth of native species. Vegetation listed on the MA Department of Agricultural Resources Massachusetts Prohibited Plant List are included in this category.

Vegetation Management Methods & Actions to Minimize Herbicides

Vegetation management methods will include both non-chemical techniques and chemical application where necessary as well as an IPM Program to minimize herbicide use. Vegetation management may involve the following methods:

- Physical Control – sustainable landscape methods, sealing cracks, repaving.
- Mechanical Methods – hand cutting, mowing, selective trimming.
- Chemical Control – foliar herbicide treatments & cut stump surface treatment.
The control methods selected will be chosen based on a variety of factors and with the goal to achieve a long-term, low maintenance vegetation management program.

**Physical Control**

Physical control methods will rely primarily on sustainable landscape methods and pavement maintenance.

**Sustainable Landscapes**

Sustainable landscape techniques include alternative methods for new development and reconstruction that minimize roadside maintenance and promote active planting of competing vegetation. This may include:

- Encouraging use of seeding and planting specifications that require less maintenance.
- Planting of native trees, shrubs, wildflowers and grasses to compete and replace undesirable species.
- Where applicable allow private abutters to maintain ROWs.
- Encouraging use of Low Impact Development (LID) techniques including residential raingardens, bioretention areas and tree box filters.

**Pavement Maintenance**

Pavement maintenance will consist of sealing cracks, general ROW repairs including repaving and installing new sidewalks and use of groundcovers where appropriate, such as under guardrails. The Town completes routine street sweeping town wide twice per year. Street sweeping takes place four times per year (or more as needed) in the downtown area of Franklin where the majority of the herbicide application takes place. Over the past several years the need for herbicide applications has decreased in the downtown area likely due to the increase in street sweeping.

**Mechanical Control**

Mechanical control methods may include hand cutting, mowing, and/or selective trimming.

**Hand Cutting**

Hand cutting consists of the mechanical cutting of target species using chain saws and brush saws. Target species are cut as close to the ground as practical. Hand cutting is used in order to protect environmentally sensitive sites. It is also used on target vegetation greater than twelve feet in height. Hand cutting is used on those restricted sites where terrain, site size or sensitivity renders mowing impossible or impractical. Hand cutting may be practiced at any time during the year.

**Mowing**

Mowing consists of the mechanical cutting of target vegetation using push mowers, large rider mowers, rear deck mowers, brush mowers, edgers and line trimmers. Selection of specific equipment is based on terrain, target vegetation size and equipment availability. Mowing will be used in areas where terrain and target stem size permit safe and efficient use of the above machinery. Mowing will be the principal method for vegetation control.
along road shoulders and where herbicide use is prohibited. Mowing will be conducted seasonally when weather conditions allow.

Selective Trimming

Selective trimming consists of the mechanical pruning of the tops of encroaching limbs of tall trees that may hamper roadway access. Trimming will be accomplished using aerial lifts via trucks or tractors, or if terrain or obstruction prevent equipment access, by climbing crews.

Chemical Control

Chemical control methods involve foliar treatment and cut stump surface treatments.

Foliar Treatment

Foliar treatments involve the selective application of an herbicide diluted in water, to the foliage. Several types of equipment for foliar treatments may be used. These could include: backpack sprayers, hand-held pump sprayers or a motorized truck-mounted sprayer. Foliar treatments with backpack and hand-held pump sprayers are used on low-density target vegetation. The herbicide solution will be diluted to the lowest possible percent that will provide effective control of target species. Motorized application equipment may be used for foliar treatment on areas where the vegetation density is high and the use of a backpack spray may not be as effective.

These foliar applications will take place when plants are in full leaf and actively growing, and in accordance with the product label. When used according to the Town’s application program, foliar treatments are an effective and efficient method to control the whole target plant. Controlling the whole target plant reduces the potential of resprout from live root systems.

Cut Stump Surface Treatment

Cut stump treatments consist of mechanical cutting of target species using chain saws followed by herbicide treatment applied with a squirt bottle, a hand pump sprayer, or painted on the freshly cut surface of the stump. The cutting procedure is identical to that outlined in the Hand Cutting section of this VMP. Cut stump application can be effective during the dormant period, however may not be effective during times of sap flow (i.e., maples and birches during the months of February through early April), as flowing sap will limit the herbicide from being absorbed into the stump down to the roots. Certain types of herbicide formulations are limited to freshly cut stumps to be effective.

Monitoring – All roadsides will be surveyed prior to any scheduled treatment program. Monitoring will be conducted by foot and/or by vehicle. Monitoring of areas may result from requests from the public. All monitoring records will be maintained by the Town.
Maintenance – All roads will be cleaned using a street sweeper. Cracking asphalt and sidewalks and other ROW defects will be repaired. The use of ground cover will be used where appropriate to assist in the prevention of vegetation growth. The use of groundcover can sometimes help outcompete and/or crowd out poison ivy and some invasive species.

Record Keeping – A log of areas surveyed will be maintained by the Town 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 or a combination of vegetation control techniques will depend on the site-specific situation. The control tactics selected will control target vegetation in the most environmentally and efficient manner.

<table>
<thead>
<tr>
<th>Target</th>
<th>Conditions</th>
<th>Control Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grasses</td>
<td>Where landscape, traffic and safety conditions allow.</td>
<td>Sustainable Landscapes Mechanical (mowing)</td>
</tr>
<tr>
<td>Low Growth Species</td>
<td>Where landscape, traffic and safety conditions allow. Species not poisonous</td>
<td>Sustainable Landscapes Mechanical (mowing)</td>
</tr>
<tr>
<td>Low Growth Species</td>
<td>Landscape prevents mowing Species not poisonous</td>
<td>Mechanical (hand cutting) Chemical (depending on situation)</td>
</tr>
<tr>
<td>Grasses &amp; Low Growth Species</td>
<td>Within cracks or joints Safety eliminates use of mechanical methods</td>
<td>Chemical (foliar)</td>
</tr>
<tr>
<td>Low Growth Species</td>
<td>Poison Ivy or other nuisance species within 10 feet of ROW</td>
<td>Chemical (foliar)¹</td>
</tr>
<tr>
<td>Tall Growth</td>
<td>Individual trees or branches</td>
<td>Mechanical (hand cutting or selective trimming)</td>
</tr>
<tr>
<td>Tall Growth</td>
<td>Plants &gt;12 feet and landscape allows</td>
<td>Mechanical (hand cutting)</td>
</tr>
<tr>
<td>Tall Growth</td>
<td>Plants &gt;12 feet and species are persistent and/or invasive</td>
<td>Chemical (cut stump surface treatment)¹</td>
</tr>
</tbody>
</table>

¹Except in no spray areas.
²Low Growth – herbaceous growth (generally 3-4’ high, grasses, vines, short woody growth)
Tall Growth – woody vegetation greater than 4’

Justification of Herbicide Use

This plan focuses on the minimization of herbicide use within ROWs. Vegetation management along public ways is necessary to control unwanted vegetation that pose a public nuisance, obstructs views and creates a traffic or pedestrian hazard. By following the proposed vegetation management methods and IPM approach discussed in this plan, physical and mechanical treatment controls most plants that interfere with traffic, visibility and safety. Chemical controls are necessary in management situations where topography, access, growth rate, species specific factors, worker safety, or
environmental/social concerns limit the potential for control by physical or mechanical methods.

Chemical controls are often the preferred method or only method of control for plants which pose a health hazard for the technician in the field, either directly or as a function of location. Poison Ivy, for example, is extremely hazardous to handle, biologically resistant to mechanical removal and can pose a serious threat. Individuals attempting to control curbside plants and weeds by pulling them or trimming them can put a technician in danger from traffic and is generally not effective for long term control.

In many situations poisonous plant species, such as Poison Ivy, cannot be effectively controlled by mowing. Due to the low growing nature of Poison Ivy, and the fact that it grows along stolons and reproduces both by fine and fibrous rhizomes as well as by berry, it is nearly impossible to control through cultivation, hand pulling or mowing at the height generally used in roadside mowing operations. Moreover, the climbing characteristics of this plant over stone walls, tree trunks and guardrails, make mechanical control out of the question for safety and economic reasons. In some locations, the use of herbicides may help develop herbaceous communities that out-compete Poison Ivy and otherwise promote natural control of these plants.

Mowing will control most grasses. Herbicide applications, however, are used where mechanical control is not feasible due to location, stem density and/or height. Although grass is more often a desirable vegetative cover along public ways, in areas where it is a target, it is difficult and sometime dangerous to remove by mechanical treatment methods. These areas include, but are not limited to, cracks in asphalt, along guardrails, paved traffic islands, sidewalks and curbs. In these instances, grass can be identified as target vegetation.

Woody vegetation (low and high growth species) growing along the ROW that interfere with pedestrian or vehicle safety is controlled by a variety of techniques. Pruning or ground cutting using hand tools or chain saws primarily controls large 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, although they often can be removed mechanically.

Small woody plants that are growing along the road shoulder in an accessible location will usually be mowed along with the roadside grass. Woody plants that are growing over obstacles that would impede the mower, or have a viney growth habit and are not practical to hand cut or chip, or that grow very rapidly, can be controlled through the use of the foliar application of herbicides.

Finally, invasive species elimination is sometimes warranted to promote the growth of a more diverse mix of vegetative species, reduce sedimentation and improve natural drainage and wildlife habitat. Invasive species are rarely controlled with ground cutting techniques and generally need to be eliminated via herbicide application to restore an area.

The plan also encourages the use of sustainable landscaping and/or LID practices that aim to control hazard, detrimental, nuisance and invasive vegetation. LID is an environmental design approach based on a variety of techniques and methods with the
goal to cost-effectively reduce negative impacts to surrounding natural resources. Through various methods the Town encourages the use of raingardens, bioretention areas and tree box filters. All of these methods aim to promote stormwater management, groundwater infiltration and help eliminate unwanted vegetation by reducing disturbance and promoting the use of native species to outcompete unwanted vegetation.

**Identification of Sensitive Areas**

Sensitive areas are defined within 333 CMR 11.00 as areas within ROWs in which public health and environmental concerns warrant special protection to further minimize risks of unreasonable adverse effects of herbicides. These include public groundwater sources, Class A public surface water sources, associated surface water bodies, tributaries, Class B drinking water intakes, private wells, state listed species habitat, wetlands, waters over wetlands, riverfront areas, certified vernal pools, inhabited areas and agricultural areas. The Franklin Conservation Commission will be consulted with to assist in identifying sensitive areas. For the purposes of identification, sensitive areas can be separated into two categories: areas that are readily identifiable and areas that are not readily identifiable in the field.

Sensitive areas that are not readily identifiable in the field include public groundwater supplies, private water supplies and public surface water supplies. Additional sources available to identify these areas include:

- Massachusetts Department of Environmental Protection (MassDEP) Water Supply Maps (1:25,000);
- MassDEP Wetlands Conservancy Maps (scale 1:1,000).
- Municipal maps and records including those from the Health Department to identify private water supplies.
- Regional Planning Agency maps and records.
- U.S. Fish and Wildlife Service National Wetlands Inventory Maps.
- Ortho photo Information – MassDEP (1:5,000).
- Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program.
- Available MassGIS maps.

Sensitive areas that are readily identifiable in the field include surface waters, wetlands, rivers and agricultural areas. The methods utilized to identify these sensitive areas will include:

- Consult MassGIS spatial data maps to locate any of these sensitive areas that may already be identified on these maps.
- Prior to commencement of herbicide application operations, the treatment crew will be provided the marked topographic map.
- The treatment crew will visually survey the area to be treated for any additional sensitive areas as well as areas where the ground is bare or has limited re-growth from previous herbicide applications.
• Sensitive areas will be identified and marked in the field prior to application.

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

• Consult appropriate reference materials and sources to determine the precise locations of sensitive areas.
• Mark boundaries of each area on U.S. Geological Survey (USGS) topographical maps, CAD (Computer Aided Drafting) drawings or GIS output.
• Prior to commencement of herbicide application operations, treatment crew will be provided with above maps identifying sensitive areas.
• Appropriate Department of Public Works staff will deploy in advance of the main herbicide application operation to locate and flag these boundaries or the boundaries of the appropriate no-spray areas.
• No spray areas will be identified with red or orange paint on the curb or in roadway at start and finish of no spray areas or with orange flags marked in the same manner, as appropriate.

<table>
<thead>
<tr>
<th>Sensitive Area</th>
<th>No Spray Areas</th>
<th>Limited Spray Areas</th>
<th>Where Identified</th>
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<tbody>
<tr>
<td>Wetlands and Water Over Wetlands</td>
<td>Within 10 feet</td>
<td>10 – 100 feet; 12 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications</td>
<td>YOP Maps and identify on site</td>
</tr>
<tr>
<td>Certified Vernal Pool</td>
<td>Within 10 feet</td>
<td>10 feet to the outer boundary of any Certified Vernal Pool Habitat; Selective low pressure, using foliar techniques or basal or cut-stump applications</td>
<td>YOP Maps and identify on site</td>
</tr>
<tr>
<td>Public Ground Water Supply</td>
<td>Within 400 feet (Zone I)</td>
<td>Zone II or IWPA (Interim Wellhead Protection Area which is the Primary Recharge Area); 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications</td>
<td>YOP Maps</td>
</tr>
<tr>
<td>Public Surface Water Supply</td>
<td>Within 100 feet of any Class A public surface water source</td>
<td>100 feet to the outer boundary of the Zone A; 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications</td>
<td>YOP Maps</td>
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<td></td>
<td>Within 10 feet of any tributary or associated surface water body located outside of the Zone A</td>
<td>10 feet to the outer boundary of the Zone A; 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications</td>
<td>YOP Maps</td>
</tr>
<tr>
<td>Area</td>
<td>Distance From Source</td>
<td>Minimum Time Between Treatments</td>
<td>Application Methods</td>
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<tr>
<td>Within 100 feet of any tributary or</td>
<td>24 months;</td>
<td>Selective low pressure, using</td>
<td>In YOP will list and identify on site</td>
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<tr>
<td>associated surface water body located</td>
<td>24 months;</td>
<td>foliar techniques or basal or</td>
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<td>within the Zone A of a Class A public</td>
<td>Selective low pressure, using</td>
<td>cut-stump applications</td>
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<td>surface water source</td>
<td>foliar techniques or</td>
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<td></td>
<td>basal or cut-stump</td>
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<td></td>
<td>applications</td>
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<td>Within a lateral distance of 100 feet</td>
<td>12 months;</td>
<td>Selective low pressure, using</td>
<td>Identify on site</td>
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<td>of 100 feet for 400 feet upstream of any</td>
<td>Selective low pressure, using</td>
<td>foliar techniques or basal or</td>
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<td>Class B Drinking Water Intake</td>
<td>foliar techniques or</td>
<td>cut-stump applications</td>
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<td></td>
<td>basal or cut-stump</td>
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<td></td>
<td>applications</td>
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<td>Frequency: 24 months</td>
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<tr>
<td>Private Water Supply</td>
<td>50 – 100 feet;</td>
<td>Selective low pressure, using</td>
<td>In YOP will list and identify on site</td>
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<td>24 months;</td>
<td>foliar techniques or basal or</td>
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<td>Selective low pressure, using</td>
<td>cut-stump applications</td>
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<td>Selective low pressure, using</td>
<td>basal or cut-stump applications</td>
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<td></td>
<td>Selective low pressure, using</td>
<td>foliar techniques or basal or cut-stump applications</td>
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<tr>
<td>Riverfront Area</td>
<td>10 feet from mean</td>
<td>12 months;</td>
<td>YOP Maps and identify on site</td>
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<td>annual high-water</td>
<td>Selective low pressure, using</td>
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<td></td>
<td>line</td>
<td>foliar techniques or basal or</td>
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<td></td>
<td></td>
<td>cut-stump applications</td>
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<tr>
<td>Agricultural and Inhabited Areas</td>
<td>N/A</td>
<td>12 months;</td>
<td>YOP Maps and identify on site</td>
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<td></td>
<td></td>
<td>Selective low pressure, using</td>
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<td>foliar techniques or basal or</td>
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<td></td>
<td></td>
<td>cut-stump applications</td>
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<tr>
<td>State-listed Species Habitat(^1)</td>
<td>No application</td>
<td>12 months;</td>
<td>YOP Maps</td>
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<td></td>
<td>within habitat area</td>
<td>Selective low pressure, using</td>
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<td>except in accordance</td>
<td>foliar techniques or basal or</td>
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<td>with a Yearly</td>
<td>cut-stump applications</td>
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<td>Operational Plan</td>
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\(^1\)Includes Estimated Habitats of Rare Wildlife and the Priority Habitats for State-Listed Species as shown on the most recent edition of the Massachusetts Natural Heritage Atlas prepared by the Natural Heritage and Endangered Species Program (NHESP) within the Massachusetts Division of Fisheries and Wildlife.

**Operational Guidelines for Applicators Relative to Herbicide Use**

As required by regulations, application to roadside ROW requires a valid Category 40 pesticide certification from the Department of Agricultural Resources. The applicator(s) will be a Town employee and/or certified contractor working under the supervision of the Town of Franklin Project Manager. All applicators and their supervisors will have a copy of the VMP and Yearly Operational Plan (YOP) with them at all times for reference during the herbicide application. In addition to the applicable rules and regulations, applicators will adhere to the following operational guidelines. Only herbicides listed on the current ROW Sensitive Area Materials List will be used.

**Weather**

Herbicide application will be restricted during certain adverse weather conditions, such as rain or wind. Herbicide applications will not be conducted during periods of moderate or heavy rainfall. Foliar applications can be effective in light mist situations, however any measurable rainfall that creates leaf runoff will wash the herbicide off target vegetation. 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 conducted during measurable precipitation events. Cut stump treatments will cease during measurable precipitation and will not resume until precipitation has ceased.
To minimize off-target drift, the applicator will comply with the following restrictions:

- During periods of wind, which are strong enough to bend the tops of the main stems of trees on the roadside, the applicator will periodically observe the application of the foliar treatment to insure 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.

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

- Foliar treatment will not be made to target vegetation that exceeds approximately twelve feet in height.

**Equipment Calibration**

Foliar application equipment will be calibrated prior to application and in accordance with manufacturer’s recommendations. 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 an herbicide solution that minimizes herbicide splash and overspray.

**Sensitive Area Restrictions**

In defined sensitive areas, there exists a no-spray area where herbicide use is prohibited and a limited spray area where herbicide use is allowed under certain conditions. In places around sensitive areas where herbicide use is allowed, only the minimum labeled rate of application for the control of target species can be applied.

**Qualifications of Individuals Developing & Submitting a Plan**

Mr. Robert Cantoreggi, Director - Department of Public Works is an experienced public works official for the Town of Franklin and has overseen the vegetation management program for the Town for several years.

Comprehensive Environmental Inc. (CEI) is a civil engineering and environmental science firm that has served municipal, state, and federal agencies throughout the New England area for nearly 30 years. Ms. Stephanie Hanson is a Project Manager and Principal Scientist at CEI specializing in the areas of wetlands, water resources, stormwater, environmental permitting and resource area protection. Ms. Hanson is a Certified Ecologist with a B.S. in Environmental Geoscience and M.S. in Environmental Science.

**Alternative Land Use Options**

Every effort will be given for alternative land use options. However, there are specific criteria to be met for adoption of alternative land use options. The alternative land use
option must control the nuisance vegetation in a similar manner, environmentally and effectively 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 Town 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 either at a secure Town facility if the application is completed by a Town employee or offsite if the application is being completed by an outside contractor. Only the amount of herbicide necessary to carry out the vegetation control, based on monitoring results, will be mixed to ensure that there will be no waste and minimize potential problems. The vehicles carrying out 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 will 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 remediated, the spill area will be protected by the placement of barriers and by the delineation of the spill area by crew members. 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 absorptive material and placing it in leak proof containers, removed from the site and disposed of properly. Dry herbicides, such as granulars, 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 the spill location per label instructions. Any minor spill will be reported to the Massachusetts Department of Agricultural Resources, Division of Crop & Pest Services.

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 MassDEP Incident Response Unit and the Massachusetts Department of Agricultural Resources, Division of Crop & Pest Services must be contacted.

Emergency first responders (including but not limited to fire and police) should be immediately notified of a major spill and/or any size incident deemed a possible risk to public health, safety and the environment.

MassDEP will be contacted when there is a spill of a regulated quantity, regardless of major or minor spill status and in accordance with 310 CMR 40.0000 Massachusetts Contingency Plan.

In the event of a spill, information on safety precautions and clean up procedures may be gathered from the following sources:
• Herbicide label
• Herbicide MSDS sheet
• Herbicide Manufacturer
  DOW (800) 992-5994
  Dupont (800) 441-3637
  Monsanto (314) 697-4000
  NuFarm (877) 325-1840
• Massachusetts Pesticide Bureau Main # (617) 626-1720
  Clayton Edwards (617) 626-1700
• Massachusetts Department of Environmental Protection
  Emergency Response (888) 304-1133
• Department of Public Health
  Environmental Toxicology Program (617) 624-5757
• Massachusetts Poison Control Center
  24-Hour Hotline (800) 222-1222
• Town of Franklin Public Works Department 508-520-4916
• Town of Franklin Fire Department 508-528-2323 or 911
• Town of Franklin Police Department 508-528-1212 or 911
• Chem-Trec 800-424-9300
• National Pesticide Information Center 800-858-7378
• National Animal Poison Control Center 888-426-4435

**Monitoring Plan**

On an annual basis, the Franklin DPW will evaluate the success of this Vegetation Management Program based on the goals and objectives stated in this VMP (page 1) which include:

• Protection of the public and environment;
• Control of target vegetation;
• Reduction in volume of chemical application;
• Reduction in frequency of chemical application;
• Ensure vegetation management activities are conducted in a safe, effective, and regulatory compliant manner; and
• Protection of sensitive areas.
This monitoring plan will evaluate the relative success of the VMP. Plan success constitutes achievement of the above goals and objectives. Monitoring plan and assessment activities will include the following:

1. Pre-application assessment of each primary treatment area to include estimated area of treatment and identification of target species. Primary treatment areas will be mapped for future assessment.

2. Recording of volume of herbicide used during treatment for each area.

3. Post-evaluation of each primary treatment area to include a description of the overall control of target species and observation of nearby sensitive resource areas, noting impacts if any.

4. The Franklin DPW will hold an annual VMP monitoring meeting in the fall after completion of all herbicide application activities. This meeting will assess the following issues:
   a. Overall control of target species in each primary treatment area;
   b. Volume of herbicide applied;
   c. Impacts related to weather;
   d. Sensitive area impacts, if any;
   e. Comments received from the public, if any; and
   f. Overall program implementation including suggested changes.

5. Meeting minutes will include the above information, data and discussion points and will include comparisons to previous years’ information, if available. Recommendations on location and use will be reflected in the next year’s YOP as applicable.

Notification Procedures

Once approved, a copy of the VMP will be provided to the Town Manager, Board of Health and Conservation Commission. Upon approval of the VMP and YOP and 21-days in advance of the application of herbicide to a ROW, the Town will notify the Department, Board of Health, water supplier, Town Manager and Conservation Commission of the application. Notification will include: method and location of application, herbicide fact sheet, EPA registration number for herbicide and applicator contact information. Additionally, at least 48-hours prior to a ROW herbicide application, the applicant will publish in a local newspaper the following information: methods and location of pesticide application, approximate dates of herbicide application, name of herbicide(s) to be used, description/purpose of application and contact information for designated individual representing the Town whom citizens can contact.