

**Massachusetts Department of Conservation and Recreation
Division of Urban Parks**

Yearly Operational Plan

2010



This Yearly Operational Plan has been developed in compliance with Rights-of-Way Management regulations (333CMR 11.00)

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Section 1

General Statement of Goals and Objectives

The Department of Conservation and Recreation (DCR) Division of Urban Parkway has developed this Yearly Operational Plan (VMP) for managing vegetation along its roadways and trails, and in its parks and land holdings, to create a safe environment for the general public. This plan is the implementation of DCR's Five Year Vegetation Management Plan and developed in compliance with Rights-of-Way Management regulations (333CMR 11.00) as promulgated by the Massachusetts Department of Agricultural Resources (DAR)

Vegetation encroaching on public parkways, roads, sidewalks, paths, and trails creates hazardous conditions for the general public including, but not limited to, blocking access, hiding signs and guard rails, limiting line of sight, noxious weed hazards, restricting drainage and deteriorating road and trail beds. Parklands are affected by invasive weeds, bio-diversity is threatened and rare and endangered species are losing habitat due to overgrowing vegetation.

The goal of this plan is to establish vegetation management methodology and practices that will result in the most effective treatment with the least environmental impact. DCR wants to be very restrictive and purposeful about its herbicide usage.

In order to achieve this goal several objectives need to be met:

- Determine the target vegetation
- Establish an Integrated Pest Management (IPM) strategy
- Determine the best control methodology and practices
- Develop operational guidelines

This document details the specifics of DCR's treatment plans for this year. Where the treatment areas are, what is going to be treated, and what chemicals will be used.

The implementation of this plan will greatly benefit the general public safety and enhance the environmental quality of these lands by a reduction in pesticide use, proper use of mechanical methods and the establishment of biological controls.

Section 2 Individual representing applicant and supervising YOP

DCR Division of Urban Parks
Mat Thurlow
251 Causeway St. Suite 600
Boston, MA 02114
(617) 626-4944

Section 3 The company contracted to do the herbicide application for DCR

Northern Tree Service
PO Box 790
Palmer, MA 01069
Phone 800-232-6132

Contact Person:
Larry Bruffee
Project Manager

Section 4 Herbicides proposed, including application rates, carriers, adjuvants

Location / Target	Herbicide	Carriers or Adjuvants	Application Technique	Application Rate
Roadside/Trailside Poison Ivy, Grass, weeds	Roundup-Pro EPA Reg. No. 524-475 Escort EPA Reg. No. 352-439	None	Low Pressure Selective Foliar	1-2 qts / acre 2 oz. / acre
Roadside/Trailside Brush and hard to control invasives	Roundup-Pro EPA Reg. No. 524-475 Arsenal EPA Reg. No. 241-346 Escort EPA Reg. No. 352-439	None	Low Pressure Selective Foliar	2-4 qts / acre 1pt / acre 2 oz. / acre
Touch Up	Roundup-Pro EPA Reg. No. 524-475 Escort EPA Reg. No. 352-439	None	Low Pressure Selective Foliar	1-2 qts / acre 2 oz. / acre

Section 5 **Herbicide application techniques and alternate control procedures**

Types of application equipment or methods:

- Low pressure backpack selective foliar: A hand pumped or motorized backpack sprayer with a hand held gun or wand used to treat individual plants.
- Low pressure hydraulic pump utilizing hand gun: A gas or electric powered pump on a vehicle with a hose and gun the operator uses by hand.
- WeedSeeker® Low pressure hydraulic pump boom: A photoelectric vegetation sensing sprayer that only sprays green vegetation from a boom as it drives.

Alternative control procedures fall into two main categories, Mechanical and Biological:

Mechanical:

These methods will be employed where the use of herbicides are unacceptable due to environmental, regulatory or cost factors.

Mowing, cutting, grubbing, or otherwise removing an undesirable plant through purely mechanical means. A sub category of mechanical would be cultural controls, which include grazing, crops, and alternate land use.

Types of equipment that could be used, including but not limited to: Flail mower, Brush hog, Chain saw, Brush saws, Root wrench, Hand saws, Loppers

Biological:

Biological control is the control of undesirable vegetation through natural means. This is done through natural plant competition, predators, and disease; this control method is accomplished by manipulating the environment in such a way that you create, or jump-start, the natural biological control. An example would be encouraging low growing shrubs to out compete tall growing species or using other proven natural means to create conditions that restrict or prohibit undesirable vegetation.

Section 6

Identification of Target Vegetation

Any vegetation that grows in such a way as to create an unsafe condition or threaten the welfare of the general public will be considered undesirable, and will be subject to control under this YOP

In order for grasses, herbaceous, and woody plants to be considered undesirable they have to meet at least some of the following criteria:

1. Do they exceed an economic threshold? The economic damage they cause is more than the cost to control them.
2. Do they cause an imminent hazard to the general public whereas a person could be injured as a result of where the vegetation is growing.
3. Does the vegetation cause a future hazard to the general public if it is allowed to continue to grow where it is?
4. Will the vegetation cause detrimental harm to the environment by where it is growing? This could be invasive plants crowding out rare and endangered species, disrupting biodiversity, and generally damaging the integrity of the environment.
5. Causing damage to the physical infrastructure and investment of the DCR.

Examples of Undesirable Vegetation

Parkways:

Tall grass, weeds, and woody vegetation growing around guardrails, signs, and abutments.

Sidewalks:

Grass and tall weeds in cracks and on curbs.

Paths and trails:

Vines and woody vegetation encroaching from sides.

All areas:

Noxious and invasive weeds like Oriental Bittersweet, Multi-Floral Rose, Poison Ivy.

Section 7 Flagging methods to designate sensitive areas on the ROW

Sensitive Areas, as defined in the Rights-of-Way Management regulations (333CMR11.02) shall refer to any areas, within rights-of-way, including but not limited to the following, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects:

Sensitive Site Buffers

- a) within the primary recharge area of a public drinking water supply well;
- b) within 400 feet of any surface water used as a public water supply;
- c) within 100 feet of any identified private drinking water supply well;
- d) within 100 feet of any standing or flowing water;
- e) within 100 feet of any wetland;
- f) within 100 feet of any agricultural or inhabited area.

No Spray Areas

- a) Within 400' feet of a public water supply wellhead
- b) Within 100' feet of a public surface water supply
- c) Within a 50' radius of a private well
- d) Within 10' from the edge of standing or flowing water or wetlands

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

- Consult the appropriate reference materials and sources to determine the precise location of these areas.
- Place the boundaries of these sensitive areas on USGS geographic maps, MassGIS Street maps or GIS drawings.
- Prior to the commencement of herbicide application operations, DCR will place yellow painted arrows that point towards a “no spray” zone on streets curbs or sidewalks as necessary, yellow arrows on stakes for dirt trials.
- DCR will deploy a qualified point person to assist in identification. For applications using a vehicle a single orange traffic cone will be placed by the yellow arrow to signify where to stop the herbicide treatment. Two cones will be placed at the next yellow arrow to signify where treatment can be re-started.

Section 8 Procedures for handling, mixing and loading of herbicides

All chemicals will be handled in accordance with the manufactures label, state and federal laws. All mixing loading and storage will be done at secure DCR facilities with no mixing/loading done on site. All filling of tanks with water will be done with proper backflow devices in place.

Section 9 Emergency Plan

DCR uses contractors who are licensed responsible entities that will comply with all local state and federal regulations. DCR contractors are required to carry spill kits.

Guidelines for Responding to a Spill

1. Contain the Spill

Wearing the appropriate PPE, identify the source and stop it if possible. Contain what has spilled or is spilling by creating a dike of soil or absorbent materials from a spill kit. Refer to MSDS and product labels for more information and contact numbers.

2. Report the Spill

Once contained, or if you are unable to contain, control or absorb the spill properly **call 911** for the **local fire department**. They are the first responder in spill situations.

Report the spill to the appropriate authorities as necessary.

DEP 24-hour Spill Reporting

To report a release of oil or hazardous material, call the DEP 24-hour notification line toll-free **(888) 304-1133**

From the Boston area dial (617) 556-1133

DAR (Dept. of Agricultural Resources) Pesticide Bureau

Within 48 hours (617) 626-1700

DCR Division of Urban Parks

Mat Thurlow (617) 626-4944

3. Minor non-reportable spills must be thoroughly absorbed, shoveled, swept up and put into a leak-proof container for disposal in a legal manner. Spread activated charcoal over area to inactivate any residual material.

4. In the event of personal contact with hazardous materials:

- Remove clothing that is soaked with hazardous materials.
- Wash affected area with sufficient soap and water.
- Contact a physician or poison control center if necessary.
- Do not breath fumes of hazardous materials.

Other Helpful Numbers

Mass. Poison Center (800) 682-9211

Mass. Dept. of Public Health Center for Environmental Health Toxicology Program

For questions about exposure to pesticides. (617) 624-5757

Mass. State Police, Central Office (617) 566-4500 or 911

Chem Trec (800) 424-9300

APPENDIX A

List of DCR areas to be treated 2010

Town	DCR Property South District	Treatment Target	Treatment Method
Boston	VFW West Roxbury Pkwy Enneking Pkwy Turtle Pond Pkwy	Grass and Weeds	Low pressure boom
Boston	Stony Brook Reservation Mother Brook Reservation Chestnut Hill Reservation	Brush and invasives Poison Ivy	Low pressure backpack
Brookline	Lost Pond Reservation Hammond Pond Pkwy	Poison Ivy Grass and Weeds	Low pressure backpack
Wellesley	Leo J Martin Golf Course	Poison Ivy Invasives	Low pressure backpack
Weston	Leo J Martin Golf Course Norumbega Road	Grass and Weeds Poison Ivy, Invasives	Low pressure backpack Low pressure boom
Waltham	Charles River Reservation MetFern Cemetery	Poison Ivy Grass, Weeds	Low pressure backpack
Dedham	Wilson Mountain Reservation Cutler park Reservation Mother Brook Reservation	Poison Ivy Grass, Weeds	Low pressure backpack
Newton	Hammond Pond Reservation Saw Mill Brook Reservation Quinobequin Road Hammond Pond Pkwy	Grass and Weeds Poison Ivy, Invasives	Low pressure backpack Low pressure boom
Needham	Needham Pathway Hemlock Gorge Reservation	Brush and invasives Poison Ivy	Low pressure backpack

Town	DCR Property North District	Treatment Target	Treatment Method
Belmont	Beaverbrook	Poison Ivy	Low pressure backpack
Arlington	Mystic Valley Pkwy Mystic River Reservation	Grass and Weeds	Low pressure boom
Somerville	Alewife Brook Pkwy Mystic River Reservation	Grass and Weeds	Low pressure boom

	McGrath Obrien Hwy		
Winchester	Mystic Valley Pkwy Hillcrest Pkwy Mystic River Reservation	Grass and Weeds Poison Ivy	Low pressure boom Low pressure backpack
Lynn	Lynnway, Carroll Parkway Nahant Beach Blvd	Grass and Weeds	Low pressure boom
Milton	Blue Hills Reservation	Poison Ivy	Low pressure backpack
Medford	Fellsway East and West Mystic Valley Pkwy South Border Rd East Border Rd Woodland Rd	Grass and Weeds	Low pressure boom
Stoneham	Fellsway North Border Rd Woodland Rd Pond St. Ravine Rd Middlesex Fells Reservation	Poison Ivy	Low pressure backpack
Melrose	Lynn Fells Pkwy Middlesex Fells Reservation	Grass and Weeds	Low pressure boom
Saugus	Breakhart Reservation	Grass and Weeds	Low pressure boom
Malden	Fellsway Fellsway East	Grass and Weeds	Low pressure boom
Everett	Revere Beach Pkwy	Grass and Weeds	Low pressure boom
Chelsea	Mary OMalley Park	Grass and Weeds	Low pressure boom
Revere	Revere Beach Pkwy Ocean Avenue Winthrop Pkwy	Grass and Weeds	Low pressure boom
Winthrop	Winthrop Shore Drive	Grass and Weeds	Low pressure boom
Boston	Constitution Beach Rd Storrow Dr Park Dr Fenway Soldiers Field Rd Birmingham Pkwy Nonantum Rd	Grass and Weeds	Low pressure boom
Boston	Charles River Reservation	Poison Ivy	Low pressure backpack

Cambridge	Memorial Drive Land Blvd Obrien Hwy Fresh Pond Pkwy Alewife Brook Pkwy	Grass and Weeds	Low pressure boom
Watertown	Charles River Rd Greenough Blvd Charles River Reservation	Grass and Weeds	Low pressure boom

Town	DCR Property Harbor District	Treatment Target	Treatment Method
Hull	Hull Shore Drive Nantasket Beach Fort Revere	Grass and Weeds Poison Ivy	Low pressure boom Low pressure backpack
Hingham	Stodders Neck	Poison Ivy	Low pressure backpack
Quincy	Quincy Shore Dr Furnace Brook Pkwy Quincy Shore Reservation	Poison Ivy Grass and Weeds	Low pressure Backpack Low pressure boom
Boston	Morton St Gallivan Blvd Morrissey Blvd Day Blvd Arborway Jamaica Way	Grass and Weeds	Low pressure boom
Boston	Southwest Corridor Park	Poison Ivy Grass, Weeds	Low pressure backpack
Boston	Harbor Islands	Brush and invasives Poison Ivy	Low pressure backpack

Appendix B

Labels Attached

Round Up Pro
Arsenal
Escort

Appendix C

Maps Attached

Appendix D

Fact Sheets Attached

Glyphosate
Imazapyr
Metsulfuron Methyl

Appendix E

