



EVERSOURCE ENERGY, EASTERN & WESTERN, MA

2024 OPERATIONAL PLAN

INTEGRATED VEGETATION MANAGEMENT PROGRAM

NATURAL HERITAGE ENDANGERED SPECIES PROGRAM



Submitted by:
Eversource Vegetation Management
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SUMMARY

In compliance with the Massachusetts Department of Agricultural Resources' Rights-of-Way Regulations (333 CMR 11.00), this Operational Plan (OP) informs municipalities of Eversource Energy, Eastern & Western MA's intent to utilize an integrated vegetation management plan that includes the use of herbicides on electric rights-of-way (ROW) in 2024. Our Integrated Vegetation Management program is outlined in our five-year Vegetation Management Plan.

This OP identifies target vegetation; the affected rights-of-way and towns; the herbicides, rates, and methods of application; alternative control methods; the individual responsible for supervising the OP, and the qualified contractors that will perform the application. It explains how sensitive areas; buffer zones and sites where herbicides are either restricted or not permitted are identified, appropriately marked, treated, and protected. It addresses procedures for the mixing, handling, and loading of herbicide concentrates. Finally, it includes Herbicide Fact Sheets and Labels, a list of emergency resources and telephone numbers, and maps marked with known Sensitive Areas.

The OP process provides for a forty-five-day public review and comment period, in conjunction with the twenty-one-day municipal rights-of-way notification period. These review periods give communities an opportunity to provide information that will help identify additional areas that may require specific precautions or protection. Finally, notice will be published in general circulation newspapers at least 48 hours before the scheduled application.

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I. INTRODUCTION

In compliance with Commonwealth of Massachusetts' Rights-of-Way Vegetation Management Regulations (333 CMR 11.00) Eversource Energy, Eastern & Western MA's Operational Plan (OP) details our vegetation management program for 2024. This OP is consistent with the terms and procedures set forth in the Eversource Energy, Vegetation Management Plan's (VMP's) per 333 CMR 11.05; with the Massachusetts Pesticide Control Act (Chapter 132B); with all pertinent clauses in Chapter 85 of the Acts of 2000; with the Massachusetts Endangered Species Act (MESA; MGL c. 131 A) and regulations (321 CMR 10.00), and with all Federal and State acts and regulations that apply to right-of-way vegetation management.

Eversource delivers electricity to 1.3 million customers in 136 municipalities. Electricity is transmitted over hundreds of miles of distribution and transmission rights-of-way (ROW) throughout the western, eastern, southeastern, and cape and islands regions of Massachusetts. To ensure safe reliable electric service, Eversource must keep these ROWs free from hazards and encroachments. In this effort, the vegetation on the ROW corridors must be maintained at an early stage of plant succession (herbaceous plants and shrubs).

Using the Integrated Vegetation Management Program (IVM) described in the VMP's, Eversource's program is based on a 4-year selective herbicide application and where appropriate mechanical treatment cycle. This program allows for the safe delivery of reliable electric service and supports a healthier more diverse habitat for wildlife that depends upon early successional landscapes (See VMP's for further description of Eversource's IVM program). The VMP's can be viewed at [Transmission Vegetation Management Projects \(eversource.com\)](https://www.eversource.com/TransmissionVegetationManagementProjects)

II. CHAPTER 132B AND 333 CMR 11.00

The purpose of this chapter is to conform the laws of the commonwealth to the Federal Insecticide, Fungicide, and Rodenticide Act, Public Law 92-516, as amended, and the regulations promulgated there under and to establish a regulatory process in the commonwealth. The exclusive authority in regulating the labeling, distribution, sale, storage, transportation, use and application, and disposal of pesticides in the commonwealth shall be determined by this chapter. (*MGL 132B, Section 1*)

Chapter 132b (Massachusetts Pesticide Control Act) was created to ensure a clear and uniform set of standards for the entire Commonwealth of Massachusetts ***in order to protect the public from the negative impacts that arise from fragmented, decentralized, sets of standards***. In this effort, the Commonwealth, through the Department of Agricultural Resources (MDAR) retains the sole right to regulate the use of pesticides, including herbicides, throughout Massachusetts. MDAR takes this responsibility extremely seriously and the regulations promulgated under Chapter 132b are stricter than Federal standards.

The purpose of 333 CMR 11.00 is to establish a statewide and uniform regulatory process which will minimize the uses of, and potential impacts from herbicides in right of way on human health and the environment while allowing for the benefits to public safety provided by the selective use of herbicides (*333 CMR 11.01*).

333 CMR 11.00 is the most comprehensive rights of way regulation in New England. It requires an Integrated Pest Management (in this case IVM) approach to right of way vegetation management; the establishment of standards and procedures to prevent unreasonable risks to humans or the environment, and a multi-layered system of public and municipal notification that requests input about environmentally and culturally sensitive areas. All of this is outlined in the Eversource VMPs, annual YOPs, *The Environmental Monitor* Notice, 21-day notification, Public Water Supplier notification and 48- hour newspaper notice which serve as guides for the public, state and municipal officials, vegetation management contractors and Eversource personnel.

To ensure compliance with Chapter 132b and 333 CMR 11.00, MDAR performs routine inspections of rights-of-way treatment crews, retains chemists, and perform further tests before approving a limited list of herbicides approved for use in Sensitive Areas (pursuant to 333 CMR 11.04 (1)(d)).

As detailed in the VMP's and YOP, Eversource Energy, Eastern & Western MA's IVM program strictly adheres to all the requirements of Chapter 132b and 333 CMR 11.00. Eversource only retains herbicide application treatment contractors that hold Massachusetts' certifications and licenses to apply pesticides, which require ongoing training to maintain. All Sensitive Areas (see section V) are treated appropriately using either mechanical treatment methods or Commonwealth of Massachusetts recommended herbicides for use in Sensitive Areas. In fact, Eversource only uses these recommended herbicides on the entire length and cleared width of its ROW corridors.

Beyond the requirements of 333 CMR 11.00 and in compliance with Chapter 216 of the Acts of 2012, Eversource also notifies "abutters" (houses and businesses that abut the rights-of-way being treated in that year) within view of the ROWs before treatments begin. Treatment contractors are required to leave door hangers or talk personally with abutters which allow the contractor to answer site specific questions, identify private wells and help explain the program.

III. LOCATION OF INTENDED TREATMENTS

In 2024 Eversource plans on completing vegetation maintenance on 34 transmission and 53 distribution line ROWs as listed in Table I. Table II is a list of municipalities where an herbicide treatment will be applied as part of IVM. Table III is a list of mechanical only rights-of-way and Table IV is a list of ROWs that might need on demand/emergency mechanical only treatments.

Table I. 2024 Rights-of-Way:

Massachusetts East (EMA)		
ROW	Segment Name	Treatment Method
Electric Transmission Rights of Way		
13-13A	Sta. 446 Medway - Uxbridge RI Line	cut floor (CF), side prune (SMT) & tree removals (HZ)
7	Sta. 65 Medway - Sta. 240 Framingham	cut floor (CF), side prune (SMT) & tree removals (HZ)
8-2	Sta. 342 Sudbury - Sta. 282 Waltham	cut floor (CF), side prune (SMT) & tree removals (HZ)
3	Grid Tie Southboro - Sta. 455 Framingham - Sta. 110 W. Roxbury	cut floor (CF), side prune (SMT) & tree removals (HZ)
144	High Hill - Fisher Rd	cut floor (CF), side prune (SMT) & tree removals (HZ)
240	Kingston - Tremont	cut floor (CF), side prune (SMT) & tree removals (HZ)
343	Shootflying Hill Rd - Barnstable Switch	cut floor (CF), side prune (SMT) & tree removals (HZ)
342W	Bourne - Q Meeting Hse Rd.	cut floor (CF), side prune (SMT) & tree removals (HZ)
342E	Q Meeting Hse Rd. - Shoot Flying Hill Rd.	cut floor (CF), side prune (SMT) & tree removals (HZ)
344	Barnstable Switch - Hyannis Junction	cut floor (CF), side prune (SMT) & tree removals (HZ)
346E	Harwich Tap - Orleans	cut floor (CF), side prune (SMT) & tree removals (HZ)
346W	Barnstable Switch - Harwich Tap	cut floor (CF), side prune (SMT) & tree removals (HZ)
347	Harwich Tap - Harwich Substation	cut floor (CF), side prune (SMT) & tree removals (HZ)
349	Orleans - Wellfleet	cut floor (CF), side prune (SMT) & tree removals (HZ)
4AW	Grid Tie - Sta. 65 Medway - Sta. 447 Walpole - Sta. 146 Walpole	herbicide application
4E	Sta. 146 Walpole - Sharon Switch - Sta. 330 Stoughton - Sta. 478 Holbrook - Sta. 150 Weymouth	herbicide application
5	Sta. 211 Woburn - Grid Tie Billerica	herbicide application
6-6c	Sta. 478 Holbrook - 451 Whitman	herbicide application
142	Crystal Spring Tap - Crystal Spring Sub	herbicide application
143	NGRID - Mendall Rd Tap	herbicide application
145	Tremont - Canal	herbicide application
340	Bourne Switch - Falmouth Tap	herbicide application
341	Falmouth Tap - Falmouth Sub	herbicide application
ROW	Segment Name	Treatment Method
Electric Distribution Rights of Way		
310	Otis Sub - Hatchville	cut floor (CF), side prune (SMT) & tree removals (HZ)
311	North Falmouth Tap	cut floor (CF), side prune (SMT) & tree removals (HZ)
207	Duxbury-Brant Rock	cut floor (CF), side prune (SMT) & tree removals (HZ)
209	East Marion Sub - Tempest Knob Sub	cut floor (CF), side prune (SMT) & tree removals (HZ)
1	Framingham to Ashland	cut floor (CF), side prune (SMT) & tree removals (HZ)
Water Works	New Bedford water works R/W -Freetown	herbicide application
101	Fair Haven - Long Road	herbicide application
146	Fairhaven to Marion	herbicide application
202	West Pond- Manomet 4kV sub	herbicide application
203	West Pond- East Carver Sub	herbicide application
204	S Ply Sub - R/W 202	herbicide application
205	Dux Sub - Pine Street, Marshfield	herbicide application
201	R/W241 - Kingston Sub also includes spur to S.Dux Sub	herbicide application
210	Wareham Sub - East Wareham Tap	herbicide application
212	Buzzards Bay Sub - Onset Sub	herbicide application
215	Marshfield-Brant Rock	herbicide application
304	Falmouth - Woods Hole	herbicide application
307	Otis Sub #515 - R/W 342	herbicide application
314	Hatchville Sub - BrickKiln Rd	herbicide application
313	Sandwich Tap	herbicide application
301	Wellfleet Bulk - Truro	herbicide application
302	Hyannis - Harwich	herbicide application
303	Harwich - Goose Pond	herbicide application

Table I. 2024 Rights-of-Way (continued):

Massachusetts West (WMA)		
ROW	Segment Name	Treatment Method
Electric Transmission Rights of Way		
WT-21	Exit 6 Jct. (Fairmont Jct.) - Fairmont S/S (16H) - Pineshed S/S (23F) - Mt. Tom S/S (22C) - Midway S/S (19B) plus North Canal S/S (44P) TAP	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-22	Pochassic S/S (37R) & Atwater S/S - Pochassic/Elm Jct. - Elm S/S (22G) - Agawam S/S (16C) - West Springfield S/S (8C)	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-23	CT state line - South Agawam S/S (42E) - North Bloomfield Jct. - Silver S/S (30A) - Agawam S/S (16C)	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-24	Agawam S/S (16C) - Bear Hole Jct. - Amostown Rd. Jct. - Piper S/S (21N) - Piper Jct. - Agawam/Holyoke Jct. - Chicopee S/S (18L) - Exit 6 Jct. (Fairmont Jct.) - Shawinigan S/S (55E) - Orchard Jct. - Ludlow S/S (19S) - Belchertown/Ludlow town line str17407 plus Line 1845 TAP and Orchard S/S (27A) TAP	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-25	Berkshire Power Station - South Agawam S/S (42E) - Franconia Jct. - Hampden Jct. plus Franconia S/S (22H) TAP	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-26	CT state line str23108 - Hampden Jct. - NGRID West Hampden S/S - Country Club TAP - Chapin St. Jct. - Ludlow S/S (19S) plus TAP to West Hampden S/S	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-27	East Springfield S/S (5J) - Cadwell S/S (50F) - East Springfield Jct. - Shawinigan S/S (55E) - Monsanto (50G) plus TAP to WT-24	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-34	Granville Jct. - Tank Jct. - str22229 (WT-32)	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-12	Britton St., Chicopee. str10297 - Ferry Rd. Jct. - Midway Jct. - Mill Valley Jct. - Amherst S/S (17K) - Tilson Jct. - Podick Jct. - WT-03/WT-12 Jct. - Millers Falls Jct. - Montague S/S (21C) - Cumberland S/S (22B) plus (UMASS) Tilson S/S (10P) TAP & Podick S/S (18G) TAP	herbicide application
WT-13	Northfield S/S (16R) - NH State Line str89	herbicide application
WT-14	French King S/S (21B) - French King TAP (NGRID)	herbicide application
ROW	Segment Name	Treatment Method
Electric Distribution Rights of Way		
D58	8C22- W.Spfld, Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D47	16C11/21N4- W.Spfld, Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D44	16C12/14- W.Spfld, Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D52	16C17- Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D4	19B16- Amh,Ehmp,Gmby,Hdly	cut floor (CF), side prune (SMT) & tree removals (HZ)
D46	21N7A/8- Chicopee	cut floor (CF), side prune (SMT) & tree removals (HZ)
D48	21N7A/8- Chicopee	cut floor (CF), side prune (SMT) & tree removals (HZ)
D54	21N7B- W. Spfld	cut floor (CF), side prune (SMT) & tree removals (HZ)
D50	27A15- Ludlow	cut floor (CF), side prune (SMT) & tree removals (HZ)
D14	22B3- Greenfield/Deerfield	cut floor (CF), side prune (SMT) & tree removals (HZ)
D5	19B15- Hadley	cut floor (CF), side prune (SMT) & tree removals (HZ)
D13	Cumber-Rt.5	herbicide application
D15	Warr - Bros. Tap	herbicide application
D18	Montg - Mnt Hermn	herbicide application
D19	Montg - Franklin	herbicide application
D20	Montg - Millers falls	herbicide application
D21	Montg - Overland	herbicide application
D22	Lake Pleasant Tap	herbicide application
D23	Montg - Mtn Road	herbicide application
D1	Podick to UMASS	herbicide application
D10	Amherst - Mill St.	herbicide application
D11	Lanes Quarry - Bay Rd.	herbicide application
D42	Clark Rd-North St.	herbicide application
D40	Crane tap-Dalt.sub	herbicide application
D35	Doreen-Dalton Sub	herbicide application
D12	Cumber.-Gardnerfs	herbicide application
D16	Cumber.-Greenfield	herbicide application
D25	Plnfd-Cummingtn-Chesfld	herbicide application
D24	Deerfield - Conway	herbicide application
D68	Greenfield - Main st.	herbicide application

Table II: List of 2024 herbicide work type treatment Municipalities:

Eastern MA (EMA) municipalities:				
Abington	Acushnet	Avon	Barnstable	Bellingham
Bourne	Braintree	Brockton	Burlington	Canton
Carver	Chatham	Dartmouth	Dennis	Duxbury
Fairhaven	Falmouth	Franklin	Freetown	Harwich
Holbrook	Kingston	Marion	Marshfield	Mattapoisett
Medway	Millis	New Bedford	Norfolk	Plymouth
Randolph	Rochester	Sandwich	Sharon	Stoughton
Truro	Walpole	Wareham	Wellfleet	Weymouth
Whitman	Woburn	Yarmouth		
Western MA (WMA) municipalities:				
Amherst	Chesterfield	Chicopee	Conway	Cummington
Dalton	Deerfield	Erving	Gill	Granby
Greenfield	Hadley	Leverett	Montague	Northfield
Pittsfield	Plainfield	Shelburne	South Hadley	Sunderland
Warwick				

Table III. 2024 Cut Only Treatment Rights-of-Way:

Eastern MA (EMA)		
ROW	Line Name	Treatment Method
Electric Transmission Rights of Way		
13-13A	Sta. 446 Medway - Uxbridge RI Line	cut floor (CF), side prune (SMT) & tree removals (HZ)
7	Sta. 65 Medway - Sta. 240 Framingham	cut floor (CF), side prune (SMT) & tree removals (HZ)
8-2	Sta. 342 Sudbury - Sta. 282 Waltham	cut floor (CF), side prune (SMT) & tree removals (HZ)
3	Grid Tie Southboro - Sta. 455 Framingham - Sta. 110 W. Roxbury	cut floor (CF), side prune (SMT) & tree removals (HZ)
144	High Hill - Fisher Rd	cut floor (CF), side prune (SMT) & tree removals (HZ)
240	Kingston - Tremont	cut floor (CF), side prune (SMT) & tree removals (HZ)
343	Shootflying Hill Rd - Barnstable Switch	cut floor (CF), side prune (SMT) & tree removals (HZ)
342W	Bourne - Q Meeting Hse Rd.	cut floor (CF), side prune (SMT) & tree removals (HZ)
342E	Q Meeting Hse Rd. - Shoot Flying Hill Rd.	cut floor (CF), side prune (SMT) & tree removals (HZ)
344	Barnstable Switch - Hyannis Junction	cut floor (CF), side prune (SMT) & tree removals (HZ)
346E	Harwich Tap - Orleans	cut floor (CF), side prune (SMT) & tree removals (HZ)
346W	Barnstable Switch - Harwich Tap	cut floor (CF), side prune (SMT) & tree removals (HZ)
347	Harwich Tap - Harwich Substation	cut floor (CF), side prune (SMT) & tree removals (HZ)
349	Orleans - Wellfleet	cut floor (CF), side prune (SMT) & tree removals (HZ)
Electric Distribution Rights of Way		
310	Otis Sub - Hatchville	cut floor (CF), side prune (SMT) & tree removals (HZ)
311	North Falmouth Tap	cut floor (CF), side prune (SMT) & tree removals (HZ)
207	Duxbury-Brant Rock	cut floor (CF), side prune (SMT) & tree removals (HZ)
209	East Marion Sub - Tempest Knob Sub	cut floor (CF), side prune (SMT) & tree removals (HZ)
1	Framingham to Ashland	cut floor (CF), side prune (SMT) & tree removals (HZ)

Table III. 2024 Cut Only Treatment Rights-of-Way:

Western MA (WMA)		
ROW	Line Name	Treatment Method
Electric Transmission Rights of Way		
WT-21	Exit 6 Jct. (Fairmont Jct.) - Fairmont S/S (16H) - Pineshed S/S (23F) - Mt. Tom S/S (22C) - Midway S/S (19B) plus North Canal S/S (44P) TAP	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-22	Pochassic S/S (37R) & Atwater S/S - Pochassic/Elm Jct. - Elm S/S (22G) - Agawam S/S (16C) - West Springfield S/S (8C)	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-23	CT state line - South Agawam S/S (42E) - North Bloomfield Jct. - Silver S/S (30A) - Agawam S/S (16C)	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-24	Agawam S/S (16C) - Bear Hole Jct. - Amostown Rd. Jct. - Piper S/S (21N) - Piper Jct. - Agawam/Holyoke Jct. - Chicopee S/S (18L) - Exit 6 Jct. (Fairmont Jct.) - Shawinigan S/S (55E) - Orchard Jct. - Ludlow S/S (19S) - Belchertown/Ludlow town line str17407 plus Line 1845 TAP and Orchard S/S (27A) TAP	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-25	Berkshire Power Station - South Agawam S/S (42E) - Franconia Jct. - Hampden Jct. plus Franconia S/S (22H) TAP	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-26	CT state line str23108 - Hampden Jct. - NGRID West Hampden S/S - Country Club TAP - Chapin St. Jct. - Ludlow S/S (19S) plus TAP to West Hampden S/S	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-27	East Springfield S/S (5J) - Cadwell S/S (50F) - East Springfield Jct. - Shawinigan S/S (55E) - Monsanto (50G) plus TAP to WT-24	cut floor (CF), side prune (SMT) & tree removals (HZ)
WT-34	Granville Jct. - Tank Jct. - str22229 (WT-32)	cut floor (CF), side prune (SMT) & tree removals (HZ)
ROW	Line Name	Treatment Method
Electric Distribution Rights of Way		
D58	8C22- W.Spfld, Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D47	16C11/21N4- W.Spfld, Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D44	16C12/14- W.Spfld, Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D52	16C17- Agawam	cut floor (CF), side prune (SMT) & tree removals (HZ)
D4	19B16- Amh,Ehmp,Gmby,Hdly	cut floor (CF), side prune (SMT) & tree removals (HZ)
D46	21N7A/8- Chicopee	cut floor (CF), side prune (SMT) & tree removals (HZ)
D48	21N7A/8- Chicopee	cut floor (CF), side prune (SMT) & tree removals (HZ)
D54	21N7B- W. Spfld	cut floor (CF), side prune (SMT) & tree removals (HZ)
D50	27A15- Ludlow	cut floor (CF), side prune (SMT) & tree removals (HZ)
D14	22B3- Greenfield/Deerfield	cut floor (CF), side prune (SMT) & tree removals (HZ)
D5	19B15- Hadley	cut floor (CF), side prune (SMT) & tree removals (HZ)

Table IV. 2024 On Demand / Emergency Cut Only Rights-of-Way:

Massachusetts East (EMA)	
ROW	ROW Name
Electric Transmission Rights of Way	
4 -A,E,W	Sta. 447 Walpole - Sta. 65 Medway - Grid tie, Sta. 146 Walpole - Sta. 150 Weymouth
13-13A	Sta 447 Medway - Uxbridge RI line
15	Pilgrim - Snake Hill
350	Bourne Sw - Canal Crossing
180	EHV- Canal to Pilgrim Tap
380	EHV Canal-Bourne
280	Pilgrim Tap-Bridgewater
16	Jordan Tap to Whitman
5	Sta. 211 - Woburn - Grid Billerica
6-6c	Sta. 478 Holbrook - Sta. 451 Whitman
7	Sta 65 Medway - Sta 240 Framingham
8-2	Sta 342 Sudbury - Sta 282 Waltham
8-3	Sta 211 - Woburn - Sta. 282 Waltham
8-1	Sta. 240 Framingham - Sta. 342 Sudbury
18	Sta. 488 Chelsea - Grid Revere Line
145	Tremont to Canal
343	Shoot Flying Hill Rd. - Barnstable Switching Station
140	Acushnet to Tremont
3	455 Framingham -Grid Southboro to Sta. 110 W. Roxbury
342W	Bourne - Q Meeting Hse Rd.
342E	Q Meeting Hse Rd. - Shoot Flying Hill Rd.
240	Tremont - Kingston
10	Sta. 447 Walpole - Sta. 260 Westwood
242	Kingston - Whitman
340	Bourne - Falmouth Tap
345	Falmouth Tap - Shoot Flying Hill Rd.
244	Horse Pond Tap - Manomet
4B	Canton Tap
9	R/W 5 - Sta.375 Dragon Court
346E	Harwich - Orleans
346W	Barnstable Switching Station - Harwich Tap
347	Harwich Tap (Dennis) - West Harwich sub.
341	Falmouth Tap - Gifford St.
241	Brook St. - West Pond
144	High Hill to Fisher Road
243	Kingston - Marshfield
141	Wing Lane - Arsene
143	Montaup Tap, Ind. Pk sub NB to High Hill sub Dartmouth
344	Barnstable Switching Station - Hyannis Junction
381	345 Cross Over
14	R/W 9 - I93 Reading T/L
349	Orleans - Wellfleet
142	Crystal Spring Tap - Crystal Spring Sub

Table IV. 2024 On Demand / Emergency Cut Only Rights-of-Way (continued):

Massachusetts East (EMA)	
ROW	ROW Name
Electric Distribution Rights of Way	
Water Works	New Bedford water works R/W -Freetown
101	Fair Haven - Long Road
146	Fairhaven to Marion
NB Buis Park	2-103-103 & 2-101-101
201	R/W241 - Kingston Sub also includes spur to S.Dux Sub
202	West Pond- Manomet 4kV sub
203	West Pond- East Carver Sub
204	S Ply Sub - R/W 202
205	Dux Sub - Pine Street, Marshfield
206	R/W 205 - R/W 208, Marshfield
207	Duxbury-Brant Rock
208	Marshfield-Seaview
209	East Marion Sub - Tempest Knob Sub
210	Wareham Sub - East Wareham Tap
211	Horse Pond Tap - Buzzards Bay Sub
212	Buzzards Bay Sub - Tempest Knob Sub (Minot St)
213	Newfield-Cordage Tap
214	N Plymouth Sub - Cordage Tap
215	Marshfield-Brant Rock
304	Falmouth - Woods Hole
307	Otis Sub #515 - R/W 342
314	Hatchville Sub - BrickKiln Rd
301	Wellfleet Bulk - Truro
302	Hyannis - Harwich
303	Harwich - Goose Pond
305	West Chop - Vineyard Haven
306	Vineyard Haven - Edgartown <i>forest tap</i>
309	Barnstable Tap
310	Otis Sub - Hatchville
311	North Falmouth Tap
312	Osterville Tap
313	Sandwich Tap
319	Goose Pond - Orleans
1	Southborough to Hopkinton
2	Medway to Hopkinton

Table IV. 2024 On Demand / Emergency Cut Only Rights-of-Way (continued):

Massachusetts West (WMA)	
ROW	ROW Name
Electric Transmission Rights of Way	
WT-01	Berkshire S/S (18) - Plainfield S/S (18K) - Ashfield S/S (38A) plus Line 312 around Plainfield S/S (18K)
WT-02	NY S/L str58128 - NEPCo TAP - NEPCo Jct. - Berkshire S/S (18C)
WT-03	Ashfield S/S (38A) - Arthur's Seat Jct. - WT-03/WT-12 Jct. - Erving Jct. - Northfield S/S (16R) plus Arthur's Seat Jct. - Cumberland S/S (22B)
WT-04	Doreen S/S (19A) - Hubbard Jct. - NEPCo TAP - plus Partridge S/S (15E) TAP
WT-05	Doreen (19A) - Berkshire S/S (18C)
WT-11	Ludlow S/S (19S) - Erving Jct. - Northfield S/S (16R) plus Erving S/S TAP
WT-12	Britton St., Chicopee. str10297 - Ferry Rd. Jct. - Midway Jct. - Mill Valley Jct. - Amherst S/S (17K) - Tilson Jct. - Podick Jct. - WT-03/WT-12 Jct. - Millers Falls Jct. - Montague S/S (21C) - Cumberland S/S (22B) plus (UMASS) Tilson S/S (10P) TAP & Podick S/S (18G) TAP
WT-13	Northfield S/S - NH S/L str89
WT-14	French King S/S (21B) - French King TAP (NGRID)
WT-21	Exit 6 Jct. (Fairmont Jct.) - Fairmont S/S (16H) - Pineshed S/S (23F) - Mt. Tom S/S (22C) - Midway S/S (19B) plus HG&E TAP
WT-22	Pochassic S/S & Atwater S/S - Pochassic/Elm Jct. - Elm S/S (22G) - Agawam S/S (16C) - West Springfield S/S (8C)
WT-23	CT S/L - South Agawam S/S (42E) - North Bloomfield Jct. - Silver S/S (30A) - Agawam S/S (16C)
WT-24	Agawam S/S (16C) - Bear Hole Jct. - Amostown Rd. Jct. - Piper S/S (21N) - Piper Jct. - Agawam/Holyoke Jct. - Chicopee S/S (18L) - Exit 6 Jct. (Fairmont Jct.) - Shawinigan S/S (55E) - Orchard Jct. - Ludlow S/S (19S) - Belchertown-Ludlow T/L str17407 plus Orchard S/S
WT-25	Berkshire Power Station - South Agawam S/S (42E) - Franconia Jct. - Hampden Jct. plus Franconia S/S (22H) TAP
WT-26	CT S/L str23108 - Hampden Jct. - NGRID West Hampden S/S - Country Club TAP - Chapin St. Jct. - Ludlow S/S (19S) plus TAP to West Hampden S/S
WT-27	East Springfield S/S (5J) - Cadwell S/S (50F) - East Springfield Jct. - Shawinigan S/S (55E) - Monsanto 50G plus TAP to WT-24
WT-31	Pleasant S/S (16B) - Lee Jct./Pleasant TAP - Woodland S/S (17G) - Oswald Jct. - Oswald S/S (30B) - plus Oswald Jct. - Doreen S/S (19A) - GE S/S (14E)
WT-32	Str22228 (WT-34) - Cobble Mtn. Jct. - Pochassic Jct. - Pochassic S/S (37R) - Buck Pond S/S (34B) - Gunn TAP Jct. - Midway S/S (19B) plus Gunn S/S (15A) TAP
WT-33	CT S/L str18101 - Southwick S/S (29A) - Granville Jct. - Blandford S/S (19J) - Lee Jct./Pleasant TAP
WT-34	Granville Jct. - Tank Jct. - str22228 (WT-32)

Table IV. 2024 On Demand / Emergency Cut Only Rights-of-Way (continued):

Massachusetts West (WMA)	
ROW	ROW Name
Electric Distribution Rights of Way	
D1	Podick - UMASS
D2	Midway - Easthampton
D4	Midway - S. Amherst
D5	Midway - Hadley
D6	Strathmore - West Rd.
D7	Huntington - Chesterfield
D9	Huntinton-Rt.20
D10	Amherst - Mill St.
D11	Lanes Quarry - Bay Rd
D12	Cumber - Gardnerfils
D13	Cumber - Rt. 5
D14	Cumber - S.Deerfld
D15	Warnr. Bros.Tap
D16	Cumber - Greenfield
D18	Montg. - Mnt.Hermn
D19	Montg. - Franklin
D20	Montague - Millers Falls
D21	Montg. - Overland
D22	Lake Pleasant Tap
D23	Montg. - Mtn. Road
D24	Deerfield - Conway
D25	Pinfld - Cummingtn - Chesfld
D27	Blanford - Huntington
D28	Partridge-Rt. 7
D29	Pleasant-Donovan
D30	Doreen-Dalton Av
D31	Donovan-Woodland
D32	Woodland-Lenox
D33	Doreen - Dorchester
D34	Blanford - E. Otis
D35	Doreen - Dalton Sub
D37	Oswald - Rt. 20
D38	Oswald-E.New Lenox
D39	Pomeroy - E. New Lenox
D40	Crane tap - Dalt.sub
D41	Plesant - Fairview
D42	Clark Rd - North St.
D43	Berkshire-Frank Schnops
D44	Eastern States
D45	Piper-CT River
D45A	CT River-Chicopee
D46	Dwight Station Loop
D47	Bear Hole & Tap
D48	Paulding Tap
D49	Chicopee - Facemate
D50	Red Bridge
D51	Franconia-CL&P
D52	Agawam - Suffield St.
D54	Piper - Cayenne
D55	Southwick-Sodom
D56	Piper-Morgan
D58	Bondi's Island
D64	Silver S/S-Cooper
D65	Partridge-Dalton Av
D68	Greenfield - Main St.
D69	Center to Booth
D70	Gunn S/S - Plain Rd
D71	Poddick-Montague Rd.

IV. IDENTIFICATION OF TARGET VEGETATION FOR HERBICIDE APPLICATIONS

Pursuant to the policy and intent set forth in the Eversource VMPs, all vegetation must be removed that obscures the ROW corridors and grows tall enough to interfere with the safe, efficient, and legal operation of an electrical power line. In the wire zone, trees and brush are targeted, and native, low growing plant communities that have a mature height less than three feet are established. The allowed mature plant height may be modified, up to 15 feet in height at maturity by species, to accommodate established herbaceous or woody plant communities that not only protect the electric facility and reduce long-term maintenance, but also enhance wildlife habitat, forest ecology and aesthetic values. In the border zone, incompatible trees and brush are targeted, and the growth of native trees and shrubs that have a mature height less than 25 feet is encouraged.

The primary target is all tree species within the cleared width of the ROW; except in Priority Habitats that are under the purview of the Natural Heritage and Endangered Species Program of the Department of Fish and Game (NHESP), which will be treated on a case-by-case basis.

Examples of targets include, but are not limited to:

Alder	Cherry	Pine
Aspen	Hemlock	Maple
Beech	Hickory	Oak
Birch	Locust	Sassafras

There are more non-target vegetation species on an electric or gas ROW than targets. In fact, ROWs are one of the primary early successional plant communities remaining in New England. As a result, many plant and animal species use ROWs as their homes, feeding grounds or nurseries. Certain plant species, therefore, are generally encouraged on the ROW using an IVM program (excluding invasive plant species):

- Most herbaceous growth is acceptable and encouraged.
- Shrubs that mature less than 15 feet in height are only targets where due to their location or attributes they interfere with the function of the ROW.

Certain categories of non-tree species are targets under some circumstances, because of their location and/or their nature. Dense woody vegetation, shrubs and vines are targets where they are capable of interfering with the inspection and maintenance of the poles, wires, and along access roads, paths and gates which need to be kept clear, especially for emergencies.

Eversource intends to control plant species including invasive, poisonous plants and vines at their facilities. Invasive plant species have become an increasing concern throughout Massachusetts in areas that include ROW corridors where they can spread rapidly and move into the adjacent landscape. Eversource plans to use herbicides to spot treat poisonous plants at sites under its ROWs identified as having a high risk of posing a health hazard. This vegetation, likewise, poses a risk to the safety and health of all individuals working on or traversing a ROW and it can impede a rapid response in an emergency.

Examples of non-tree species generally considered targets, include, but are not limited to:

Autumn Olive	Multiflora Rose
Buckthorn	Oriental Bittersweet
Hawthorne	Staghorn Sumac
Honeysuckle	Poison Sumac
Japanese	Greenbriar
Knotweed	Poison Ivy

V. DEFINITION, IDENTIFICATION AND TREATMENT OF SENSITIVE AREAS

Sensitive Areas are those areas within a ROW in which public health, environmental concerns or agricultural interests warrant special protection to minimize the risk of unreasonable adverse effects.

The map(s) in Appendix I are a resource and a tool for both the public and the vegetation management crews. They contain the data necessary to identify, mark and treat Sensitive Areas appropriately.

The map(s) include known Sensitive Areas available at the printing of this YOP. Some Sensitive Areas are included in the base USGS topographic maps. The most current data available through Mass GIS such as public water suppliers, certified vernal pools, etc. and any data that Eversource has collected to date on areas such as private wells are added on top of the USGS data. At the time of treatment, any additional Sensitive Areas collected will be added to the maps utilized by our vegetation management contractors. Please note that Zone II's and limited spray areas are not mapped since Eversource Energy, will only use herbicides approved for use within this type of Sensitive Area in their 2024 IVM program.

There is one type of Sensitive Area not included on the maps that we are not authorized to publish: the locations of the Priority Habitats of state listed species as regulated by the Natural Heritage and Endangered Species Program (NHESP) of the Division of Fisheries & Wildlife. A map layer of Priority Habitats is available to the general public at <https://www.mass.gov/orgs/massgis-bureau-of-geographic-information>, but it is neither specific to areas of concern for herbicide applications nor does it include data on the individual species since the exact location and details of their habitat is protected. Please be assured that we follow all necessary precautions to stay in compliance with 321 CMR 10.00 and this YOP was approved by NHESP.

Prior to any herbicide application, Sensitive Areas will be identified and when necessary marked in the field by an experienced vegetation management treatment crew point person, by individuals trained in the identification of Sensitive Areas that require the use of GIS (geographic information systems) and GPS equipment, and/or by a NHESP approved botanist trained in the delineation of state-listed species.

Two simple descriptions guide the complex identification of the Sensitive Areas listed in 333 CMR 11.02: *Readily identifiable in the field* and *Not readily identifiable in the field*:

- A. *Readily identifiable in the field areas* will be treated and marked according to all applicable restrictions listed in 333 CMR 11.00 and the Eversource Energy, 5-year VMP's.
- B. *Not readily identifiable in the field areas* are identified by the use of the data marked on our maps and additional data collected in the YOP and notification processes before the time of treatment.

Eversource and contractor personnel assigned the task of identifying Sensitive Areas in the field will use the following sources and methods:

- A. Massachusetts Department of Environmental Protection (DEP) watersupply maps/GIS mapping layers available through Mass GIS
- B. Massachusetts Department of Agricultural Resources (MDAR) records of identified private wells along the ROW.

- C. Correspondence and input from municipalities within the consecutive forty-five-day YOP and twenty-one-day municipal ROW notification review and comment periods and the 48-hour newspaper notification
- D. Correspondence and input from Eversource's abutter notification procedure
- E. A point person who precedes the treatment crew verifying identified Sensitive Areas and any additional areas that may require special precautions.

The following section details some of the Sensitive Areas that require special attention, particularly those that are classified as either no spray or *not readily identifiable in the field*:

A. Limited Spray Areas:

Per 333 CMR 11.02, the following need to be identified in the field, require the use of herbicides on the *MDAR Rights-of-Way Sensitive Area Materials List*, and time restrictions between herbicide applications (see Appendix II, Sensitive Area Table). Please note that for 2024 IVM herbicide applications, Eversource is only using Sensitive Area approved herbicides on our entire ROW system:

- (a) any Zone II or IWPA
- (b) a distance of between 100 feet and 400 feet of any Class A Surface Water Source
- (c) a distance of between 10 and 200 feet of any tributary or associated surface water body where the tributary or associated surface water body runs outside the Zone A for the Class A surface water source
- (d) a lateral distance of between 100 and 200 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake
- (e) a distance of between 50 and 100 feet of any identified Private Well
- (f) a distance of between 10 and 100 feet of any Wetlands or Water Over Wetlands
- (g) a distance of between 10 feet from the mean annual high water line of any river and the outer boundary of the Riverfront Area
- (h) a distance of between ten feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat
- (i) a distance of 100 feet of any Agricultural or Inhabited Area.

Please Note that "(f)" is modified by the MDAR (formerly Department of Food and Agriculture) *Decision*, dated October 12, 1995, concerning the wetland impact study conducted pursuant to 333 CMR 11.04(4)(c)(2). According to the *Decision*, Eversource may use herbicides within wetlands except on or within 10 feet of standing or flowing water (item "g" in the *no-spray areas* below was removed from the no spray list for utilities because it does not apply for the same reason).

B. No-Spray Areas:

Again, quoting from 333 CMR 11.02 the following no-spray areas need to be identified:

No-Spray Area, any area that is both within a Right-of-Way and within:

- (a) any Zone I
- (b) 100 feet of any Class A Surface Water Source
- (c) 100 feet of any tributary or associated surface water body where the

- tributary or associated surface water body runs within 400 feet of a Class A surface water source
- (d) 10 feet of any tributary or associated surface water body where the tributary or associated surface water body is at a distance greater than 400 feet from a Class A surface water source
- (e) a lateral distance of 100 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake
- (f) 50 feet of any identified Private Well [within 100 feet of the ROW]
- ...
- (h) 10 feet of the mean annual high-water line of any river
- (i) 10 feet of any Certified Vernal Pool.

C. Identification and Treatment of Private Drinking Water Supplies

No herbicide treatments will take place within fifty feet of any identified private wells located within one hundred (100) feet of a ROW. Eversource updates its private well records based on available data.

Municipalities should assist in the identification process and the MDAR will be consulted again prior to the treatment in an attempt to keep the private drinking water supply information up to date.

Identified private drinking supplies within one hundred (100) feet of a ROW will be permanently recorded on appropriate maps.

D. State-Listed Species Habitat

Eversource recognizes the importance of the Massachusetts Endangered Species Act, M.G.L.C. 131 A, and its significance to ROW vegetation management. Eversource will comply with all applicable portions of this Act and the regulations promulgated thereunder. Eversource will also follow the rules and prohibitions directed at human activities which Take Species or alter their Significant Habitat (as of this printing there are no designated Significant Habitat in Massachusetts).

321 CMR 10.14, Massachusetts Endangered Species Act Regulations, Part II Exemptions and 333 CMR 11.04(3)(a-c) exempts utility ROW vegetation management from the permit process under the following conditions:

- (12) The management of vegetation within existing utility rights-of-way provided that the management is carried out in accordance with a vegetation management plan approved in writing by the Division prior to the commencement of work for which a review fee shall be charged, the amount of which shall be determined by the commissioner of administration under the provisions of M.G.L. c.7, § 3B...

To comply with exemption 10.14(12), Eversource submits this YOP to the NHESP for review.

The NHESP has delineated areas as Priority Habitat based on the "Best Scientific Evidence Available" to protect State-listed species from a "take." Under the approval process, details about the Priority Habitat of state-listed species that might be affected by our activities and management recommendations are shared with Eversource under strict confidentiality agreements. Using this data and best management practices, Eversource and contract personnel will follow the appropriate vegetation management treatment methods within these sensitive areas taking all

practical means and measures to modify ROW vegetation management procedures to avoid damage to state-listed species and their habitat.

To identify Priority Habitats, Eversource personnel, NHESP approved review botanists and vegetation management crews must use proper identification procedures. Contractors are, therefore, required to train their personnel to recognize the location of Priority Habitats using one of the following tools: paper maps, GPS coordinates and/or GIS systems.

VI. PROPOSED HERBICIDE TREATMENT METHODS

Under Eversource's IVM program, combined with mechanical "prep-cutting," mowing and side-trimming activities, herbicide applications will be applied on foot using selective low pressure foliage treatments with backpack sprayers and cut stump or basal treatments. Experienced, Massachusetts licensed applicators will perform the selective herbicide treatments under the direct on-site supervision of a certified applicator as required by Chapter 132B.

Eversource's herbicide program is a selective program scheduled to sustain acceptable vegetation control at minimal application rates. Using backpack sprayers, small amounts of herbicide are applied directly to the leaves, stumps, or bark of the target vegetation. The average per acre rate of herbicide mix for Eversource's foliar program is under 5 gallons per acre and the actual amount of applied active ingredient is in the pints per acre range.

Eversource also chooses herbicide formulations that are low in acute toxicity, do not bio-accumulate and as applied, have a short half-life with low soil mobility (see VMP's, Bibliography). Above and beyond the review by the Federal EPA, these herbicides are all carefully reviewed jointly by MDAR and the Massachusetts Department of Environmental Protection for use in "limited spray" sensitive areas (including Zone IIs). Eversource takes this one step further and only uses sensitive area approved herbicides on their entire right-of-way system.

A. Methods:

Eversource and contract personnel will utilize the most appropriate technique for the vegetation species, height, density, site, and mandated restrictions. These methods as described in detail in the Eversource 5-year VMP's are briefly reviewed below:

Low Volume Foliage Techniques utilize hand-operated pumps or motorized, backpack sprayers. The motorized, backpack sprayer produces an air current that delivers small amounts of herbicide mixture from a portable spray tank to the target vegetation. The low-pressure hand-pump sprayer uses a column of water. In both cases, the amount of herbicide solution applied only dampens or lightly wets the target vegetation.

Low-Volume Stem Basal: the selective application of herbicides to the lower 6"-8" of the plant stem. The herbicide concentration is applied with low-pressure, backpack sprayers with special wand attachments and positive shut-off nozzle tips with small orifices.

Cut Stump Surface Treatment (CST): the application of an herbicide mixture to the cut surface of a stump immediately following or during a cutting operation. Application equipment includes low-volume, backpack, hand-pump sprayers; handheld squirt bottles; paintbrushes, or sponge applicators.

B. Guidelines:

1. All Sensitive Area restrictions will be followed.
2. Foliar and Basal treatments are used within the cleared width of the ROW for tree and shrub target species below 12 feet in height.
3. CST treatments are used in conjunction with hand-cutting and in situations including but not limited to trees and shrubs that cannot be foliar treated, at road buffers, and around structures such as poles and gates.
4. Only mechanical treatment methods will be used in *no spray* Sensitive Areas, including but not limited to hand cutting, trimming, and mowing.

C. Treatment of Wetlands

Herbicide applications in wetlands will be performed in accordance with 333 CMR 11.04 (4)(c)(2) relative to ROW management. Targets will be selectively treated with herbicides on the MDAR's *Sensitive Area Material List* and will not be applied within ten (10) feet of standing or flowing water.

D. Treatment of State-Listed Priority Habitats

All vegetation management activities will be completed in compliance with the Massachusetts Endangered Species Act (MESA; MGL c. 131 A) and its regulations, 321 CMR 10.00.

VII. PROPOSED HERBICIDES, CARRIERS, ADJUVANTS AND RATES

In 2024 only the Commonwealth of Massachusetts recommended herbicides listed below for use in Sensitive Areas—pursuant to 333 CMR 11.04 (1)(d)—will be used on the entire length and cleared width of Eversource Energy ROW corridors, in compliance with all labeled directions.

Table V. Tank Mixes for Low Volume Foliar Applications:

Tank Mix #1 for Low Volume Foliar (LVF) Treatment Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Krenite S	Ammonium salt of fosamine	42750-247	6-10%	32-128 oz.
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	2-4 oz.	0.125-0.8 oz.
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	0.125%-0.5%	2-8 oz.
Induce, Clean Cut, Methylated Seed Oil (MSO) ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%	1-16 oz.
Point Blank, Clasp, or equivalent drift retardant	n.a.	n.a.	0.125%-0.5%	1-2 oz.
Carrier: Water	n.a.	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15				

Tank Mix #2 for Low Volume Foliar (LVF) Treatment Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Rodeo or Roundup Pro	Glyphosate	62719-324 or 524-475	3-5%	16-128 oz.
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	2-4 oz.	0.125-0.8 oz.
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	0.125%-0.5%	2-8 oz.
Induce, Clean Cut, MSO ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%	1-16 oz.
Point Blank, Clasp, or equivalent drift retardant ²	n.a.	n.a.	0.125%-0.5%	1-2 oz.
Carrier: Water	n.a.	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15				

Tank Mix #3 for Low Volume Foliar (LVF) Treatment Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Milestone	Amino Pyralid-Tripromine	62719-519	0.125%-0.33%	1-6 oz.
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	2-4 oz.	0.125-0.8 oz.
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	0.125%-0.5%	2-8 oz.
Induce, Clean Cut, Methylated Seed Oil (MSO) ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%	1-16 oz.
Point Blank, Clasp, or equivalent drift retardant	n.a.	n.a.	0.125%-0.5%	1-2 oz.
Carrier: Water	n.a.	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15				

Tank Mix #4 for Low Volume Foliar (LVF) Treatment Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	2-4 oz.	0.125-0.8 oz.
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	0.125%-0.5%	2-8 oz.
Induce, Clean Cut, MSO ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%	1-16 oz.
Point Blank, Clasp, or equivalent drift retardant ²	n.a.	n.a.	0.125%-0.5%	1-2 oz.
Carrier: Water	n.a.	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15				

Tank Mix #5 for Low Volume Foliar (LVF) Treatment Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Garlon 4 Ultra	Triclopyr	62719-527	2-4%	12-64oz
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	2-4 oz.	0.125-0.8 oz.
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	0.125%-0.5%	2-8 oz.
Induce, Clean Cut, MSO ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%	1-16 oz.
Point Blank, Clasp, or equivalent drift retardant ²	n.a.	n.a.	0.125%-0.5%	1-2 oz.
Carrier: Water	n.a.	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15				

Tank Mix # 6 for Low Volume Foliar (LVF) Treatment Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Garlon 4 Ultra	Triclopyr	62719-527	2-4%	12-64oz
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	2-4 oz.	0.125-0.8 oz.
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	0.125%-0.5%	2-8 oz.
Induce, Clean Cut, MSO ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%	1-16 oz.
Point Blank, Clasp, or equivalent drift retardant ²	n.a.	n.a.	0.125%-0.5%	1-2 oz.
Carrier: Water	n.a.	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15				

Table VI: Tank Mix for Poison Ivy, Vines, and Invasive Species

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo, Aquaneat, Roundup Pro, or Roundup Custom ^{4,5}	Glyphosate	62719-324, 228-365, 524-475, 524-343	2-5%
Garlon 4 Ultra	Triclopyr	62719-527	2-4%
Escort XP or Patriot	Metsulfuron-Methyl	432-1549 or 228-391	1.25-4 oz.
Induce, Clean Cut, MSO ³ , or Aqua Fac or equivalent surfactant ²	n.a.	n.a.	0.125%-1%
Point Blank, Clasp, or equivalent drift retardant ²	n.a.	n.a.	4-16 oz.
Carrier: Water	n.a.	n.a.	n.a.
Gallons per acre – 3 to 15			

Table VII. Tank Mixes for Cut Surface Treatment (CST) Applications:

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)	Estimated Application Rate Per Acre
Rodeo, Aquaneat, Roundup Pro, or Roundup Custom ^{4,5}	Glyphosate	62719-324, 228-365, 524-475, 524-343	40% to 50%	Per density of target stems
Arsenal Powerline or Polaris ¹	Imazapyr	241-431 or 228-534	3%-5% (mixed with Rodeo)	Per density of target stems
Carrier: Water or Windshield Washing Fluid	n.a.	n.a.	n.a.	n.a.

Table VIII. Tank Mixes for Low-Volume Basal or Cut Surface Treatment (CST) Applications:

Tank Mix #1 Low Volume Basal or Cut Surface Treatments (CST) Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals.)	Estimated Application Rate Per Acre
Garlon 4 Ultra	Triclopyr	62719-527	20%-30%	Per density of target stems
Polaris	Imazapyr	228-534	3%-5% (mixed with Garlon 4 Ultra)	Per density of target stems
Carrier: Arborchem's low odor basal oil or Aquimix Plus basal oil with dye or equivalent ²	n.a.	n.a.	n.a.	n.a.
Maximum of 8 gals. Per acre				

Tank Mix #2 Low Volume Basal or Cut Surface Treatments (CST) Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals.)	Estimated Application Rate Per Acre
Garlon 4 Ultra	Triclopyr	62719-527	20%-30%	Per density of target stems
Carrier: MSO ³	n.a.	n.a.	n.a.	n.a.
Maximum of 8 gals. Per acre				

1 – Imazapyr will not be applied on the same right-of-way in two consecutive years

2 – Equivalent surfactants, drift retardants, and basal oils will be used if those listed are no longer available or more effective alternatives become available

3 -Methylated Seed Oil (MSO) will be labeled for wetland uses

4 4- Roundup Custom ATU will only be used if added to the Massachusetts Sensitive Materials List

5 5- Additional Glyphosate products may be substituted depending on the availability of products or if additional products become available

VIII. ALTERNATIVE MECHANICAL CONTROL TECHNIQUES

Areas not treated or prohibited from herbicide use, such as protective buffers for Sensitive Areas, will be maintained mechanically according to the specifications in the VMP's. The following is a brief review of these methods:

Hand Cutting: the use of chain and brush saws to remove the stem and/or branches from the plant's root system; can be combined with CST except in no-chemical restricted areas.

Mowing: the cutting, severing, or shattering of vegetation by large rotary or flail mowers.

Side Pruning: side pruning or removal of encroaching tops and/or branches of trees growing on or near the ROW's and access roads.

IX. COMPANIES THAT MAY PERFORM THE HERBICIDE TREATMENT

Vegetation Control Service, Inc.
2342 Main Street
Athol, MA 01331
(978) 249-5348

Stanley Tree
275 George Washington Hwy
Smithfield, RI 02917
401-231-8733

Tree Tech
6 Springbrook Rd.
Foxboro, MA 02035
(888) 873-3832

Enviro Arbor Solutions
1695 Lantana Ave., Suite B
Englewood, FL 34224
(678) 787-2941

Lewis Tree Service, Inc
300 Lucius Gordon Drive
West Henrietta, NY 14586
(585) 436-3208

BluRoc
15 Atwood Dr, Ste 301
Northampton, MA 01060
413-461-3970

Northern Tree Service
1290 Park St.
Palmer, MA 0106
(413) 522-4155

Lucas Tree
636 Riverside St.
Portland, ME 04104
(888) 845-7870

North Eastern Tree
1000 Pontiac Ave.
Cranston RI, 02920
(401) 941-7204

Asplundh Tree
708 Blair Mill Rd.
Willow Grove, PA 19090
(800) 248-8733

X. INDIVIDUAL RESPONSIBLE FOR SUPERVISING THE OPERATION PLAN

William Hayes
Manager
Eversource Energy
Transmission Vegetation Management
247 Station Drive, SW-B1036
Westwood, MA 02090-9230
781-441-3932 (office)

XI. HERBICIDE FACT SHEETS

Herbicide Fact Sheets prepared and provided by the MDAR, explain technical information relative to the herbicide concentrates proposed for use during the 2024 treatment cycle. These are included in Appendix III, along with the manufacturer's labels in Appendix IV.

XII. PROCEDURES FOR HANDLING, MIXING AND LOADING HERBICIDE CONCENTRATES

All herbicides will be handled, mixed, and applied strictly according to *Label Instructions* and in compliance with all applicable federal and state laws and regulations. If possible, herbicide mixing should be done at the contractor's facilities and extreme care shall be exercised during all mixing, handling, and loading 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.

XIII. EMERGENCY RESOURCES

Eversource contracts with independent, professional, certified herbicide applicators that are responsible for the containment, clean up and reporting of chemical spills or accidents. The following is a guide to the information sources that, according to various regulations, must be available to the treatment crew in the event of a chemical spill or emergency:

- A. Technical Reference Materials:
 - a. Product Label
 - b. Product Material Safety Data Sheet (SDS)
 - c. Product Fact Sheet, if available

B. Table IX. Herbicide Manufacturers:

MANUFACTURER	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Albaugh Inc.	(800) 247-8013	
BASF Corporation	(800) 832-4357	
ENVU and Bayer Environmental Science	(800) 334-7577	
Corteva AgriScience	(800) 992-5994	
Nufarm	(877) 325-1840	
Rainbow Treecare	(877) 272-6747	

C. Table X. State Agencies:

STATE AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts Pesticide Bureau	(617) 626-1700	A.S.A.P. (within 48 hours)
Massachusetts Department of Environmental Protection, Emergency Response Section	DEP 24 Hour Contact: (888) 304-1133	For emergencies involving reportable quantities of hazardous materials; required info: City/town, street address, site name (if applicable), material
	Southeast Region: (508) 946-2700	
	Northeast Region: (978) 694-3200	
	Western Region: (413) 784-1100	
	Central Region: (508) 792-7650	
Massachusetts Dept. of Public Health, Bureau of Env. Health Assessment Toxicology Program	(617) 339-8351	
Massachusetts Poison Information Centers	(800) 682-9211	For medical emergencies involving suspected or known pesticide poisoning symptoms

D. Table XI. Emergency Services:

EMERGENCY SERVICE	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts State Police, Central Office	617-566-4500 or 911	
Local Fire / Police Dept.	911	
Chem Trec	800-424-9300	
Clean Harbors	800-OIL-TANK	
Pesticide Hotline	800-858-7378	PST: 8:00 am to 12:00 pm, Web: www.NPIC.orst.edu

E. Eversource contact in the case of a spill or accident is:

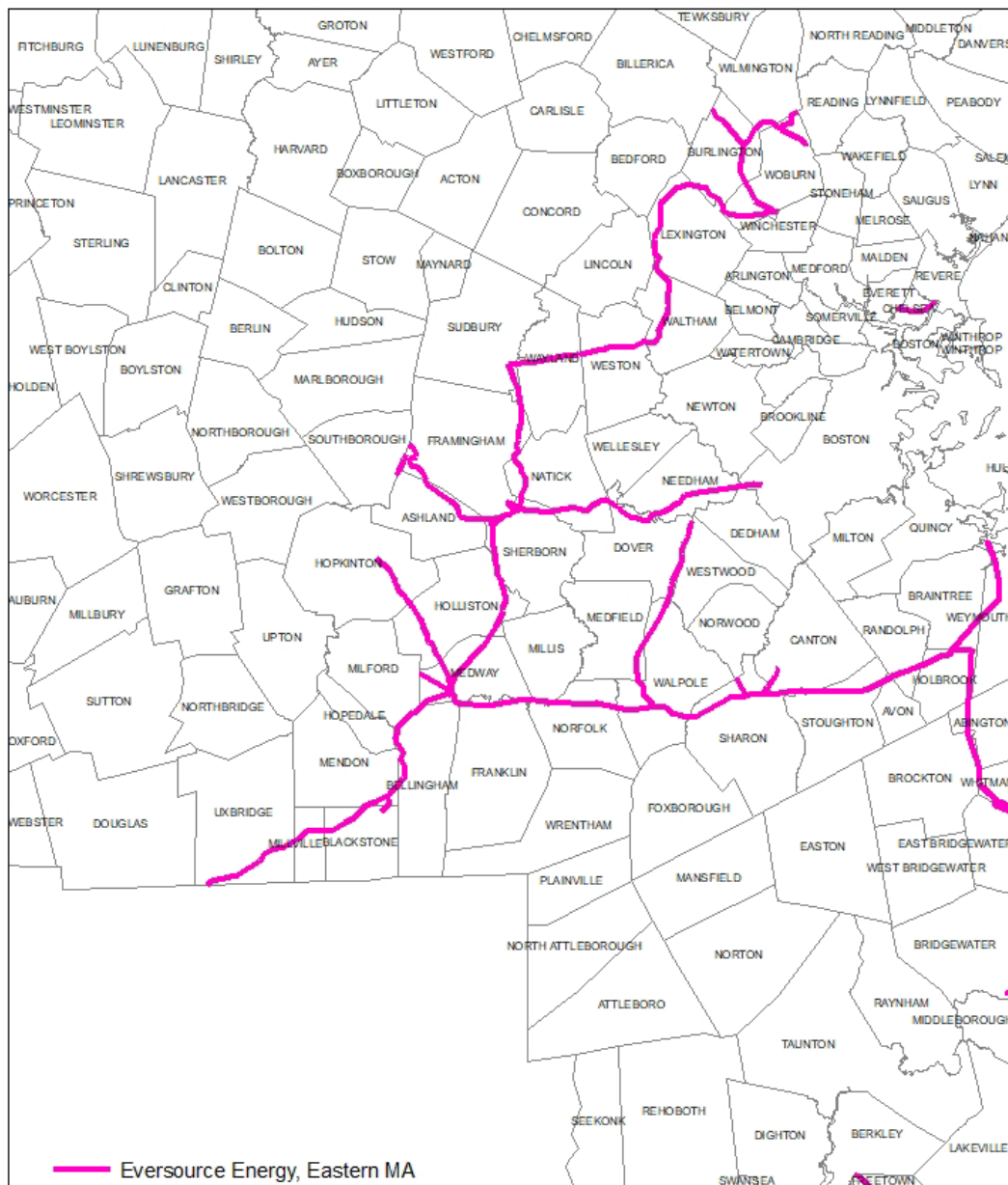
System Control
Eversource
247 Station Drive
Westwood, MA 02090-9230
(617)-541-7858

F. Table XII. Local Emergency Numbers:

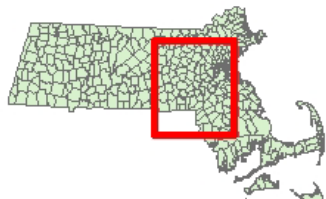
Non-911 Emergencies Services for Eversource Electric Municipalities

Town	Board of Health	Town/City Hall	Town	Board of Health	Town/City Hall
Acushnet	(508) 998-0275	(508) 998-0200	Marion	(508) 748-3530	(508) 748-3500
Barnstable	(508) 862-4644	(508) 862-4610	Marshfield	(781) 834-5558	(781) 834-5563
Beckett	(413) 623-8934	(413) 623-8934	Mashpee	(508) 539-1426	(508) 539-1400
Blanford	(413) 848-4279 x 401	(413) 848-4279	Medway	(508) 533-3206	(508) 533-3200
Bourne	(508) 862-4644	(508) 862-4610	Natick	(508) 647-6460	(508) 647-6400
Burlington	(781) 270-1955	(781) 270-1600	New Bedford	(508) 991-6199	(508) 979-1400
Canton	(781) 821-5021	(781) 821-5000	Otis	(413) 269-0100 x129	(413) 269-0100
Chesterfield	(413) 296-4771	(413) 296-4741	Pembroke	(781) 293-2718	(781) 293-3844
Duxbury	(781) 934-1105	(781) 934-1100	Pittsfield	(413) 499-9411	(413) 499-9361
East Bridgewater	(508) 378-1612	(508) 378-1601	Plymouth	(508) 747-1620 x118	(508) 747-1620 x106
Easthampton	(413) 529-1400 x430	(413) 529-1400 x460	Plympton	(781) 585-7000	(781) 585-2700
Falmouth	(508) 495-7485	(508) 548-7611	Rochester	(508) 763-3871 x15	(508) 763-3871 x10
Framingham	(508) 532-5470	(508) 532-5400	Russell	(413) 862-4791	(413) 862-4791
Granville	(413) 357-8585	(413) 357-8585	Sandwich	(508) 888-4200	(508) 888-5144
Halifax	(781) 293-6768	(781) 293-1734	Sharon	(781) 784-1510	(781) 784-1515
Hanson	(781) 293-3138 x122	(781) 293-2131 x100	Sherborn	(508) 651-7852	(508) 651-7850
Holliston	(508) 429-0605	(508) 429-0601	Southampton	(413) 529-1003	(413) 529-0106
Holyoke	(413) 322-5595	(413) 322-5510	Southwick	(413) 569-1212	(413) 569-3137
Hopkinton	(508) 497-9725	(508) 497-9700	Sudbury	(978) 443-2209 x1379	(978) 639-3381
Huntington	(413) 512-5211	(413) 512-5200	Waltham	(781) 314-3305	(781) 314-3100
Kingston	(781) 585-0503	(781) 585-0500	Wareham	(508) 291-3100 x3197	(508) 291-3100
Lee	(413) 243-5540	(413) 243-5500	Wayland	(508) 358-3617	(508) 358-7755
Lenox	(413) 637-5500	(413) 637-5500	Westfield	(413) 572-6210	(413) 572-6200
Lexington	(781) 862-0500 x237	(781) 862-0500	Whitman	(781) 618-9755	(781) 618-9701
			Woburn	(781) 932-4407	(781) 932-4400

APPENDIX I:
Maps



— Eversource Energy, Eastern MA



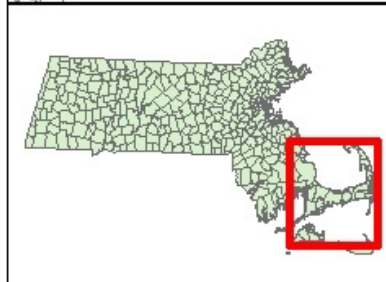
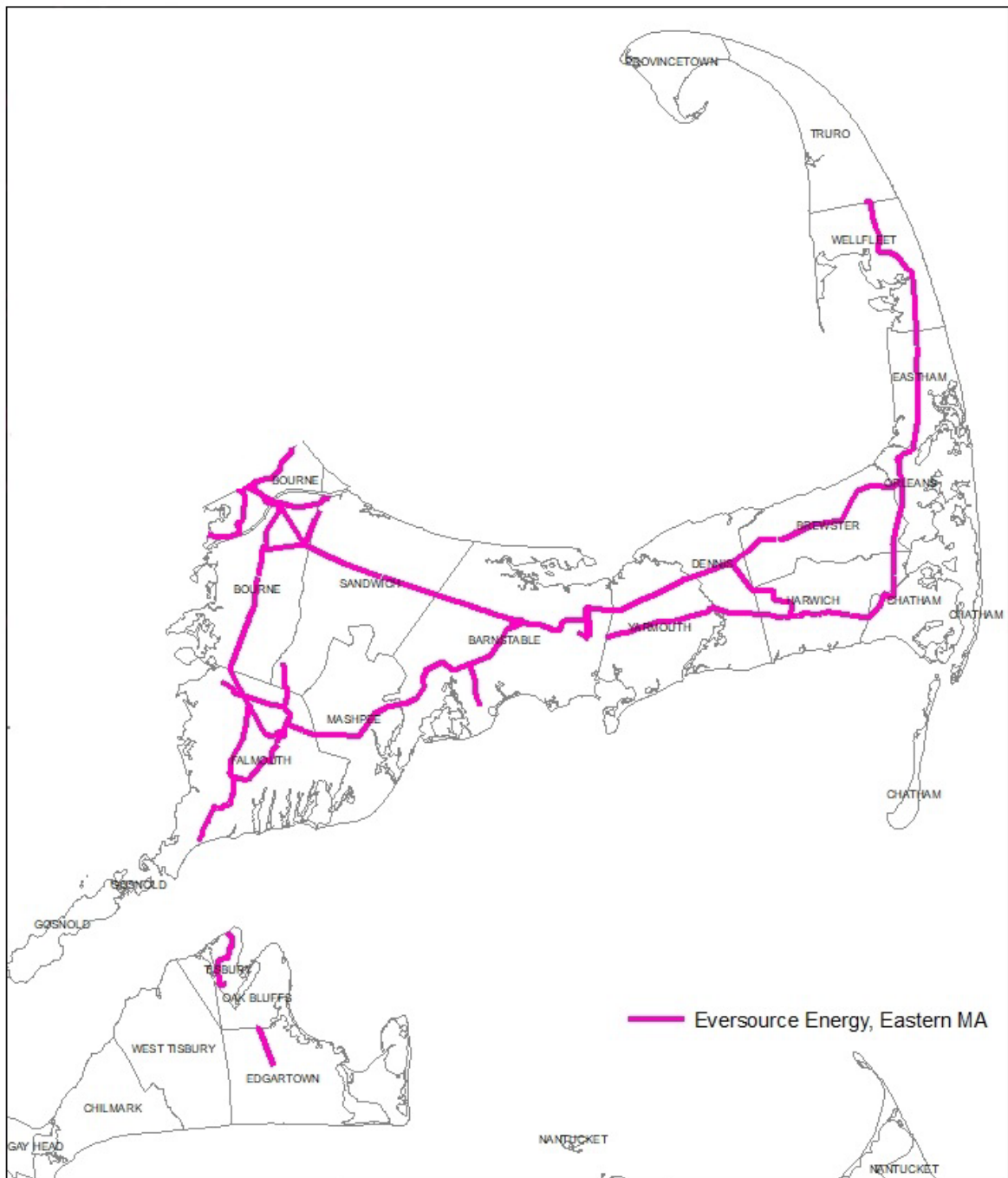
Eversource Energy Eastern, MA System Map

Map 1 of 2

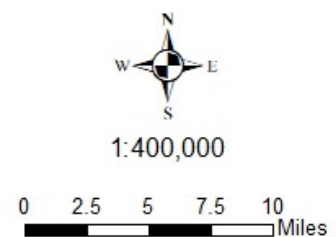


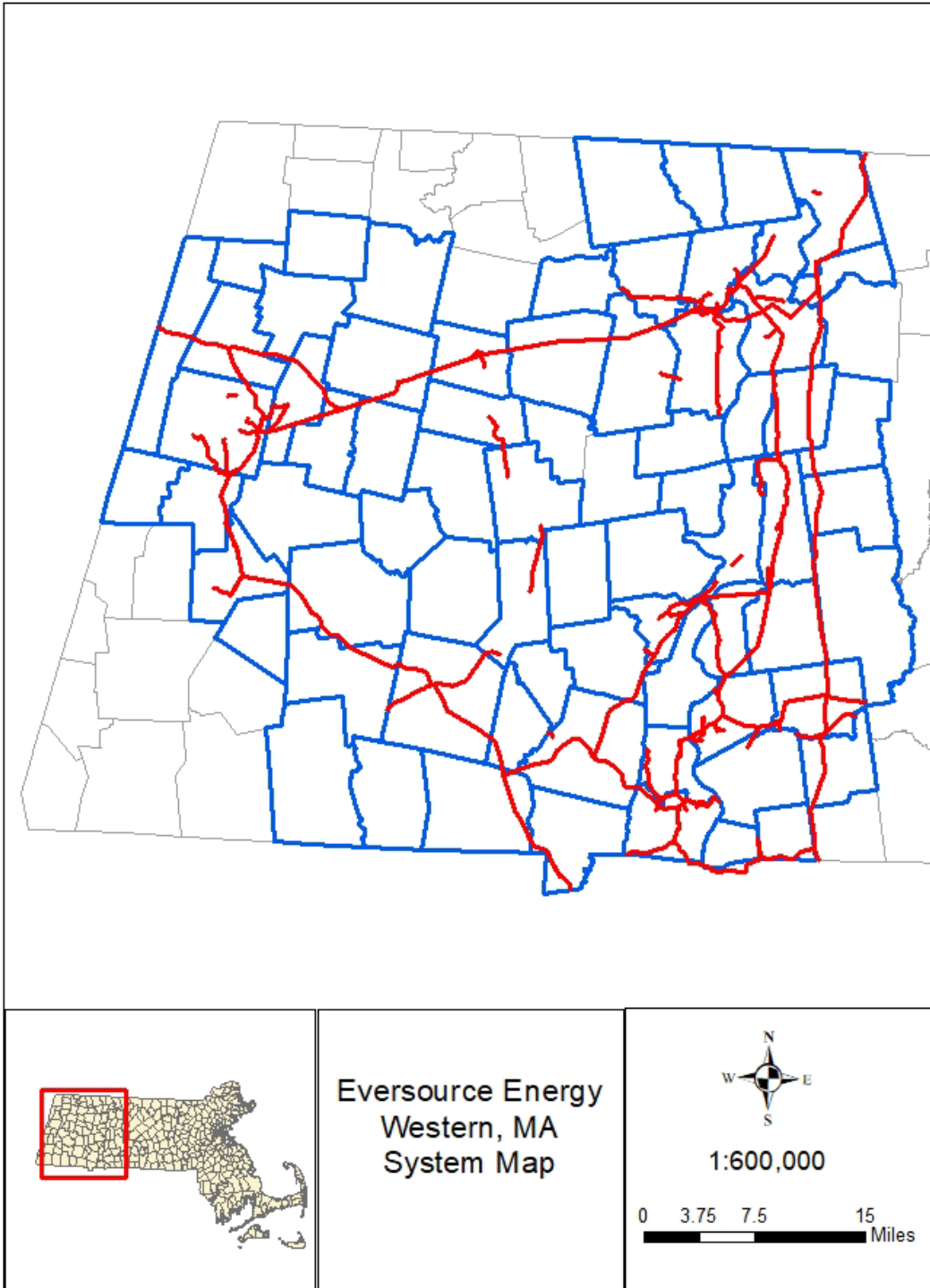
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0 2.5 5 7.5 10 Miles



Eversource Energy Eastern, MA System Map





APPENDIX II:
Sensitive Area Table

CONTROL STRATEGIES FOR SENSITIVE AREAS[#]

Sensitive Area	No-Spray and Limited Spray Areas (feet)	Control Method	Restriction Code
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or ½ mile radius	Mechanical, Recommended Herbicides*	24 months
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	24 months
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	24 months
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Recommended Herbicides	24 months
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Recommended Herbicides	24 months
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Recommended Herbicides	24 months
Surface Waters	10'	Mechanical Only	None
	10'-100'	Recommended Herbicides	12 months
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Recommended Herbicides	12 months
Wetlands	100' (treatment in wetlands permitted up to 10' of standing water)* ⁺	Low-pressure Foliar, CST, Basal Recommended Herbicides	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 written approval per 321 CMR 10.14(12)	
Priority Habitat	No treatment without written approval per 321 CMR 10.14(12)		

Restrictions "24 Months": A minimum of twenty-four months shall elapse between applications

"12 Months": A minimum of twelve months shall elapse between applications

*Massachusetts recommended herbicides for sensitive sites

⁺Per "Decision Concerning the Wetlands Impact Study"

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

**APPENDIX III:
Herbicide Fact Sheets**

[HTTPS://WWW.MASS.GOV/SERVICE-DETAILS/RIGHTS-OF-WAY-SENSITIVE-AREA-MATERIALS-LIST](https://www.mass.gov/service-details/rights-of-way-sensitive-area-materials-list)

APPENDIX IV: Herbicide Labels

ARSENAL POWERLINE
WWW.CDMS.NET/LDAT/LD86K002.PDF

ESCORT XP:
[ESCORT XP 1 LB 85796941C 210224AV1 ETL 081821 \(CDMS.NET\)](http://ESCORT.XP.1.LB.85796941C.210224AV1.ETL.081821.CDMS.NET)

GARLON 4 ULTRA:
[COR_GARLON 4 ULTRA_111320_SPEC.LBL.INDD \(CDMS.NET\)](http://COR_GARLON_4_ULTRA_111320_SPEC.LBL.INDD.CDMS.NET)

KRENITE S:
[HTTPS://S3-US-WEST-1.AMAZONAWS.COM/WWW.AGRIAN.COM/PDFS/KRENITE_S_LABEL11.PDF](https://s3-us-west-1.amazonaws.com/www.agrian.com/pdfs/KRENITE_S_LABEL11.PDF)

PATRIOT:
[HTTP://WWW.CDMS.NET/LDAT/LD6KH000.PDF](http://WWW.CDMS.NET/LDAT/LD6KH000.PDF)

POLARIS:
[HTTP://WWW.CDMS.NET/LDAT/LD8KR002.PDF](http://WWW.CDMS.NET/LDAT/LD8KR002.PDF)

Milestone:
https://s3-us-west-1.amazonaws.com/agrian-cg-fs1-production/pdfs/Milestone_Label1p.pdf

Roundup Pro:
https://www3.epa.gov/pesticides/chem_search/ppls/000524-00475-20161018.pdf

RODEO:
[HTTP://WWW.CDMS.NET/LDAT/LD4TN001.PDF](http://WWW.CDMS.NET/LDAT/LD4TN001.PDF)

Aquaneat:
<https://www.cdms.net/ldat/ld5NE001.pdf>

Roundup Custom:
<https://www.cdms.net/ldat/ld34B002.pdf>