City of Taunton

2016 Yearly Operational Plan

Submitted by:
City of Taunton
Parks, Cemeteries & Public Grounds Department

Marilyn A. Greene, Commissioner

February 26, 2016

Yearly Operational Plan

A yearly operational plan (YOP) must be submitted to the Department of Agricultural Resources (DAR) every year herbicides are intended for use to maintain public ways (right-of-way). The YOP provides a detailed program for vegetation management including the methods used to identify target vegetation and sensitive areas, planned treatment methods, herbicides and herbicides mixtures and rates for the year.

A five year Vegetation Management Plan (VMP) will be available for review at the Parks, Cemeteries & Pubic Grounds Office, Board of Health, Conservation Commission and Mayor.

Upon receipt of this YOP, the DAR publishes a notice in the Environmental Monitor. The City must also provide a copy of the proposed YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and Mayor. The Department allows a 45-day comment period on the proposed YOP beginning with the publication of the notice and receipt of the YOP and Environmental Monitor notice.

Public notification of herbicide application is made at least 21 days prior to the treatment(s) by a separate notice. This Notice is made to the Department of Agricultural Resources, Mayor, Board of Health, the Conservation Commission and the Public Water Supplier.

A Newspaper Notice will also be made at least 48 hours in advance of the treatment(s).

Any comments on this YOP should be made to the person designated herein as the person supervising the YOP or the person performing the treatment.

1. INTRODUCTION

In compliance with Commonwealth of Massachusetts' Rights-of-Way Vegetation Management Regulations (333 CMR 11.00) the City of Taunton's Yearly Operational Plan (YOP) details our vegetation management program for 2015. This YOP is consistent with the terms and procedures set forth in the 2011-2015 Vegetation Management Plan (VMP) for the City of Taunton; with the Massachusetts Pesticide Control Act (Chapter 132B); with all pertinent clauses in Chapter 85 of the Acts of 2000; and with all acts and regulations that apply to public-way (right-of-way) vegetation management.

Vegetation growing along curbing's, within and around paved traffic islands, in cracks in the asphalt, under guiderails along roadways and in areas that cannot be mowed is of a growing concern in Taunton. These areas, along with Poison Ivy and other public nuisance vegetation, can be effectively controlled with the use of herbicide applications.

These treatments will be done under the supervision of a contracted certified applicator in compliance with the public way Integrated Vegetation Management (IVM) program and protocols described in Taunton's VMP.

In order of preference, an Integrated Vegetation Management program on public ways is a combination of cultural, physical, mechanical, and chemical management techniques that control undesirable vegetation in an ecologically sound manner. As with all IVM programs, this program is designed to maximize control of undesirable vegetation while minimizing any potential impact to the environment.

2. THE INDIVIDUAL THAT WILL PERFORM AND SUPERVISE THE HERBICIDE TREATMENT

A licensed herbicide applicator under contract with the City of Taunton will perform the herbicide treatment. Applicators will be certified by the Massachusetts Department of Agricultural Resources.

The Individual who will supervise the YOP and perform herbicide treatment in conjunction with qualified contractors:

Frederick J. Caiozzo, License 10442, Commercial Cat. 40
Rights of Way Consultant
Parks, Cemeteries & Public Grounds Department
170 Harris Street
Taunton, MA 02780
Phone: 508-821-1415

The City of Taunton and the contractor will be responsible to insure that the vegetation management activities are conducted in a professional, safe and efficient manner. Special attention will be directed towards minimal environmental impact.
The contractor selected will be qualified and licensed to apply herbicides. "Qualified" means those personnel who have been trained to recognize and identify target and non-

target vegetation and are knowledgeable in the safe and proper use of both mechanical and chemical vegetation management techniques.

All contract personnel will also follow all label instructions regarding Personal Protective Equipment (PPE). Applicators will at all times exercise good judgment and common sense during herbicide treatment activities and will immediately stop operations if adverse conditions or other circumstances warrant.

The City of Taunton will rely on the independent contractors and the City operator listed in the YOP for vegetation.

3. LOCATION OF INTENDED HERBICIDE TREATMENT(S)

For 2015, the primary treatment areas include, but are not limited to cracks in asphalt, along guiderails, along curbings, within and around paved traffic islands, between sidewalks and the adjacent curbing, and wherever public nuisance vegetation, particularly Poison Ivy is causing a public hazard.

Planned treatment areas and known *Sensitive Areas* are included in the map of Taunton included on the map provided.

A Taunton street listing is also included in Appendix A to cover potential treatment locations for public nuisance and vegetation posing a risk to public safety. Especially for Poison Ivy, predicting the location of all target vegetation along public ways in advance of the active growing season is not possible or practical. In an effort to limit the application of herbicides only to areas that require treatment, the town will, therefore, conduct patrols and treat only those areas in which vegetation poses a public nuisance and/or poses a safety risk to pedestrian or vehicular safety and which cannot be practically treated by the other methods listed in the VMP.

4. IDENTIFICATION OF TARGET VEGETATION

The target vegetation for this YOP will be poison ivy and vegetation growing between curbing and sidewalks that pose a safety risk to pedestrian or vehicular safety. Vegetation management crews will exercise care to insure that low-growing vegetation and other non-target organisms are not unreasonable affected by the application of herbicides.

Nuisance Grass and Herbaceous Growth

In most instances grass is a desirable plant species. Along the shoulders of roads, grass growth is encouraged and maintained through mechanical mowing. However, in some instances, grasses and other herbaceous plants can be identified as targets in areas where they cause a safety risk. These areas include, but are not limited to along curbings, cracks in asphalt, along guiderails, within and around paved traffic islands, and between sidewalks and the adjacent curbing.

Public Nuisance Vegetation

Public nuisance vegetation includes, but is not limited to poisonous and noxious plant species growing along public ways that pose a health hazard. Noxious vegetation poses a risk to safety and health because of heavy thorns, dense foliage and/or impenetrable stems; examples include but are not limited to Multiflora Rose, Common and Glossy Buckthorn, and Blackberries. Although not the only target species of concern, Poison Ivy is the dominant poisonous plant community along public ways that requires control.

Vegetation Posing a Risk to Safety

Vegetation that hampers visibility or impedes movement along public ways often poses 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. This includes woody plant species and invasive species. A short list of examples includes all tree species considered "street trees", all shrubs, vines and more specifically, invasive species, particularly Autumn Olive, Japanese Knotweed, Bittersweet and Multiflora Rose. Please note that only vegetation less than 12 feet tall may be foliar treated.

5. DEFINITION, IDENTIFICATION AND TREATMENT OF SENSITIVE AREAS

The general definition of *sensitive areas* regulated by 333 CMR 11.04 is as follows:

> ...any areas within Rights-of-Way, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.

Protecting these environmentally sensitive sites is accomplished by defining specific *sensitive areas* and establishing buffer zones and treatment restrictions within their borders according to Table 1 below. These s*ensitive areas* consist of no-spray zones in which herbicide use is prohibited, larger, limited spray areas where herbicide use is permitted under certain conditions and areas that require special treatment recommendations.

Treatment in limited spray areas require the use of herbicides from the *Sensitive Area Materials List* available at: www.mass.gov/agr/pesticides/rightofway/index.htm, following the application restrictions in 333 CMR 11.04 which includes applying minimum labeled herbicide application rate for the control of target species.

TABLE 1: CONTROL STRATEGIES FOR SENSITIVE AREAS

Table Compiled by Jeffrey M. Taylor, Vegetation Control Service, Inc.

Sensitive Area	Limited Spray and No-Spray Areas (feet)	Control Method	Restriction Code
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2 mile radius	Mechanical, Recommended Herbicides*	24 months
Public Surface Water Supplies (Class A & Class B)	100' 100'-400'	Mechanical Only Recommended Herbicides	None 24 months
Tributary to Class A Water Source, within 400' upstream of water source	100' 100'-400'	Mechanical Only Recommended Herbicides	None 24 months
Tributary to Class A Water Source, greater than 400' upstream of water source	10' 10'-200'	Mechanical Only Recommended Herbicides	None 24 months
Class B Drinking Water Intake, within 400' upstream of intake	100' 100'-200'	Mechanical Only Recommended Herbicides	None 24 months
Private Drinking Water Supplies	50' 50'-100'	Mechanical Only Recommended Herbicides	None 24 months
Surface Waters	10' 10'-100'	Mechanical Only Recommended Herbicides	None 24 months
Rivers	10' from mean annual high water line 10'-200'	Mechanical Only Recommended Herbicides	None 12 months
Wetlands	10' 10'-100' [with approved Wetlands Determination per 310 CMR 0.05(3)(a) & 310 CMR 0.03(6)(b)]	Mechanical Only Low-pressure Foliar, CST, Basal, Recommended Herbicides	None 24 months
Inhabited Areas	100' (for high-pressure foliar only)	Recommended Herbicides	12 months
Agricultural Area (Crops, Fruits, Pastures)	100' (for high-pressure foliar only)	Recommended Herbicides	12 months
Certified Vernal Pools	10'	Mechanical Only when water is present	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	No treatment without approval	
Priority Habitat	No treatment outside the 4 foot paved road exemption without approval of the Natural Heritage Endangered Species Program (NHESP)		

*Massachusetts recommended herbicides for sensitive sites

Identification Methods

As appropriate, *Sensitive Areas* will be identified and marked in the field by trained and experienced individuals.

Two simple descriptions guide the complex identification of the *sensitive areas* defined in 333 CMR 11.04: *Readily identifiable in the field* and *Not readily identifiable in the field.* Readily identifiable in the field areas will be treated, identified and when appropriate, marked according to all applicable restrictions listed in 333 CMR 11.00. Not readily identifiable in the field areas will likewise be treated and marked when appropriate, but they are identified by the use of data marked on maps and collected in the YOP and notification processes before the time of treatment.

The individual(s) assigned the task of identifying and treating *Sensitive Areas* in the field will use the appropriate sources and methods from the following list:

- Town maps, records and institutional knowledge
- Massachusetts Department of Environmental Protection water supply maps and/or GIS mapping layers available through MassGIS
- Water Department, Department of Agricultural Resources (DAR) and Board of Health maps and lists of identified private wells along the ROW
- Correspondence, meetings and input within the forty-five day YOP and twenty-one day municipal right-of-way notification letter review and comment periods and the 48 hour newspaper notification (under 333 CMR 11.06 & 11.07 and Chapter 85 of the Acts of 2000)
- Prior to treatments, an advance point person will verify, identify and where appropriate mark *Sensitive Areas* and any additional areas that may require special precautions
- USGS topographical maps
- Information from MassGIS
- When necessary, confidential information from NHESP
- The assistance of the Conservation Commission
- A copy of the YOP and VMP.

6. PROPOSED HERBICIDE TREATMENT METHODS

As identified in the City of Taunton's VMP, most of the treatment methods are handled using mechanical or hand tools. The proposed method of treatment for the identified areas included in this plan for 2015 will consist of the following:

Chemical (Herbicide Application) Methods:

1. **Foliar Treatments:** the selective application of herbicides diluted in water, to the foliage of target vegetation. Two types of equipment for foliar treatments are used: Low volume and high volume. Both treatments use low pressure, below 60 psi at the nozzle, for applications. Foliar applications take place when leaves are fully developed in the spring until early fall.

a. **Low volume foliar treatments** use a hand pump sprayer or squirt bottles. The herbicide solution is applied to lightly wet the target plant, not to the point of run-off.

b. **High volume foliar treatments** use truck or tractor mounted application equipment that delivers the herbicide solution through nozzles attached to a hose or boom-mounted equipment. The herbicide solution is sprayed to thoroughly wet the target vegetation using a water based herbicide mixture from a tank and pump on the application vehicle.

2. **Pre-emergent Treatments:** the use of pre-emergent herbicides using the same equipment described in the "foliar treatments" above. Pre-emergent applications are used where season long vegetation control requires "vegetation-free conditions" such as along curbing, sidewalks, under guiderails and on paved traffic islands. Usually, pre-emergent treatments are used in conjunction with foliar applications.

7. PROPOSED HERBICIDES, CARRIERS, ADJUVANTS AND RATES

Only Commonwealth of Massachusetts recommended herbicides listed below for use in *Sensitive Areas*—pursuant to 333 CMR 11.04 (1)(d) will be used throughout the town. Complete information on these products is included in Appendix C, Fact Sheets and Appendix D, Labels.

Table 2: Tank Mix #1 for Curbings, Cracks, Guiderail, Traffic Island Treatments (General Weed Control)

Herbicides & Adjuvants	Active Ingredient	Mix Concentration (per 100 gals. water)
Accord Concentrate	Glyphosate	2-5%
Oust Extra	Sulfometuron Methyl and Metsulfuron-Methyl	10 oz.
Induce (surfactant)	n.a.	64 oz.
Loveland's 38F or other drift retardant	n.a.	4-16 oz.

Table 3: Tank Mix #2 for Poison Ivy

Herbicides & Adjuvants	Active Ingredient	Mix Concentration (per 100 gals. water)
Accord Concentrate	Glyphosate	2-5%
Escort XP	Metsulfuron-Methyl	1.25 oz.
Induce (surfactant)	n.a.	64 oz.
Loveland's 38F or other drift retardant	n.a.	4-16 oz.

Table 4: Tank Mix #3 for Poison Ivy

Herbicides & Adjuvants	Active Ingredient	Mix Concentration (per 100 gals. water)
Garlon 4*	Triclopyr	4%
Induce (surfactant)	n.a.	64 oz.
Loveland's 38F or other drift retardant	n.a.	4-16 oz.

8. HANDLING, MIXING AND LOADING HERBICIDE CONCENTRATES

All herbicides will be handled, mixed and applied strictly by *Label Instructions* and in compliance with all applicable federal and state laws and regulations. All herbicide mixing should be done at the PCPG garage and extreme care shall be exercised during all mixing, handling and loading in order to prevent careless spills or splashes. No herbicide concentrates will be mixed, handled or loaded on a ROW within one hundred (100) feet of a Sensitive Area.

Although it is expected that all the mixed herbicide will be used, any remaining will be stored in accordance with manufacturer's instructions.

9. ALTERNATE CONTROL TECHNIQUES

Vegetation management in Taunton is a primarily mechanical treatment techniques program, as described in the VMP.

Monitoring: All public ways will be surveyed prior to any scheduled treatment program. Monitoring will be conducted by foot or by vehicle. Monitoring of areas may also result from public requests.

Maintenance: All roads will be cleaned annually by the Department of Public Works (DPW) using a street sweeper. Cracking asphalt and sidewalks and other right-of-way defects will be repaired. Ground cover will be used where appropriate to assist in the prevention of undesirable target vegetation growth.

Record Keeping: A log of surveyed areas will be kept for future planning and reference purposes. Areas maintained either through physical repair, mechanical or chemical control will be monitored and recorder by the PCPG Department.

Control Methods: The decision to use one or a combination of vegetation control techniques will depend upon the site-specific situation. The management tactics selected will control nuisance vegetation in the most environmentally and efficient manner:

A. Physical Controls
    1. Sealing cracks

2. General right-of-way repairs
3. Use of ground cover where appropriate
4. Cleaning ditches
5. Street sweeping

B. Mechanical Controls
1. Selective pruning
2. Ground cutting
3. Mowing

C. Chemical Controls
1. Cut stump treatments
2. Low pressure foliar treatments
3. Basal treatments
4. Turf retardants/broadleaf weed control.

10. TREATMENT RECORDS

The certified applicator must complete daily vegetation management reports that include:

A. Date, name and address of certified applicator(s)
B. Identification of site or work area
C. List of crew members
D. Type of equipment and hours used
E. Method of application and description of target vegetation
F. Amount, concentration, product name of herbicide(s), adjuvants, and dilutants (EPA registration numbers must be on file)
G. Weather conditions
H. Notation of any unusual conditions or incidents, including public inquiries
I. Recording and/or verification of sensitive areas on ROW maps

11. REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

This section is offered as a general procedural guide for responding to chemical spills or related accidents (related accidents include but are not limited to fire, poisoning and vehicle accidents). The following is, therefore, a guide to the items that *shall be* available to the applicator on site in the event of a chemical spill or emergency.

Although education and attention will constantly be directed at accident and spill prevention, in the event of a spill, immediate action will be taken to contain the spill and protect the spill area (Appendix E: *Herbicide Spill Check List* shall be available on-site to the applicator). Until completely clean, the spill area will be protected by placing barriers, flagging or crew members at strategic locations, as appropriate. 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 placed 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 into leak proof containers for proper disposal. When applicable, all contaminated soil will be placed in leak proof containers, removed from the site and disposed of properly. When applicable, activated charcoal will be incorporated into the soil at the spill location at a rate of several pounds per thousand square feet to inactivate any herbicide residue. Any minor spill will be reported to the DAR, Pesticide Bureau.

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 Southeast Department of Environmental Protection Emergency Response Section and the Pesticide Bureau must be contacted.

Types of Chemical Spills that Require Action

Chemicals include, but are not limited to the following:

- Herbicides
- Bar and Chain Oil
- Motor and Hydraulic Oil/Fluids
- Diesel Fuel
- Gasoline
- Title 3 Hazmat Materials

Required Spill Response Equipment

As a minimum, the treatment crew should have available on the job site:

- YOP with Emergency Contact List
- MSDS
- Product Label
- Product Fact Sheets (when applicable)
- Appropriate absorbent material
- Shovel
- Broom
- Flagging
- Leak Proof Container
- Heavy-duty Plastic Bags

Personal Contact

In the event of **Personal Contact** with hazardous chemicals:

- Wash affected area with plenty of soap and water
- Change clothing which has absorbed hazardous chemicals
- If necessary, contact a physician
- If necessary, contact the proper emergency services
- If necessary, follow the procedures for Major or Minor Spills as outlined below
- Avoid breathing the fumes of hazardous chemicals

Reference Tables (information subject to change as necessary)

Table 5: Herbicide Manufacturers

MANUFACTURER	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Dow Agro Sciences	(800) 992-5994	
E.I. du Pont de Nemours and Co.	(800) 441-3637	Medical Emergencies

Table 6: State Agencies

STATE AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
DAR, Pesticide Bureau	(617) 626-1700	A.S.A.P. (within 48 hours)
Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 Southeast Region: (508) 946-2700	For emergencies involving reportable quantities of hazardous materials, call within 2 hours. Required info: City/town, Street address, Site name (if applicable), material, quantity released, environment impacted
Massachusetts Poison Information Centers	800-682-9211	for medical emergencies involving suspected or known pesticide poisoning symptoms

Table 7: Emergency Services

EMERGENCY SERVICE	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts State Police - Middleboro	(508) 993-2016	
City of Taunton Emergency	911	
ChemTrec	(800) 424-9300	
Clean Harbors	(800) OIL-TANK	
Pesticide Hotline	(800) 858-7378	PST: 6:30 am-4:30 pm, web: www.NPIC.orst.edu

City of Taunton contact(s) in the case of a spill or accident:

Police Department
Call: 508-822-7522

Fire Department
Call: 508-824-4022

Board of Health
Call: 508-821-1400

Proposed YOP Locations for Roadside Spraying
Summer, 2016
Appendix A
Locations of Intended Herbicide Treatments

Rte. 140	Alfred Lord Blvd. to Hart Street
Rte. 44	Warner Blvd. to Dean Street Railroad Track
Rte. 138	Baker Road to East Britannia Street
Middleboro Ave	Hart & Middleboro Ave. to Caswell Street
Arlington Street	Corner of School & Floral Street to Rte. 44
Gordon Owen Riverway	Rte. 44 to Rte 140 County Street
Norton Avenue	Tremont to Taunton Educational Complex
Washington Street	Tremont Street to Bay Street
Weir Street	High Street to Walker Park
East Water Street	Bridge to Weir Riverfront
High Street	Ingell Street to Cohannet Street
Cohannet Street	Downtown to Highland Street
North Walker Street	Rte. 44 to Tremont Street
Oak Street	Washington St. to Highland Street
Bay Street	Broadway to Morey's Dam
Clifford Street	Shore Street to Kilmer Avenue
Monroe Street	Broadway to Bay Street
Sheridan Street	Kilmer Ave. to End
Second Street	Somerset Ave. to End
Williams Street	County to Powers Street
Stevens Street	Hart Street to Rte. 140

THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

Department of Agricultural Resources

251 Causeway Street, Suite 500, Boston, MA 02114
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MDAR
MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

MATTHEW A. BEATON
Secretary

JOHN LEBEAUX
Commissioner

Ms. Marilyn Greene
Director, Park & Recreation Department
City of Taunton
170 Harris Street
Taunton, MA 02780

June 10, 2016

Dear Ms. Greene

After reviewing the Yearly Operational Plan (YOP) submitted for the **City of Taunton**, 2016, the Department feels the plan adequately satisfies the requirements put forth by the Department for approval.

The Department must be made aware of any compromises or agreements between the applicant and citizen(s) of the municipality, as soon as it/ they are confirmed so that these compromises and or agreements will become part of the YOP. Those compromises or agreements made known to the Department by written confirmation will cause the YOP to be "modified."

Any violations of the Massachusetts Pesticide Control Act, MGL Chapter 132 B or the regulations promulgated thereunder, 333 CMR, inclusive, may subject the responsible party or parties to further agency action and referral of this matter to the Office of the Attorney General, Commonwealth of Massachusetts, or the local District Attorney's Office for civil or criminal prosecution.

Thank you for your cooperation throughout this process. You may contact me at 617-828-3792 with any concerns dealing with the ROW process.

Sincerely,

Michael W. McClean

Digitally signed by Michael W. McClean
DN: cn=Michael W. McClean, o=MDAR, ou=Pesticide, email=michael.mcclean@state.ma.us, c=US
Date: 2016.06.10 09:00:23 -04'00'

Michael W. McClean
ROW Coordinator