

Yearly Operational Plan (YOP)

City of Amesbury

2014

Prepared By:

City of Amesbury – Department of Public Works
39 South Hunt Road
Amesbury, MA 01913
&

Comprehensive Environmental Inc.
21 Depot Street
Merrimack, NH
800.725.2550

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Program Purpose

The purpose of 333 CMR 11.00, Rights of Way Management, is to promote the implementation of integrated pest management techniques and to establish standards, requirements, and procedures necessary to minimize the risk of unreasonable adverse effects on human health and the environment associated with the use of herbicides to maintain streets, road, sidewalks and paths. These regulations establish procedures that guarantee ample opportunity for public and municipal agency review and input on the right-of-way maintenance plans.

A yearly operational plan (YOP) must be submitted to the Massachusetts Department of Agricultural Resources (Department) every year herbicides are intended for use to maintain rights-of-way. The YOP provides a detailed program for vegetation management for the year. A five year Vegetation Management Plan (VMP) was approved by the Department and is available for review at the Amesbury Department of Public Works, Board of Health, Conservation Commission, and Mayor's Office. The 5-year VMP was approved in 2013 and is in effect through 2017.

Upon receipt of this YOP, the Department publishes a notice in the *Environmental Monitor*. The City must provide a copy of the proposed YOP and *Environmental Monitor* notice to the Board of Health, Conservation Commission, and the Mayor for the City of Amesbury, in which the proposed herbicide treatment is proposed. 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 by the City.

Public notification of herbicide application to the streets is made at least 21 days in advance of the treatment by a separate notice. Notice is made to the Department of Agricultural Resources, Mayor, Public Water Supplier, Board of Health, and the Conservation Commission in the City of Amesbury.

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.

This Yearly Operational Plan, approved by the Massachusetts Department of Agricultural Resources pursuant to Rights-of-Way Management Regulations (333 CMR 11.00), has been adopted by the following roadway vegetation management program in the City of Amesbury. The undersigned hereby acknowledges that the conditions of the Yearly Operational Plan will be adopted and complied with.

Municipality: City of Amesbury

Name: Mr. Robert Desmarais

Office: Department of Public Works

Address: 39 South Hunt Road

Telephone / Fax: Ph: (978) 388-8116 Fax: (978) 388-1769

Email: rob@amesburyma.gov

Signature: _____

Date: _____

Wetland Determination: Negative Determination issued by the Amesbury Conservation Commission

Individual Supervising YOP

Name and Title: Mr. Peter Dearborn
Department: Department of Public Works
Address: 37 Water Street, Amesbury, MA
Telephone: Ph: (978) 388-0037
Signature: _____

Municipal Department Performing Herbicide Treatment

Licensed Amesbury DPW staff and/or a licensed herbicide applicator under contract to the City of Amesbury DPW will perform the herbicide treatment. Applicators are certified by the Massachusetts Department of Agricultural Resources in the applicator category:

Certified Applicator:

License Number:

Company or Department:

To Be Determined

Address:

Telephone Number:

Email:

The following information is provided as details of the YOP of the City of Amesbury in accordance with the requirements of 333 CMR 11.06 (2):

Herbicides Proposed

The herbicides proposed for use in calendar year 2014 are:

Herbicide & EPA Reg: Accord Concentrate or Rodeo (62719-324)
Round-Up Pro (524-475)
Active Ingredient: Glyphosate
Registrant: Dow AgroSciences
Application Rate: Accord Concentrate – 2-5% solution
Rodeo – 2-5% solution
Round-Up Pro – 2-5% solution

Herbicide:	Oust Extra
Active Ingredients:	Sulfometuron Methyl, Metsulfuron Methyl
Registrant:	DuPont
EPA Reg. #	352-622
Application Rate:	2 2/3 ounces to 3 ounces per acre.

Complete information on these products are attached, including the Material Safety Data Sheets (MSDS). The herbicide fact sheet for the above listed herbicides are attached to and made part of this YOP.

Herbicide Application Techniques and Alternative Control Procedures

The herbicide(s) will be applied in accordance with the instructions in the attached manufacturer's information. Alternative control procedures, applicable at the designated "No Spray Zones" will consist of hand cutting, mowing, or selective trimming (mechanical). Other alternative controls will include routine street sweeping along with crack and road repairs.

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. In both cases, the herbicide solution is applied to lightly wet the target plant/ target area. These techniques have few limitations with the exception being reduced effectiveness on tall, high-density target vegetation and will not be used on vegetation over 12 feet in height.

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. Cut stump treatments will generally be performed to trees greater than 12' tall and resprout.

All equipment used for vegetation management programs must be maintained in good working condition, and should be of adequate design and ability to produce the professional quality of work that the City requires. Because the City recognizes the vast variety and performance of herbicide application equipment, dictating how that equipment should be calibrated to deliver precise amounts of herbicide to effectively

control a host of vegetation conditions is difficult. Therefore, the City insists that the applicator provide the most appropriate application equipment, calibrated to effectively and legally control target vegetation.

Both the applicator and/or the City are responsible to insure that vegetation management activities are conducted in a professional, safe, efficient manner, with special attention directed towards minimal environmental impact. The applicator is qualified, licensed and certified 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 personnel applying herbicides in Massachusetts must be licensed in the Commonwealth and must work under the on-site supervision of a certified applicator. All contract personnel will also follow all Label instructions regarding Personal Protective Equipment (PPE).

The City will rely on the applicator listed in the YOP for vegetation management applications and requires, (in a contractual agreement if an outside entity) that applicators comply with all applicable federal and state laws and regulations. These include, but are not limited to, applicable OSHA, FIFRA and DOT regulations, 333 CMR 1-15.00, Rights-of-Way Management, Chapter 132B, Chapter 85 of the Acts of 2000 and 321 CMR 10.00 as managed by NHESP.

Herbicides will only be applied in a safe and judicious manner, in compliance with all-applicable State and Federal pesticide regulations.

Applicators will at all times exercise good judgment and common sense during herbicide treatment activities, and will immediately cease operations if adverse conditions or other circumstances warrant.

Herbicides will NOT be applied during the following adverse weather conditions:

- A. During high wind velocity, per 333 CMR 11.03
- B. Foliar applications during periods of dense fog, or moderate to heavy rainfall
- C. Foliar applications of volatile herbicides during periods of high temperatures (90 plus degrees Fahrenheit) and low humidity
- D. Cut Stump applications when deep snow (i.e. 6" plus or ice frozen on stem or stump) prevents adequate coverage of target plants to facilitate acceptable control

The applicator or a representative of the City must complete daily vegetation management reports that include:

- A. Date, name and address of vegetation management applicator(s)
- B. Identification of site or work area
- C. List of crew members
- D. Type of equipment and hours used, both mechanical and chemical
- 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

A Daily Vegetation Management Form is included in the Appendix

Target Vegetation

The target vegetation for this YOP will include hazard, detrimental, and nuisance vegetation.

Vegetation management crews will exercise care to insure that low-growing desirable vegetation and other non-target organisms are not unreasonably affected by the application of herbicides.

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, block storm drains and cause winter shading (causing ice/reduced melting). Hazard vegetation may include but is not limited to trees, tree limbs and shrubs.

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.

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.

Description of Methods Used to Flag or Otherwise Designate Sensitive Areas

Sensitive areas as defined by 333 CMR 11.04 are ‘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.’ The Sensitive Areas Restriction Table at the end of this document defines specific sensitive areas and associated buffer zones and treatment restrictions such as limited-spray and no-spray zones.

The attached map identifies ‘Sensitive Areas Not Readily Identifiable in the Field’. With this map and the assistance of the Conservation Commission Agent, sensitive areas will

be identified and marked along the ROW prior to any herbicide application. Field methods will include flagging and/or roadway marking (via paint) of start and stop areas.

Procedures and Locations for Handling, Mixing and Loading of Herbicide Concentrates

The herbicide will be mixed in the controlled environment at the Amesbury Town Garage located at 37 Water Street in Amesbury.

Although it is expected that all the mixed herbicide will be used, any remaining will be stored at the Amesbury Town Garage in accordance with manufacturer's instructions. The absorbent product "Speedi-Dri" will be available for use at the locations of application. If there is a leak in the hose, the pump will be immediately shutoff. Equipment used will be washed at the Amesbury Town Garage.

Herbicides will be handled and applied only in accordance with the label instructions. Applicators will strictly adhere to all mandated safety precautions directed towards the public, the applicator and the environment.

Remedial Plan to Address Spills and Related Accidents

All mixing and loading of herbicides will be conducted at the Amesbury Highway Garage where the herbicides are stored. 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 adsorptive 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 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 MassDEP Incident Response Unit and the Pesticide Bureau must be contacted.

Emergency first responders (including but not limited to fire and police) will 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.

Emergency Contacts

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
 - DOW (800) 992-5994
 - Dupont (800) 441-3637
 - Monsanto (314) 697-4000
 - NuFarm (877) 325-1840
- Massachusetts Pesticide Bureau Main # (617) 626-1720
Michael McClean (617) 626-1781
- 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
- City of Amesbury Public Works Department 978-388-8116
- City of Amesbury Town Garage 978-388-0037
- City of Amesbury Fire Department 978-388-1333 or 911
- City of Amesbury Police Department 978-388-1212 or 911
- Chem-Trec 800-424-9300
- National Pesticide Information Center 800-858-7378
- National Animal Poison Control Center 888-426-4435

Sensitive Area Restrictions

333 CMR 11.04

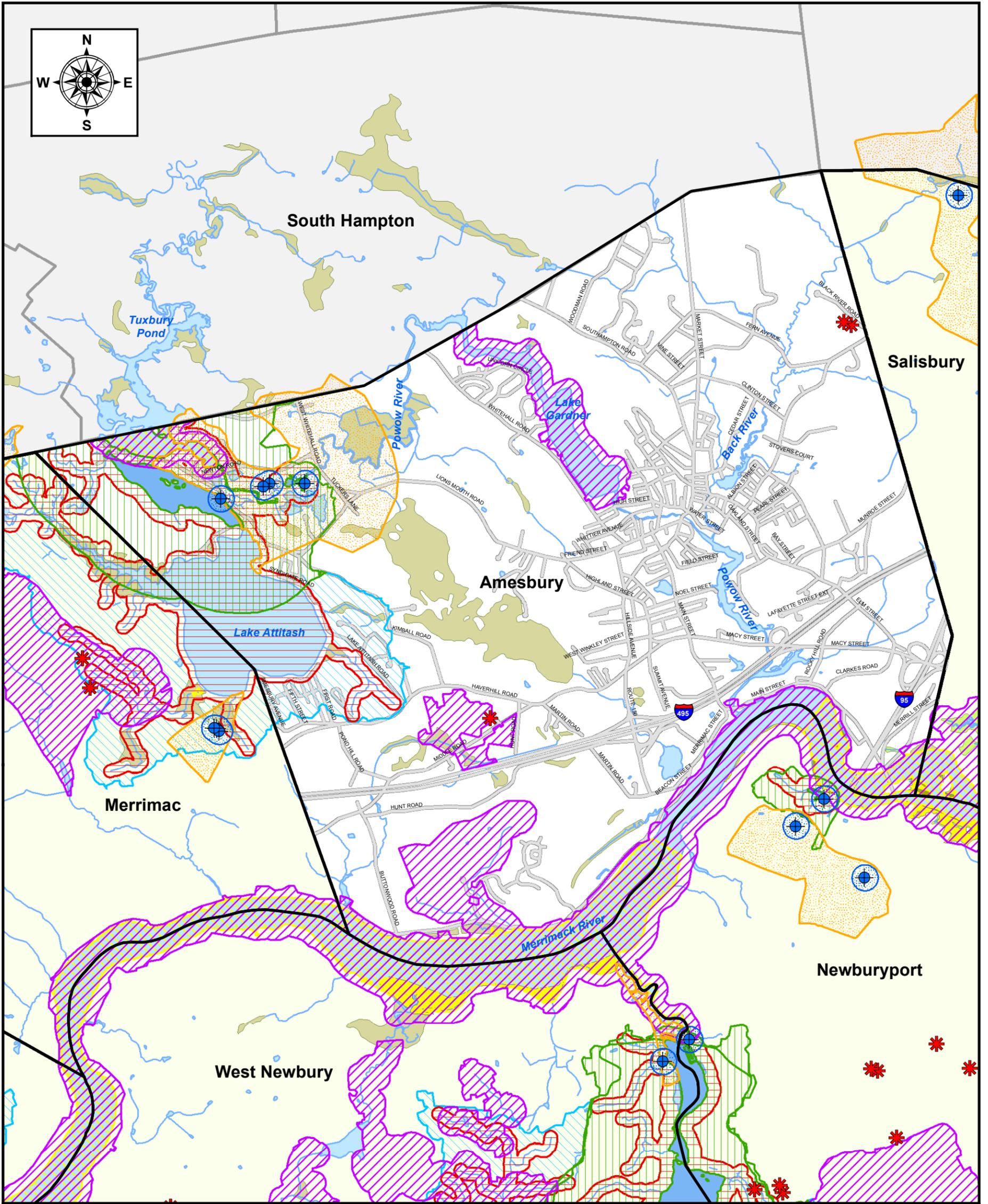
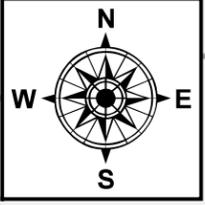
CONTROL STRATEGIES FOR SENSITIVE AREAS

Sensitive Area	Minimum Buffer Zone (feet)	Control Method	Time Restriction Code
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2 mile radius	Mechanical, Recommended Herbicides*	1
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	1
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	1
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Recommended Herbicides	1
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Recommended Herbicides	1
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Recommended Herbicides	2
Surface Waters	10'	Mechanical Only	None
	10'-100'	Recommended Herbicides	2
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Recommended Herbicides	2
Wetlands	100' (treatment in wetlands permitted up to 10' of standing water)* ⁺	Low Pressure Foliar, Cut Stump, Basal Recommended Herbicides	1
Habitated Areas	100' (for high-pressure foliar only)	Recommended Herbicides	2
Agricultural Area (Crops, Fruits, Pastures)	100' (for high-pressure foliar only)	Recommended Herbicides	2
Certified Vernal Pools	10'	Mechanical Only	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	As recommended by NHESP in their permit process, no treatment without written permission	
Priority Habitat	As recommended by NHESP in their permit process, no treatment without written permission		

Restriction Code #1: A minimum of twenty-four months shall elapse between applications

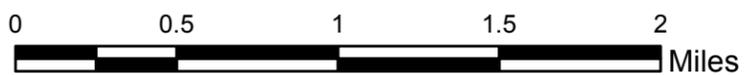
Restriction Code #2: A minimum of twelve months shall elapse between applications

*Massachusetts recommended herbicides for sensitive sites



Legend

- | | |
|--|--------------------|
| Certified Vernal Pool | Hydrography |
| Public Water Supply | Lake, Pond |
| Zone I | Reservoir |
| Zone II (Oct 2013) | Wetland |
| Surface Water Protection Zones (Oct 2013) | Salt wetland |
| A | Tidal Flats |
| B | Stream, Brook |
| C | Town Boundary |
| NHESP Priority Habitats of Rare Species | |
| NHESP Living Waters Core Habitats | |
| NHESP Natural Communities | |



**Sensitive Areas
Not Readily Identifiable in the Field**

2014

Amesbury, Massachusetts



Comprehensive Environmental Inc.