

# Yearly Operational Plan (YOP)

City of Worcester

2011

Prepared By:

City of Worcester – DPW & Parks  
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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 Department of Agricultural Resources 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 Worcester Department of Public Works & Parks, Board of Health, Conservation Commission, and Office of the City Manager.

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 City Manager for the City of Worcester, in which the 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, City Manager, Board of Health, and the Conservation Commission in the City of Worcester.

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 Worcester. The undersigned hereby acknowledges that the conditions of the Yearly Operational Plan will be adopted and complied with.

Municipality: City of Worcester

Name: Mr. Matthew Labovites

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Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Wetland Determination: Issued by the Worcester Conservation Commission  
May 11, 2009  
Valid for 2009-2013

## Individual Supervising YOP

Name and Title: Mr. Matthew Labovites  
Assistant Commissioner of Operations

Department: Department of Public Works & Parks

Address: 20 East Worcester Street, Worcester, MA 01604-3695

Telephone: (508) 799-1476

Signature: \_\_\_\_\_

## Municipal Department Performing Herbicide Treatment

The City of Worcester Department of Public Works & Parks has several staff members currently licensed for herbicide application that will complete this work. Applicators are certified by the Massachusetts Department of Agricultural Resources in the applicator category:

Certified Applicator: John Jennette  
License Number: #30277  
Company or Department: City of Worcester, DPW&P  
Address: 20 East Worcester Street  
Telephone Number: 508.929.1300

Certified Applicator: Edward Larson  
License Number: #30233  
Company or Department: City of Worcester, DPW&P  
Address: 20 East Worcester Street  
Telephone Number: 508.929.1300

Certified Applicator: Daniel Page  
License Number: #30276  
Company or Department: City of Worcester, DPW&P  
Address: 20 East Worcester Street  
Telephone Number: 508.929.1300

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

## Herbicides Proposed

The herbicide proposed for use in calendar year 2011 is:

Herbicide:	Round-Up Pro
Active Ingredient:	Glyphosate
Registrant:	Monsanto
EPA Reg. #	524-475
Application Rate:	Lowest labeled rate for target vegetation and environment

Complete information for this product is attached, including the Material Safety Data Sheet (MSDS). The herbicide fact sheet for the above listed herbicide is attached to and made part of this YOP.

## Herbicide Application Techniques and Alternative Control Procedures

The herbicide 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.

Low volume foliar treatments will be made using ready to use squirt bottles or hand pump backpacks. High volume foliar application may include a truck-mounted hydraulic sprayer. 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 treatments will generally be performed to trees greater than 12' tall and resprout. Cut stump treatments consist of mechanical cutting of target species using chain saws immediately followed by herbicide treatment applied with a squirt bottle, a hand pump sprayer, or painted on the freshly cut surface of the stump. The herbicide is limited to freshly cut surface of the remaining stump.

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 literally impossible. Therefore, the City will utilize the most appropriate application equipment, calibrated to effectively and legally control target vegetation.

City staff will insure that vegetation management activities are conducted in a professional, safe, efficient manner, with special attention directed towards minimal environmental impact. City staff holding applicator status are 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 applicator personnel will follow all label instructions regarding Personal Protective Equipment (PPE).

Staff applicators will 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

City staff applicators or a representative of the City must complete daily vegetation management reports that include:

- A. Date, name and address of vegetation management staff
- 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 represents vegetation that may: obscure sightlines, obscure signs, obscure vehicular movement, block fire hydrants, windfall hazards, and winter shading (increase in use of deicing). This may include woody vegetation along the edges of roadways.

### Detrimental Vegetation

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

### Nuisance Vegetation

This category includes nuisance vegetation that could cause problems to the general public, employees or contractors. Target vegetation in this category is primarily Poison Ivy and other nuisance vegetation within 10 feet of the edge of pavement, bridge abutments, drainage structures and other areas accessible by the public and/or requiring maintenance.

## **Description of Methods Used to Flag or Otherwise Designate Sensitive Areas**

The sensitive areas detailed herein are easily recognizable in the field as described and will be marked with an orange painted line in the street.

The attached map identifies 'Sensitive Area Restrictions'. 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 managed and mixed by licensed DPW&P staff in the controlled environment at the DPW&P Reservoir Moy Ranch Facility in Holden, Massachusetts. Although it is expected that all the mixed herbicide will be used, any remaining will be stored at the DPW&P Reservoir Moy Ranch Facility 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 DPW&P Reservoir Moy Ranch Facility.

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

### **ALB Cooperative Eradication Program**

In 2008, the U.S. Department of Agriculture confirmed the presence of the Asian longhorned beetle (ALB – *Anoplophora glabripennis*) in the City of Worcester. This invasive insect can infest tree species (including Maple, horse chestnut, birch, poplar, willow, elm and ash) and eventually destroy the tree (host). In 2008, a portion of Worcester county was quarantined for ALB via Federal Order with several Amended Orders issued since then. Per this order, associated amendments and the MA Cooperative ALB Eradication Program, all contractors and staff completing work under this VMP shall be familiar with and follow local, state and federal ALB procedures currently in place regarding work with host species. This will include activities related to cutting, treatment, removal and disposal of infected or potential host species. Current ALB program information and fact sheets are included in the Appendix.



### **Emergency Contacts**

City of Worcester Department of Public Works & Parks	508-929-1300
City of Worcester Fire Department	508-799-8606 or 911
City of Worcester Police Department	508-799-1816 or 911
Town of Holden Police Department	508-829-4444 or 911
Town of Holden Fire Department	508-829-0266 or 911
Massachusetts Pesticide Bureau	617-626-1781
Bureau Environmental Health Assessment	617-624-5757
Mass. Department of Environmental Protection Incident Response Unit	617-556-1133 or 888-304-1133
Chem Trec	800-424-9300
EPA Pesticide Hotline	800-858-7378
Massachusetts Poison Control Center	800-682-9211

## Sensitive Area Restrictions

333 CMR 11.04

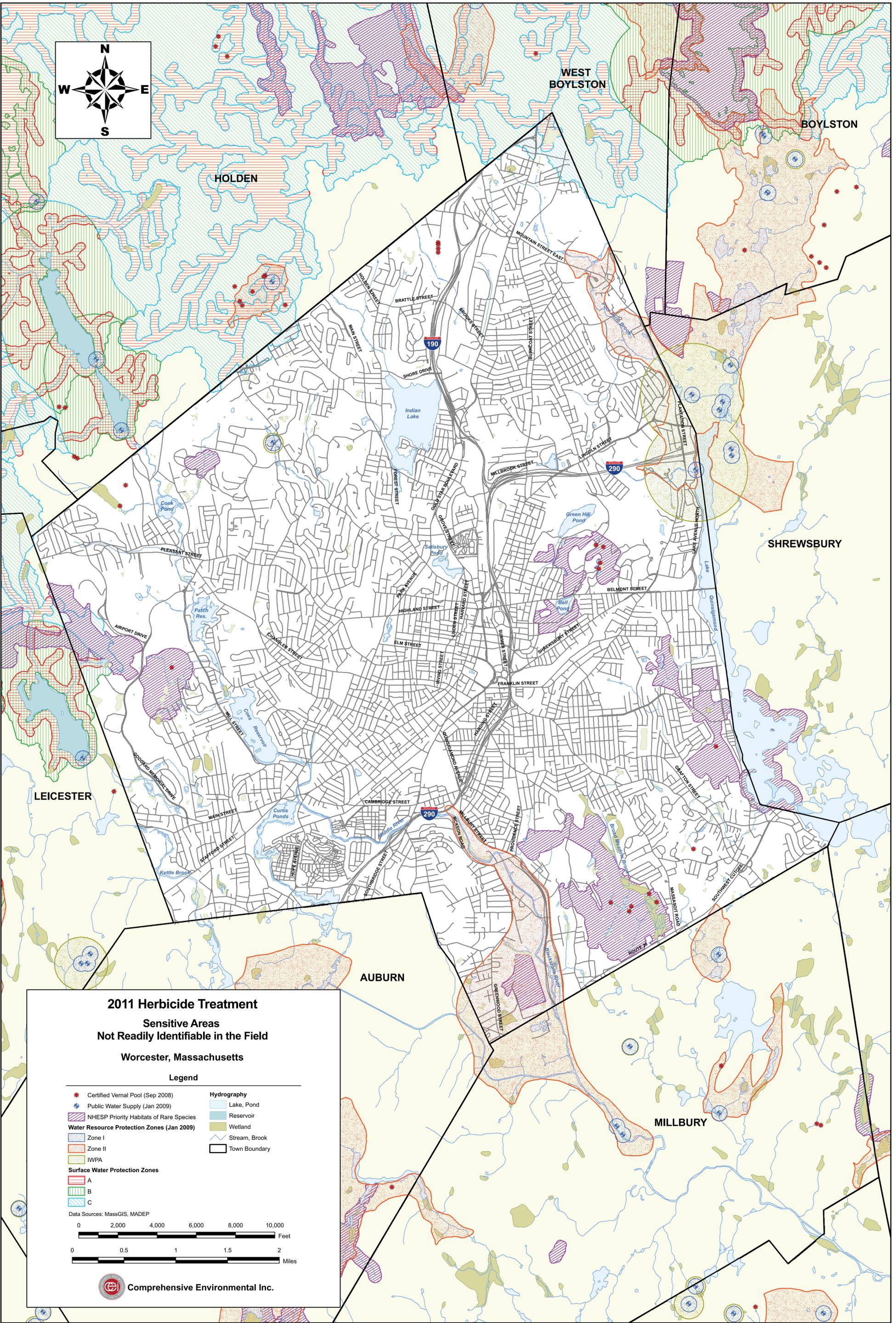
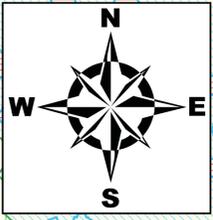
### CONTROL STRATEGIES FOR SENSITIVE AREAS

Sensitive Area	Minimum Buffer Zone (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*	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)* <sup>+</sup>	Low-pressure Foliar, CST, 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



**2011 Herbicide Treatment  
Sensitive Areas  
Not Readily Identifiable in the Field  
Worcester, Massachusetts**

**Legend**

- Certified Vernal Pool (Sep 2008)
- Public Water Supply (Jan 2009)
- NHESP Priority Habitats of Rare Species
- Water Resource Protection Zones (Jan 2009)**
  - Zone I
  - Zone II
  - IWPA
- Surface Water Protection Zones**
  - A
  - B
  - C
- Hydrography**
  - Lake, Pond
  - Reservoir
  - Wetland
  - Stream, Brook
  - Town Boundary

